STAKEHOLDER EXPECTATIONS FOR ENVIRONMENTAL PERFORMANCE WITHIN THE APPAREL INDUSTRY

by

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ABSTRACT

Every stage of the apparel production process has the potential to impact the environment. Using R. E. Freeman's 1984 stakeholder theory as a framework this work seeks to a) identify current stakeholder groups' expectations for environmental performance on key environmental issues within the apparel industry and b) evaluate stakeholder interactions with apparel companies in attempting to improve environmental performance.

For this work, a stakeholder is defined as "any group or individual who is affected by or can affect the achievement of an organization's objectives" (Freeman, 1984, p. 5). Using Clarkson's 1995 primary and secondary divisions for stakeholder groups, it is determined that various different stakeholder groups are impacted by the decisions made within the apparel industry. As such case studies were developed for a primary group, the American Apparel and Footwear Association (AAFA), as well as two secondary groups, Organic Exchange (OE) and Ceres.

These case studies were developed using website analysis, semi-structured interviews, and archival record searches. Each group shared their expectations for environmental performance, which are currently not being met, as well as key environmental issues they are working on within the apparel industry.

Three common environmental issues of concern for these three groups are water usage, chemical use and management, and carbon footprint reduction. If an apparel brand or retailer was unsure which issue to tackle first, this work suggests they

focus on carbon footprint reduction because through this process the brand or retailer will have visibility into their chemical use and water consumption.

In-depth supply chain management is the underlying management practice apparel brands and retailers must implement if they seek to meet stakeholder groups' expectations and establish stronger stakeholder relationships. Companies that invest in and deeply manage their supply chain through clear communication, capacity building, education, training, steady order placement, and stakeholder engagement will have plenty of information they are confident reporting on to the public. This in-depth management process will allow companies to begin externally reporting on their activities. This level of reporting may in turn improve media relations, employee morale, and public opinions of the company.

From this work it is apparent that a third dimension of stakeholders may be developing due to new forms of communication, collaboration, and technology. These collaborative, tertiary stakeholders have the ability to affect both primary and secondary stakeholder groups within the industry and may be of future interest to apparel brands and retailers. The results from this thesis suggest the possibility for clearer, more efficient and productive communications between the apparel industry and its stakeholder groups.

Chapter 1

INTRODUCTION

- entitled *White Gold: The True Cost of Cotton*, "In order to irrigate its 1.47 million hectares under cotton, Uzbekistan's regime has all but eradicated the Aral Sea. Once the world's fourth largest body of water, the Aral is now reduced to just 15% of its former volume. This environmental catastrophe has witnessed the disappearance of the sea's 24 species of native fish from its waters, the drying out of associated wetlands and the creation of tens of thousands of environmental refugees; the former dependents of the Aral's ecosystem" (p. 26).
- Recent findings from a report generated by Business for Social
 Responsibility and the Center for Water Research at China's Peking
 University, show that the "Guangdong Province is experiencing
 growing rates of infectious disease linked with water pollution"
 (Hwang, 2008, p. 1). The Guangdong Province, located in the southern
 part of China, accounts for about 23% of China's total textile and

apparel export. The dyeing of textiles carries with it the burden of dealing with large amounts of wastewater containing potentially toxic chemicals.

After a new running shirt left his skin dyed red, runner Jeremy

Litchfield started *Atayne*, a company that produces high-performance running and athletic gear that is sensitive both to the athlete and the environment under the mantra "Reduce. Reuse. Recycle. Run."

Litchfield found that the materials used in some performance apparel "are not only harmful to the environment, but have a lot of chemicals that can be harmful to people" (Averett, 2009, p. 8).

Environmental issues arise at all stages of the textile and apparel supply chain. The expansion of apparel production and consumption has contributed to increasing pollution, water shortages, fossil fuel and raw material depletion, and climate change (Textiles Intelligence, 2008). Each step in the apparel production process carries the potential for an environmental impact (Claudio, 2007; Potoski & Prakash, 2005).

The three opening examples in this chapter depict how the apparel industry can damage the fragile ecosystem on which it relies on for water, land, fuel, and other natural resources (Claudio, 2007; Potoski & Prakash, 2005). These examples also highlight how different stakeholder groups are impacted by the decisions made within the apparel industry. Fishing companies who depend on the Aral Sea for their

livelihood, humans living with respiratory illness due to polluted water, and athletes chaffing due to chemically treated fabrics all represent important stakeholder groups that must be engaged and considered within the apparel industry.

The apparel industry, like many other industries, is increasing in its realization that "the environment is not a minor factor of production, but rather an envelope containing, provisioning, and sustaining the entire economy" (Hawken, Lovins, & Lovins, 1999, p. 9). The dual purpose of this research was to a) identify current stakeholder groups' expectations for environmental performance on key environmental issues within the apparel industry and b) evaluate stakeholder interactions with apparel companies in attempting to improve environmental performance.

In their 2009 book entitled *Social Responsibility in the Global Apparel Industry*, Dickson, Eckman, and Loker touch on the major environmental impacts caused during the production and use of textile fibers and apparel. They list these as including:

- Energy used in laundry and needed for production of materials.
- Use of toxic chemicals that can harm human and environmental health during growing, production, and processing of textiles and apparel.
- Release of chemicals in wastewater during production, dyeing, finishing, and laundering.
- Solid wastes during production and at disposal (p. 14).

Environmental impacts from the apparel industry, however, could be even more extensive. In their 2008 work, Rueda-Manzanares, Aragón-Correa, and Sharma, review the environmental impact of the service sector. They state that this sector has:

high intensity impacts on the natural environment such as intensive use of energy for climate control in retail spaces, offices and guest accommodations; consumption of large quantities of paper and cleaning products; negative impacts on habitat biodiversity and resilience by locating in ecologically sensitive areas; or consumption of large quantities of water for drinking and cleaning (p. 186).

All of these statements could also apply to the apparel industry. Following Dickson, Eckman, and Loker's (2009) lead more statements of impact may also be added around water consumption as it relates to dyeing textiles, prewashing/finishing garments and cleaning large production factories. It is of interest to note that other industry's (such as chemical, steel, pharmacology, and consumer electronics) environmental guidelines have been reviewed and researched by academia. This statement does not fully apply to the apparel industry.

Currently, the apparel industry is guided by environmental guidelines that apply to a narrow scope of the industry. Restricted Substance Lists (RSLs) have been developed by government agencies in almost every country (AAFA.org; Textiles Intelligence, 2008). RSLs apply to the materials used to create, dye, and process textile products. Registration, Evaluation, Authorisation and Restriction of Chemical Substances (REACH) legislation, which aims to encourage safe and eco-friendly chemical production, is another attempt to monitor chemical use (The European

Commission, 2010; Textiles Intelligence, 2008). In the European Union, "the REACH regulations enacted 1 June 2007 require clothing manufacturers and importers to identify and quantify the chemicals used in their products" (Claudio, 2007, p. A454).

Some retailers are voluntarily attaching "eco-labels" to garments to provide environmental information to consumers. Although these labels have had varying levels of success in the marketplace, they can encourage "best practice" in manufacturing. Some labeling schemes, such as the EU's "Eco-label" scheme and its associated flower logo, adopt a full life cycle or "cradle to grave" approach. While others, such as Öeko-Tex, focus on a single aspect of an item such as its environmental attributes, social attributes, or individual phases of its life cycle (Textiles Intelligence, 2008).

The environmental conduct of multinational companies (MNCs) has been a topic of controversy for many years. It has been argued that MNCs exploit international differences in environmental regulations by locating dirty operations in countries with lax environmental regulations (Christmann, 2004). Christmann concluded, "little is known about the factors that cause MNCs to standardize their environmental policies on a global basis" (2004, p. 747). It is difficult to empirically collect data for this area of research because a firm's environmental strategy consists of many practices for which public data are unavailable (Darnall, Henriques, & Sadorsky, 2008; Rueda-Manzanares, et. al, 2008). It is even more difficult to empirically collect data from an

industry that has historically been mistrustful of "outsiders" asking for company information, has decentralized operations in multiple countries, and lacks transparent supply chains. Further complicating the matter, currently there are only a few researchers attempting to empirically evaluate the effect of external influences, such as activist groups, on businesses (O'Rourke, 2008; Rueda-Manzanares, et. al, 2008; Spar, 2003). These researchers have yet to focus on the global apparel industry and stakeholders expectations for environmental performance.

Taking into account the challenges of gathering empirical data from apparel companies as well as the lack of research on the effect of external influences, such as stakeholder groups, this study uses a qualitative methodology to identify stakeholders' expectations for environmental performance in the apparel industry as well as to evaluate stakeholder interactions with apparel companies in attempting to improve environmental performance.

Case studies focused on stakeholder groups working within the apparel industry to improve the environmental performance of companies are developed as part of this work. These case studies were compiled using data collected through website analysis, semi-structured interviews, and archival records searches. This qualitative research allows us to begin peeling back the layers necessary to identify current stakeholders' expectations for environmental performance in the apparel industry.

Statement of Research Problem

Widely accepted environmental standards do not exist in the apparel and footwear industry. "This means that [apparel and footwear] brands are running in a race with different finish lines. Industry development and adoption of a common set of environmental metrics is key to ensure that consumers have consistent and comparable information when making purchasing decisions" (The Timberland Company, 2009). "Science has not yet come forward with a universally accepted and absolute measure of how to compare and evaluate different environmental impacts" (Wehrmeyer, 1993). There is not a sufficiently explicit or detailed description of what companies should be aiming for when it comes to environmental performance. Nor is "there a welldeveloped or convincing body of literature that can clearly articulate the value to organizations of engaging in such [environmentally conscious] behaviors" (Panayiotou, Aravossis, & Moschou, 2008, p. 129). As such, it would be helpful to apparel companies to gather feedback and information from stakeholder groups as to their expectations. The dual purpose of this research was to a) identify current stakeholder groups' expectations for environmental performance on key environmental issues within the apparel industry and b) evaluate stakeholder interactions with apparel companies in attempting to improve environmental performance.

Research Questions

This study involves case study research. Case studies are developed on three primary and secondary stakeholder groups by collecting data from website analysis, semi-structured interviews, and archival records searches. Through this research process the following questions were considered.

- What are stakeholder groups' expectations for environmental performance of apparel brands and retailers?
- Does the environmental performance of apparel brands and retailers meet stakeholder groups' expectations?
- What do apparel brands and retailers need to do in the future in order to improve environmental performance?
- How have stakeholder groups influenced changes in environmental performance within the apparel industry?
- How has the environmentally-focused work of stakeholder groups been influenced by the apparel industry?

Assumptions

One of the basic assumptions of this research is that specific stakeholder groups are considered important within the apparel industry. There is also the assumption that these groups have caused changes in the environmental performance of the apparel industry. Lastly, it is assumed that apparel companies generally understand the

importance of responding to stakeholder pressures. "The heterogeneous perspectives and the conflicting interests of a firm's stakeholders on a specific strategic issue require a firm to develop a specific capability to manage these pressures" (Rueda-Manzanares, et al., 2008, p. 185).

Limitations

"Case study research results are not generalizable to a population. The particular case... is so unique that it represents a one-off context" (Woodside & Wilson, 2003, p. 500). The objective of this case study research is not generalizablity; it is to identify stakeholder's expectations for environmental performance. As such each group will have a unique perspective and set of expectations. The in-depth case study research format used for this work did not allow for the creation of a case analysis for every type of primary and secondary stakeholder group identified in the review of literature. These are limitation of this work that must be acknowledged. Another limitation of the data collected is its time sensitive nature. Case study research provides a snap shot in time, in terms of key issues and stakeholder expectations. This is a limitation that should be considered if this work is reviewed years from now.

Operational Definitions

- Environmental performance- a company's "environmental impact, regulatory compliance, stakeholder relations, and organizational systems" (Henri & Journeault, 2008, p. 166).
- Stakeholder group- "any group or individual who is affected by or can affect the achievement of an organization's objectives" (Freeman, 1984, p. 5).
- Primary stakeholder- groups required by the corporation to exist on a daily basis (Clarkson, 1995).
- Secondary stakeholder- "those who influence or affect, or are influenced or affected by, the corporation" but who are not engaged in formal transactions with the organization (Clarkson, 1995, p. 108).
- Organizational effectiveness- the extent to which an organization's mission is being achieved (Cameron, 1986; Georgopoulos & Tannenbaum, 1957; Herman & Renz, 1998). The organization's ability to influence and improve environmental performance in the apparel industry through the use of the group's reputation, media communications, and industry partnerships.

Chapter 2

LITERATURE REVIEW

This chapter includes a review of previously conducted research that applies to the work at hand. This literature review includes various concepts that apply to many fields of study. However, the focus of this review is stakeholders within the apparel industry and their expectations for environmental performance.

The Sustainability Revolution

Various researchers have noted that a new revolution has come about as a result of the Industrial Revolution's degradation of the environment (Bridges & Wilhelm, 2008; Hawken, Lovins, & Lovins, 1999). The Sustainability Revolution (Hawken, et al., 1999), as it has been coined, is being led by a large and diverse number of individuals, government agencies, non-governmental organizations (NGOs), and business organizations that claim we must work together to develop a new economic paradigm that values natural capital as a business asset and a new world view that appreciates ecology (Bridges & Wilhelm, 2008; Hawken, et al., 1999). This revolution is being "fuelled by growing international transparency" (Elkington, 2004, p. 4). As companies are forced to be more transparent, "a wide range of different stakeholders

increasingly demand information on where business is going and planning to do" (Elkington, 2004, p. 4).

Corporations have become more aware of the importance of environmental issues to all levels of their operations. Various factors such as consumer pressure and government regulation have often been cited as two contributing factors to the change in attitude. Corporations, however, are not only affected by government and consumers but by a plethora of stakeholders including shareholders, employees, neighborhood groups, and trade associations. Each of these pressure groups presents a firm with a daunting array of potential environmental risks (Henriques & Sadorsky, 1996, p. 382).

Stakeholder groups play a large role in this Sustainability Revolution, as they are the change agents encouraging the Revolution along.

Environmental Sustainability

Environmental sustainability is a key concept to the implementation of the Sustainability Revolution. Environmental sustainability requires the long-term health and viability of our major ecosystems (air, water, etc) (Hawken, et al., 1999). Creating a healthy environment, free of pollution and toxic waste, while at the same time providing a stable economy that will endure for an extended period must be viewed as complementary rather than conflicting endeavors (Bridges & Wilhelm, 2008).

Companies may implement environmental management systems (EMS) or environmental quality management systems (EQMS) as a way to support the Sustainability Revolution (Darnall, Henriques, & Sadorsky, 2008). For many companies, these management systems consist of internal policies, assessments, plans,

and implementation actions that address specific environmental concerns or issues (Darnall, et al., 2008). These systems require "having the right documents and information on the environmental quality systems and processes [of a company]. The EQMS should be able to incorporate life cycle data, environmental design information, regulatory data, materials, and process data" (Sarkis, 1998, p. 162).

Sustainable Business Development

The often-quoted 1987 Brundtland Report entitled Our Common Future provides a popular definition of sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987, p. 8). In today's world, a sustainable business has a "greater commitment to protecting natural resources and working less wastefully" (Mastrull, 2010, p. D1).

Henriques and Richardson concisely sum up the two main approaches to business sustainability in their 2004 work. They state that there are two approaches: "top down" and "inside out". "Top down" approaches emphasize management, measurement, and control. According to these researchers, this approach does not give companies the ability to make the necessary changes to accurately implement their environmental management plan. Henriques and Richardson go on to express that "inside out" approaches allow companies to be creative as they attempt to build stakeholder relationships and find solutions to environmental concerns.

Inside out approaches stress the importance of change and innovation....This is about working outside the and beyond the structures of the current [economic] paradigm. Going inside out is about relationships and connectedness. Being connected and responsive to shareholders, suppliers, communities, and customers, is the foundation of sustainability (Henriques & Richardson, 2004, p. ix).

Sustainability seeks to change the current measure of business success, which values and accounts for "economic capital at the expense of world's natural capital" (Adams, Frost, & Webber, 2004, p. 18).

Social Responsibility

This connected approach to business leads to the concept of social responsibility (SR). Buchholz's 1991 summary definition for social responsibility applies to the scope of this work because it ties stakeholders' expectations to business performance. He states that

various definitions of social responsibility have been advocated, there seem to be five key elements in most, if not all, of these definitions: (1) corporations have responsibilities that go beyond the production of goods and services at a profit; (2) these responsibilities involve helping to solve important social problems, especially those they have helped create; (3) corporations have a broader constituency than stockholders alone; (4) corporations have impacts that go beyond simple marketplace transactions; and (5) corporations serve a wider range of human values than can be captured by a sole focus on economic values (p. 19).

Social responsibility refers to the obligation of a firm, beyond that required by law or economics, to pursue long-term goals that are beneficial for society.

Dickson and Eckman (2006) propose a definition for the term social responsibility that applies specifically to the apparel industry. They define socially responsible businesses as those who consider the "entire system of stakeholders associated with apparel supply chains, including production workers, sales help, and consumers, and the entire product lifecycle from the inception of raw materials and components to product design, use, and discard" (p. 189).

Environmental Performance

Sarkis (1998) defines environmental policy and performance to include a statement by the company that speaks to their "commitment to compliance, prevention of pollution and continual improvement" (p. 163). Sarkis goes on to note the importance of communicating this policy statement and performance data to stakeholders. A company relies on its environmental performance policies and practices when considering their entire supply chain and product life cycles.

Environmental performance indicators (EPIs) represent numerical measures about a company's "environmental impact, regulatory compliance, stakeholder relations, and organizational systems" (Henri & Journeault, 2008, p. 166). This serves as the definition of environmental performance for this work. These analytical tools allow for comparison within a firm as well as across an industry with respect to certain environmental characteristics (Tyteca, 1996). Existing approaches to collecting, handling, and reporting this data "are both rare and dissimilar. They range from

oversimplified indicators to more sophisticated ones, in which there is a trend to take somewhat arbitrary viewpoints" (Tyteca, 1996, p. 288). EPIs refer to the measurement of the interaction between the business and the environment (Henri & Journeault, 2008). Researchers have also measured and defined environmental performance to include a company's toxic emission levels as reported through the EPA's Toxic Release Inventory (Hamilton, 1995; Kassinis & Vafeas, 2006).

In their 2007 work, Aerts, Cormier, and Magnan noted that for "both North American and European firms, web-based environmental disclosure essentially comprises information about pollution abatement, sustainable development, and environmental management" (p. 651). Aerts, Cormier, and Magnan noted that environmental performance may include company policies and practices around pollution abatement, sustainable development and environmental management as well as wastewater management, hazardous chemical use, carbon emissions tracking, electricity use, fossil fuel burn rates, energy consummation, landfill diversion/recycling rates, and carbon footprint measuring. These environmental performance measures may be found within a CSR report or within a company's website, which may be accessed by external stakeholder groups (Aerts, Cormier, & Magnan, 2007; Cormier, Ledoux, & Magnan, 2008).

Theoretical Framework-Stakeholder Theory

R. Edward Freeman originally proposed stakeholder theory in business literature

in his book entitled Strategic Management: A Stakeholder Approach. Freeman (1984) defined the concept of stakeholder as "any group or individual who is affected by or can affect the achievement of an organization's objectives" (p. 5). Taking a historical perspective on a stakeholder approach to business. Freeman dates the word "stakeholder" back to an "SRI International memorandum" from 1963 (1984, p. 31). However, Preston and Sapienza's (1990) account and historical definition of the word "stakeholder" goes back a bit further than Freeman's version. Preston and Sapienza trace the word "stakeholder" back to the Great Depression Era when General Electric identified four major "stakeholder" groups: shareholders, employees, customers, and the general public (p. 361). These groups were seen as critical to GE's success and survival during the Great Depression. Preston and Sapienza, also, note that "Robert Wood Johnson's list of "strictly business" stakeholders --customers, employees, managers, and shareholders -- first appeared in print in 1947 and ultimately evolved into the well-known Johnson and Johnson Credo" (1990, p. 361). This "Credo" encourages Johnson and Johnson's to put the needs and well-being of the people they serve first. Even today, it continues to guide Johnson and Johnson's business practices. These early references to stakeholders set the stage for the importance of this work.

Clarkson added to Freeman's 1984 definition stating that "stakeholders are person or groups that have, or claim, ownership, rights or interest in a corporation and

its activities, past, present or future" (1995, p. 106). The claimed rights or interests of stakeholders are based on their transactions with the company (Clarkson, 1995). Clarkson divided the stakeholder groups Freeman's theory identified into primary and secondary stakeholders. These two groups, which are reviewed later in this chapter, have different spheres of influence on the apparel industry. This information may help us determine an order of importance when it comes to their expectations for the apparel industry.

Freeman's stakeholder theory introduced the concept that businesses should consider the interest and concerns of a wide variety of groups when making business decisions (Clarkson, 1995; Dickson, et al., 2009; Freeman, 1984; Freeman, Wicks, & Parmar, 2004; Preston & Sapienza, 1990). It should be a general requirement for companies to keep its principal stakeholder groups reasonably satisfied, so that they continue as part of the corporate stakeholder system (Clarkson, 1995). It has, also, been proposed that "corporate social responsibility can be analyzed and evaluated more effectively using a framework based on the management of the corporation's relationships with its stakeholders" (Clarkson, 1995, p. 92). Henriques (2004) adds that "in order to be sustainable [and survive in the current business climate], organizations will have to be accountable to their stakeholders" (p. 27).

Various researchers have applied this theory to different business sectors with varying results. Buchholz's 1991 work entitled "Corporate Responsibility and the

Good Society: From Economics to Ecology" makes a very applicable point that

the social responsibility issues that developed in the 1960s did include environmental concerns; these concerns were largely human centered. The public policy measures passed in the 1960s and 1970s were largely based on the protection of human health, not on a concern for the protection of the environment for its own sake. The typical stakeholder map includes stockholders, creditors, employees, consumers, government... all of which have a significant stake in corporate activities (p. 29).

Henriques and Sadorsky (1996) evaluated the perceived importance of different stakeholder groups using data from Canadian firms, and found that in addition to government regulation it is primarily customers, shareholders, and local community groups that affect corporate environmental management practices, especially the content of environmental action plans. The importance of stakeholders is relative, issue-based, and can change over time (Mitchell, Angle, & Wood, 1995). Kassinis and Vafeas (2006) note that even when stakeholder "pressures seem to matter, they appear to have a varying effect on firm environmental performance—that is, some seem to matter more than others even when the pressures originate from a single stakeholder group" (p. 145).

The dual purpose of this research was to a) identify current stakeholder groups' expectations for environmental performance on key environmental issues within the apparel industry and b) evaluate stakeholder interactions with apparel companies in attempting to improve environmental performance. Thus this work will bring to light

the interest and concerns of the various groups that are affected by the business decisions of the apparel industry, the industry's stakeholder groups, as Freeman's theory states.

Stakeholders Within the Apparel Industry

Current stakeholders' expectations for environmental performance in the apparel industry have been overlooked as an important research topic by previous researchers. As the apparel industry is comprised of multinational companies and global supply chains, it is important to understand stakeholder's expectations (Global Reporting Initiative, 2010). With a better understanding of the issues and concerns that stakeholders believe are important, the apparel industry may be able to focus improvements in these areas and address the issues that are raised as important.

In their 2009 book entitled *Social Responsibility in the Global Apparel Industry*, Dickson, et al. makes clear linkages between the apparel industry and stakeholder theory. They state that apparel businesses "need to consult with stakeholders in order to gather information, manage conflicts, improve decision making, build consensus across groups with diverse views, and enhance corporate reputations" (2009, p. 114). Citing Clarkson's 1995 work, they identify stakeholder groups as primary or secondary in terms of influence and effectiveness.

The growing interest in collaboration between the apparel industry and NGOs as well as working with governments, leads to stakeholder integration- the ability to

bring together the needs and demands of disparate groups. Sharma and Vredenburg (1998) define stakeholder integration as the "ability to establish collaborative relationships with a diversity of stakeholders, especially with those that pursue non-economic objectives that may embrace values associated with environmental preservation" (p. 735). These collaborations, in addition to acknowledging common interests, lead to stakeholder engagement. It has been noted that the integration of stakeholder concerns into a company's policies can lead to innovation (Rueda-Manzanares, Aragón-Correa & Sharma, 2008). Through a greater attention to the "environmental concerns of a wide variety of stakeholders... firms are able to develop a stakeholder integration capability and adopt proactive strategies where they can foresee negative environmental impacts" (Rueda-Manzanares, et al., 2008, p. 189).

In attempts to integrate various stakeholder groups and generate new knowledge on environmental sustainability, the University of Delaware's Fashion and Apparel Studies department collaborated with key industry partners to release a set of guidelines it suggests apparel firms follow to promote environmental sustainability within the apparel and retail industries (University of Delaware's Sustainable Apparel Initiative [UDSAI], 2010). The resulting 10 policy statements, which were published in May, 2009, are the first project for the University of Delaware's Sustainable Apparel Initiative (UDSAI). These policy statements are far ranging and challenge companies to tackle the issues necessary to become environmentally sustainable. A

company could use these policy statements as a guide to becoming environmentally sustainable. They are the first of its kind and speak to the importance of engaging stakeholders in the quest to be environmentally sustainable.

Wood and Jones (1995) established an applicable description of how stakeholders become an integral part of corporate social performance models. Wood and Jones propose a corporate social performance model whereby stakeholders serve at least three roles with respect to corporate social performance:

- 1. Stakeholders are the source of expectations about what constitutes desirable and undesirable firm performance.
- 2. Stakeholders experience the effects of corporate behavior that is they are the recipients of corporate actions and output.
- 3. Stakeholders evaluate how well firms have met expectations and/or how firms behaviors have affected the groups and organizations in their environment (1995, p. 231).

This description of the important role stakeholders, both primary and secondary, play in a corporation's performance ties in nicely with the work at hand and with Freeman's stakeholder theory, which will serve as the framework for this research.

Stakeholders may also play a role as effective change agents in the apparel industry. The construct of effectiveness must be clearly defined or bounded "particularly in areas where ambiguity regarding appropriate criteria exist," such as the apparel industry (Cameron, 1986, p. 93). Researchers have argued that what really determines an organization's effectiveness is the extent to which that organization's mission is being achieved (Cameron, 1986; Georgopoulos & Tannenbaum, 1957;

Herman & Renz, 1998). An organization's reputation may provide understanding of its effectiveness. "A broad stakeholder-based approach says that reputation combines everything that is knowable about a firm" (Sarbutts, 2003, p. 342). Researchers have also noted that CSR policies and practices are most effective when they do not have a "corporate gloss, are seen to be passive, and are closer to the ideals of the organization that flexes with its stakeholders, learns from them, and demonstrates resulting changes (Sarbutts, 2003, p. 346). Cameron's 1986 review of the organizational effectiveness of universities and college's found that "management strategies may lead to positive change in effectiveness on some dimensions, but that environmental changes [within the areas which the organization operates] may be more of a result than a precursor to changes in effectiveness" (p. 104). This finding may apply to stakeholder groups within the apparel industry. Effectiveness is a product of individual values and preferences, and therefore the best criteria for assessing effectiveness cannot truly be identified (Cameron, 1986, p. 88). However, for this work organizational effectiveness involves the extent to which that organization's mission is being achieved (Georgopoulos & Tannenbaum, 1957; Herman & Renz, 1998) as well as the organization's ability to influence and improve environmental performance in the apparel industry through the use of the group's reputation, media communications, and industry partnerships.

Primary Stakeholders

Clarkson (1995) defines primary stakeholders as those groups required by a corporation to exist on a daily basis. These groups include investors, suppliers, employees, customers, governments and communities, as well as trade associations, (Buysse & Verbeke, 2003; Clarkson, 1995; Dickson, et al., 2009; Savage et al., 1991). A company can be seen as a network of primary stakeholders, who all rely on each other (Clarkson, 1995). Primary stakeholders have the greatest impact on determining the success or failure of any environmental strategy a company attempts to adopt. "There is a high level of interdependence between the corporation and its primary stakeholders" (Clarkson, 1995, p. 106). Without the support of these primary stakeholder groups, the company would not survive. If a company is not satisfying and receiving the support of a primary stakeholder group, it is possible that the company will be seriously damaged and unable to continue in business (Clarkson, 1995). According to Clarkson "the stakeholder framework provides the basis for the following definition of the corporation and its purpose:

- 1. The corporation is a system of primary stakeholder groups.
- 2. The survival and continued profitability of the corporation depend upon its ability to fulfill its economic and social purpose, which is to create and distribute wealth or value sufficient to ensure that each primary stakeholder group continues as part of the corporation's stakeholder system.
- 3. Failure to retain the participation of a primary stakeholder group will result in the failure of that corporate system and its ability to continue" (1995, p. 110).

Investors, shareholders, and financial institutions form the first primary stakeholder group to be reviewed.

Investors, Shareholders, and Financial Institutions

There is mounting societal concern over the role of business in contributing to global environmental problems (Aragón-Correa, 1998). Consequently, shareholders, financial institutions, and insurance companies are concerned about liabilities stemming from corporate operations that are damaging to the environment, such as oil drilling and chemical spills (Rueda-Manzanares, et al., 2008).

In an effort to financially validate this concern, the Dow Jones Sustainability World Index (DJSI World) was created in 1999 as a joint partnership between the Dow Jones Indexes, an index provider in the United States, and the Sustainable Asset Management Group (SAM), a social responsibility investment research and asset management company (Dow Jones Sustainability World Index [DJSI World], 2009). The DJSI World Index is comprised of the more than 300 companies, who are considered sustainability leaders around the world. These companies represent the top 10% of the companies listed on the Dow Jones Global Total Stock Market Index (DJSI World, 2009). In order to be a part of this index, companies must demonstrate that they are incorporating sustainable business practices into all areas, including marketing strategy, financial decisions, product development, human welfare,

governance, energy consumption, climate change strategies, and stakeholder engagement (Bridges & Wilhelm, 2008; DJSI World, 2009).

According to the DJSI World's website and researchers (Aragón-Correa, 1998; López, Garcia, & Rodriguez, 2007; Sharma & Vrendenburg, 1998), corporate sustainability performance is an investable concept. Corporate sustainability is a business approach that creates long-term shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments (DJSI World, 2009). Corporate sustainability leaders achieve long-term shareholder value by gearing their strategies and management to harness the market's potential for sustainable products and services while at the same time successfully reducing and avoiding sustainability costs and risks (DJSI World, 2009).

In their 2007 work, López, et al. analyzed the relation between the adoption of corporate social responsibility (CSR) practices and certain accounting indicators in two groups of companies to determine whether a significant difference in performance indicators existed between the groups. According to the "Green Paper Promoting a European Framework for Corporate Social Responsibility", issued by the Commission of the European Communities (2001), CSR is defined as the concept whereby "companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (p. 5). In López et al.'s work one group of firms belonged to the DJSI World, while the other group was

comprised of firms quoted on the Dow Jones Global Index, but not on the DJSI World. This longitudinal comparison showed that firms that had adopted CSR as a core part of the corporate strategy performed better than those that had not (López, et al., 2007). At the financial level, poor environmental performance can seriously strain a company's relationship with its investors and shareholders. "A company faces a daunting array of potential environmental risks connected with various pressure groups which if not addressed may adversely affect a company's bottom line (Henriques & Sadorsky, 1996, p. 382). Shareholders may suffer monetary losses on their investments if a company is found liable for environmental damage or if its poor environmental record makes the news (Hamilton, 1995). As a result, shareholders as well as private investors and financial institutions, perceive companies with a poor environmental record as riskier to invest in, and may demand a higher risk premium (Henriques & Sadorsky, 1996). They may also voice their discontent over poor environmental performance by withdrawing capital or refusing to extend new loans (Buysse & Verbeke, 2003). Without operating capital, it is very difficult to establish a network of suppliers.

Suppliers

Companies depend on a network of suppliers and contractors to keep them financially lucrative and "in business". Companies interact with this supplier network on a daily basis. From an environmental perspective, the apparel industry's supplier

network may include farmers, chemical manufacturers, dye houses, ginning facilities, fabric mills, and finishing plants. Suppliers and other external sources are effective in helping companies develop environmental practices (Christmann, 2004; Liu, 2009; Rueda-Manzanares, et al., 2008). In the apparel industry, the relationship also works in the other direction, as apparel brands and companies are able to influence suppliers to adopt environmental policies (Denend, 2007; O'Rourke, 2005; Spar & LaMure, 2003).

A positive relationship between a company's business strategies and its approach to the natural environment may be apparent in its integration of environmental issues into its business strategies, organizational manuals, and corporate literature (Aragón-Correa, 1998; Liu, 2009). Aragón-Correa (1998) defines this positive relationship as "environmental proactivity." He goes on to state "the positive effects of proactivity on the development of natural environmental approaches (both preventive and corrective) define a new area of possible competitive advantage" (Aragón-Correa, 1998, p. 564). This competitive advantage may include an apparel company implementing consistent environmental policies throughout all its divisions (e.g. menswear, women's' wear, children's, and licensing).

Researchers have noted many large manufacturing firms devote significant time and financial resources to environmental management (Buysse & Verbeke, 2003; Spar & LaMure, 2003). Key apparel suppliers, such as MAS Holdings in Sri Lanka, are developing and implementing far reaching environmental sustainability strategies that

incorporate the concerns of various stakeholder groups. MAS Holdings is South Asia's largest intimate apparel manufacturer as well as a rapid growing competitive sportswear supplier (MAS Holdings, 2009). MAS supplies several key brands in the apparel industry, including Marks & Spencer, Victoria Secret's, Nike, Speedo and the adidas Group, with apparel that is produced following sustainable production practices to meet their exacting environmental performance standards.

The development and implementation of meaningful and consistent environmental policies tend to be closely integrated with other functional areas of a company. This "integration exists because implementing environmental policies requires support from many functional areas" such as research and development, product development, production, human resources, and marketing (Christmann, 2004, p. 751). Christmann concluded that pressures by different external stakeholder groups as well as the ability to develop cross-functional teams "contribute to standardization of operational environmental policies" (2004, p. 751). This may prove to be a challenge in the apparel industry, since for many companies these functional areas do not coexist in one building, let alone one continent. As suppliers are a primary stakeholder group, their support and participation are critical to a firms' environmental policy development, and implementation.

Researchers have concluded, "when managers perceive the business environment to be complex, they are less likely to integrate stakeholder views to

develop a proactive environmental strategy" (Rueda-Manzanares, et al., 2008, pg. 198). This finding may apply to the supplier network in the apparel industry. From an environmental perspective, the apparel industry's supplier network ranges from "dirt to shirt" which is to say that it includes farmers, dye houses, fabric mills, and sewing factories. This list does not include the myriad of contracted and sub-contracted production suppliers; trim vendors, trucking companies, and shipping brokers that are also a part of the entire supply chain. In such situations, it is important to "reduce complexity for managers by developing long-term guidelines for environmental actions and practices that managers can follow" as they make short-term decisions and changes to their business environment (Rueda-Manzanares, et al., 2008, p. 198).

Within a complex supply chain, it is also important to establish a corporate culture that values the environment. "An organizational culture that incorporates a shared vision of a long-term sustainable business model for the firm might help reduce the influence of short-term complexity in the business environment on managerial decisions" (Rueda-Manzanares, et al., 2008, p. 198). The complexity of the global apparel supply chain must be taken into account as we evaluate current stakeholders' expectations for environmental performance in the apparel industry.

Employees

Primary stakeholder groups, such as employees, who entertain formal relationships with the firm, have the greatest impact on determining and implementing

a company's environmental strategy (Buchholz, 1991). Employees are a key internal driver of sustainability performance (Moffat, 2010). In their 2002 work, Waddock and Bodwell introduce the theory of Total Responsibly Management (TRM), based on the Total Quality Management system developed in Japan during World War II. TRM theory has various components, with employee empowerment and education being one of the most important links in theory. "TRM approaches are ... centered on employees, recognizing that investing in a workforce is an investment in the capacity of an organization" (Waddock & Bodwell, 2002, p. 118). An educated work force that is committed to upholding and carrying out the company's environmental strategies is likely to have success.

The formal relationships that primary stakeholders, such as employees, have with their employer have direct relevance to the firm's survival, profitability, and growth (Ansett, 2007; Clarkson, 1995). Employees and investors may benefit the most from sounder corporate environmental practices because they provide assets (human labor and financial backing respectively) that are tied to the firm and cannot be easily shifted around without risking a loss of value (Hill & Jones, 1992). As a firm begins to adopt an environmental leadership strategy, employee participation in solving environmental problems as well as their commitment to the process is crucial to the company's success (Hill & Jones, 1992; Sharma & Vredenburg, 1998). Environmental leadership strategies may also permit establishing better relationships with consumers

interested in products with a superior environmental performance (Buysse & Verbeke, 2003).

Consumers

The consumer plays a primary role in the success of a company as their purchases provide financial support for the company. "Overall, the attention toenvironmental issues has raised the consciousness not only of activists but also of consumers... to the increasing social expectations that are placed on companies" (Waddock & Bodwell, 2002, p. 114). There is a growing trend of key stakeholders, such as consumers, preferring to deal with companies and products that are less harmful to the natural environment (Rueda-Manzanares, et al., 2008). A "rising number of average citizens and opinion leaders alike believe that ...companies have a responsibility to respect human rights... [and] limit their carbon emissions and other environmental impacts" (Freeman, 2006, p. 13). The development of consumer education programs can be seen as a result of an increasing awareness of the significant environmental degradation that exists across the globe (Bridges & Wilhelm, 2008). This trend can also be seen in the recent influx of organic cotton garments, as well as corn-based fibers for socks.

However, consumers are fickle and there is little empirical research that supports the claim that consumers will consistently purchase environmental friendly products when given a choice. "Consumers are clearly more environmentally and socially

aware today, but they still do not generally consume with concern" (O'Rourke, 2005, p. 116). As Butner (1995) explains, consumers will only purchase "greener" products when they have credible information that allows them to feel confident in evaluating whether their choice is actually having an impact. Most consumers do not have access to information on the environmental or social impacts of the products they purchase and they do not trust the information that is provided to them by companies (O'Rourke, 2005).

"A company's reputation for environmental responsibility with its customers is based on the information about the company's environmental conduct that customers can obtain" (Christmann, 2004, p. 750). Although some data on firms' environmental conduct and performance is readily available in many industrialized countries such as the United States and the European Union through reports such as the U.S. Toxic Release Inventory (TRI) and rankings in popular magazines, such as Fortune and BusinessWeek. The same data is not available for MNC subsidiaries in many foreign countries, especially in developing countries. The lack of transparency when it comes to a MNCs' global environmental conduct is high, which may lead to consumers mistrust (Christmann, 2004). In order to move past this level of mistrust, it is important for apparel companies to provide information to consumers on the companies' environmental performance.

Consumers may choose to hold a company responsible for their environmental

actions by withholding their buying power. Christmann (2004) notes that perceived consumer pressures contribute to standardization of environmental communication by a company with its stakeholders. Consumers can use this information to boycott products and companies they believe do not meet their expectations for environmental performance (Sen, Gurhan-Canli, & Morwitz, 2001). It has been proposed that the "decision to withhold consumption of a desirable product in the interest of achieving a collective social or economic gain" is a social dilemma (Sen, et al., 2001, p. 400). Social dilemmas are situations in which the interests of individual members of a group are at odds with the collective interests of a larger group or a company (Sen, et al., 2001). This would seem to apply to environmental gains as well. Consumer groups have organized various boycotts on apparel products they felt did not agree with their interest (i.e. Clean Clothes Campaign against adidas apparel produced for the 2008 Beijing Olympics). These results provide important insights into the complex relationships between the nature of external stakeholder demands and the company's responses to these stakeholder groups.

Governments and Communities

The government provides both the legislative framework and the broader political discourse, which embeds environmental sustainability across society as a whole (Porritt, 2004). Knowing that the U.S. government is the nation's single largest user of energy, on October 5, 2009, President Obama signed an executive order

requiring federal agencies to begin implementing environmentally sustainable practices. The order requires federal agencies to, among other things, "increase energy efficiency; measure, report, and reduce greenhouse emissions; conserve and protect water resources; and leverage acquisitions to foster markets for sustainable technologies and environmentally preferable materials" (Mastrull, 2010, p. D6). This recent executive order clearly shows the large-scale effect the U.S. government has as a stakeholder group, as well as a consumer of natural resources.

In recent years, companies have partnered with governments to develop stakeholder relationships. An example of this partnership between the United States government and the apparel industry occurred in 1995, after the "El Monte Sweatshop Raid". The discovery of a sweatshop operating covertly in California, prompted the Clinton Administration to establish the "White House Apparel Industry Partnership". This partnership was made up of representatives from industry, labor, government, and public-interest groups, to pursue non-regulatory solutions to sweatshop abuses in the United States (Liebhold & Rubenstein, 1998).

The government and the resulting communities where companies conduct business can be seen as "public stakeholder groups" (Clarkson, 1995, p. 106). These two groups provide the infrastructure and markets that support companies. The government also enacts and monitors the environmental laws and regulations that a company must follow. It is then up to the community to enforce these laws and

regulations. It has often been argued that environmental regulation is instrumental to the introduction of better environmental management practices within firms, and that more stringent regulations are needed to further improve such practices (Buysse & Verbeke, 2003). However, when crafting specific environmental strategies, firms undoubtedly attach more importance to other stakeholders than government regulators (Aragón-Correa, 1998; Christmann, 2004; López, et al., 2007; O'Rourke, 2005; Spar & LaMure, 2003). This suggests the importance of evaluating the expectations of a diverse range of stakeholders for environmental performance in the apparel industry.

Business literature usually makes a distinction between firms that are compliance driven, where they aim to merely meet legal requirements, and those that adopt more proactive environmental strategies, thereby taking into account a variety of forces other than government regulation (Buysse & Verbeke, 2003). More specifically, "the inclusion of environmental issues into corporate strategy beyond what is required by government regulation could be viewed as a means to improve a company's alignment with the growing environmental concerns and expectations of its stakeholders" (Buysse & Verbeke, 2003, p. 453).

Apparel companies, by going beyond local government environmental regulations, could have a positive influence on the local government. This positive influence could lead to the following situation:

In places like Burma... corporations such as The Gap...can wield a disproportionate amount of economic influence, an influence made

even larger in recent years by the relative decline of both foreign aid and official lending. If economic influence can be translated into political pull, then the best way to change a country's laws or practice may well be through the corporations that invest there (Spar & LaMure, 2003, p. 8).

As previously noted with suppliers, the relationship between the apparel industry and the primary stakeholder group could work in both directions, with the industry influencing the stakeholder group as well as the stakeholder group having an effect on the industry. This seems to be the case when analyzing the relationship between the apparel industry and the government and communities in which they operate.

Economic growth cannot take place without the appropriate environmental conditions to support growth. "The notion that policymakers have to make a trade-off between economic growth and environmental protection in decisions about public and corporate policy no longer makes sense. The two goals are consistent with each other" (Buchholz, 1991, p. 30). The environment must be protected and enhanced for economic growth to take place. An example of this environment/ economic trade off is happening in Hong Kong, where "government encouragement played a significantly more important role in larger companies, particularly with regard to initiatives relating to extended producer responsibility and participation in voluntary environmental initiatives" (Studer, Welford, & Hills, 2006, p. 423). In an effort to balance economic growth and environmental protection, it is necessary to understand the expectations of stakeholders for environmental performance in the apparel industry. Trade

associations within the apparel industry could also work to balance economic growth with environmental protection.

Trade Associations

The National Science Foundation (NSF) defines trade associations as organizations of business competitors, in a specific industry, that are interested primarily in the commercial promotion of products or services (National Science Foundation, 2009). Memberships are usually held in the name of a business entity, not an individual person. Activities may fall into one or more of the following areas: business ethics, management practices, government lobbying, standardization, research, publication, marketing, promotion, and public relations National Science Foundation, 2009).

In the United States, the American Apparel & Footwear Association (AAFA) represents the largest trade association for the apparel industry. According to its website the AAFA is "the" national trade association representing apparel, footwear and other sewn products companies, and their suppliers. Acknowledging that the apparel industry is a global industry, the AAFA seeks to assist U.S. based apparel companies as they compete in the global market. The AAFA's mission statement includes promoting and enhancing "members' competitiveness, productivity and profitability in the global market by minimizing regulatory, legal, commercial, political and trade restraints" (American Apparel & Footwear Association [AAFA],

2009). The AAFA has also established an "Environmental Sustainability and Compliance" committee, comprised of business as well as legislative representatives working to establish meaningful environmental policy in the United States as it applies to the apparel and footwear industry.

The National Cotton Council (NCC) is another example of a trade association in the United States that is working to enhance its members' competitiveness and productivity. The NCC is a "unifying force [in] the U.S. cotton industry, bringing together representatives from the seven industry segments in the 17 cotton-producing states of the Cotton Belt to work out common problems and develop programs of mutual benefit" (National Cotton Council, 2009). On occasion, the NCC has partnered with U.S. congressmen, as well as the labor union Unite Here! to encourage government enforcement of the Textile Monitoring Program, a program that monitors textile imports from China and Vietnam ("U.S. seeks monitoring", 2008).

The Outdoor Industry Association (OIA) is another trade association affecting the apparel industry and its environmental performance. The OIA is the premier trade association for companies in the active, outdoor, and recreation business (Outdoor Industry Association, 2009). OIA provides trade services for over 4,000 manufacturers, distributors, suppliers, sales representatives, and retailers in the outdoor industry, including a diverse group of apparel brands and retailers. OIA "seeks to ensure healthy and diverse specialty retail and supply chain based on quality,

innovation, and service" (Outdoor Industry Association, 2009). As the outdoor industry advocacy group, the OIA is committed to environmental sustainability. As such they have formed an Eco Working Group to explore the issues of environmental sustainability as related to the outdoor industry.

According to a July 2008 Business Times Singapore article, the Textile and Fashion Federation (TaFf) of Singapore in cooperation with other trade groups in Singapore has launched a new industry-wide apparel brand, Apparel Singapore. This new brand is to act as a promotional branding vehicle and umbrella brand for the textile and apparel manufacturing industry in Singapore. The goal of the TaFf is to display the creative abilities and inherent quality of the country's apparel manufacturers to potential overseas customers. While at the same time, encouraging supply chain efficiencies, and ensuring that environmental policies, such as the ones related to dye usage, are followed ("Textile, fashion federation", 2008). This is an example of a primary stakeholder group motivating or having an effect on another primary stakeholder group.

In Thailand, eight apparel trade groups ranging from the Polyester Products

Industry Association to the Thai Garment Manufacturers Association have partnered to develop the domestic market in an effort to connect local apparel manufacturers with leading international brands (Pratruangkrai, 2008). This trade cluster is also encouraging government involvement, as they believe that the government "should"

convince the name brands to use Thailand as a manufacturing base to supply their global network" (Pratruangkrai, 2008, p. 1). This example points to the interconnected effect primary stakeholder groups have on each other. As stated earlier, a company can be seen as a network of primary stakeholders, which rely on each other (Clarkson, 1995).

Secondary Stakeholders

Secondary stakeholders are defined as "those who influence or affect, or are influenced or affected by, the corporation" but who are not engaged in formal transactions with the organization (Clarkson, 1995, p. 108). These secondary stakeholder groups include non-governmental organizations (NGOs), competitors, public agencies, and the media (Buysse & Verbeke, 2003; Clarkson, 1995; Dickson, et al., 2009; Savage, et al., 1991). "Engaging with and responding to external stakeholders helps companies establish credibility and support for their license to operate" (Moffat, 2010, p. 26). Secondary stakeholder groups have the "capacity to mobilize public opinion in favor of, or in opposition to a company's performance" (Clarkson, 1995, p. 108). A literature review of these secondary stakeholder groups helps establish the sphere of influence these groups may have on the apparel industry. These groups have the "capacity to mobilize public opinion in favor of, or in opposition to" a company's performance (Clarkson, 1995, p. 108). With the various stakeholder groups associated with apparel production, it is not surprising that their

needs and interests may conflict and are a challenge for apparel companies to balance.

Non-Governmental Organizations

Non-governmental organizations (NGOs) are "non-profit groups that combine resource mobilization, information provision, and activism to advocate for changes in certain issue areas" (Spar & LaMure, 2003, p. 79). As they apply to the apparel industry, NGOs run the gamut from small-scale, grassroots groups such as student run campaigns to large, professionally managed institutions such as the Environmental Defense Fund. NGOs and activists tend to organize around ideas and a "collective commitment to some shared belief or principle" (Spar & LaMure, 2003, p. 79). Since these groups operate independently of any government body, NGOs target both public and private entities.

In their case study of three NGO campaigns, Spar and LaMure note that the "emergence of activist groups has forced firms to make decisions in new ways, factoring in variables that once could be ignored" (2003, p. 97). NGOs and other activist groups have successfully brought to light information that companies had previously kept well hidden, thus affecting public opinion and company policy. The choice to develop and publicize environmental policies by apparel companies may fall into this category of information companies would rather keep under wraps. Spar and LaMure (2003) go on to note how

Western activists have targeted Western corporations as agents of change in global industries. Instead of taking their protests directly to

the offending states or governments and instead of lobbying their own governments to engage in the timeworn process of diplomacy, NGOs are taking their protests to the streets again, and to the market via consumers, trying to persuade corporations to do the work once reserved for governments (p. 80).

"The power and impact of NGOs cannot be overstated, emerging from almost nowhere to challenge multinational corporations" (Freeman, 2006, p. 13). When it comes to the global apparel industry, NGOs have targeted large, branded, reputation-sensitive companies and have motivated a class of consumers to express their concern about specific issues (O'Rourke, 2005; Spar & LaMure, 2003). This is an example of a secondary stakeholder group (NGOs) having an impact on a primary group (consumers).

NGOs deploy both negative information to critique leading brands, and positive information to help build new markets for improved products. According to a 2009 *South China Morning Post* article, the group Friends of Nature and the Institute of Public and Environmental Affairs called on the U.S. based brand Timberland to persuade "two factories to clean up their acts. Timberland is a well-known brand and they have a very clear policy on environmental protection," said Zhang Boju, leader of the Friends of Nature group. "We want to put some pressure on them because we believe they have enough influence to bring about a change" (Clem, 2009, p. 1).

Within the apparel industry, companies are "confronted with internet-connected and media-savvy NGO campaigns raising tough issues and posing severe challenges to

their reputations and even to their fundamental social license to operate" (Freeman, 2006, p. 13). NGOs have used market campaigns to share information about the environmental or social impacts of products or processes with consumers and the media (O'Rourke, 2005; Spar & LaMure, 2003). Market campaigns first identify a specific problem that resonates with consumers (e.g. shoes made with child labor) and then connect these to larger issues (e.g. labor rights and toxic chemical reduction). NGOs then work strategically to frame these problems in a way that supports consumer understanding and action and that places responsibility on specific corporations (Liu, 2009; O'Rourke, 2005; Shellenberger, 2003; Spar & LaMure, 2003). Through this process, it is possible to witness two secondary stakeholder groups (NGOs and the media) working in unison to dramatically affect a primary stakeholder group (consumers).

It is also possible for NGOs to affect other stakeholder groups. Liu (2009) found that "pressure from communities and NGOs were considered the most important factor affecting environmental enthusiastic behavior of firms located in the Yangtze River Delta" (p. 1485). It is possible for the actions of an NGO to have an effect on the community in which they are operating, by raising awareness and concern of environmental issues. Liu notes that "creating rules that facilitate communities and NGOs to access more information about environmental behavior of firms and thereby adding complementary efforts [to government] enforcement" is important to

accomplish (p. 1485). This demonstrates how a secondary stakeholder group (NGOs) can have an effect on primary stakeholder groups (the government and communities).

NGOs play a critical role as information providers, analysts, and verifiers of product claims. NGOs are thus also participating in efforts to develop credible certification systems of products and processes (O'Rourke, 2005). It is important to identify current stakeholders' expectations for environmental performance in the apparel industry with a focus on NGOs as they compromise a large secondary stakeholder group capable of affecting many other groups.

Competitors

Within the apparel industry, competition is fierce. Apparel suppliers compete with other suppliers for intellectual property rights and trade secrets. Many apparel brands compete with each other to garner the best prices from suppliers on products. Retailers compete with each other to win over consumers. Retailers such as Kohl's face heavy competition from department stores JCPenney and Macy's, discounters Target and Wal-Mart, and off-price retailers Ross and T.J. Maxx (Chang, 2009). "Most large businesses today operate in a fundamentally global competitive environment, in both producing and selling their wares, frequently using long supply chains to actually produce goods" (Waddock & Bodwell, 2002, p. 114). Companies keenly feel this industry competition when they are reporting on their environmental activities.

More specifically, with respect to its environmental activities, a firm's disclosure may provide competitors with information about particular production process inefficiencies, costing structures, expansion plans or product reliability. This information may allow competitors to gain an advantage over the firm in its relations with customers, suppliers or regulators (Aerts, et al., 2007, p. 646).

Many apparel brands and retailers are hesitant to disclose environmental information that would give their competitors an advantage.

The September 28, 2009 edition of BusinessWeek featured the magazine's "100 Best Global Brands" ranking of company that compete against each other. Interbrand Consulting Group compiled this yearly list for BusinessWeek. In order to be considered for this list, a "brand must derive at least a third of its earnings from outside its home country, be recognizable beyond its base of customers, and have publicly available marketing and financial data" (Helm & Boyle, 2009, p. 50). The methodology used by Interbrand evaluates brand value in the same way other corporate assets are valued—on the basis of how much it is likely to earn for the company in the future. "BusinessWeek and Interbrand believe this figure comes closest to representing a brand's true economic worth" (Helm & Boyle, 2009, p. 50). "This is a Darwinian recession. Only the strongest will survive," says Jez Frampton, CEO of Interbrand (Helm & Boyle, 2009, p. 44).

According to the 2009 list, fashion brands, such as Louis Vuitton and Gucci, benefited by expanding into China and the Middle East. Luxury companies specializing in handbags and other accessories—including Louis Vuitton, Gucci, and

Hermès—generally performed better than those best known for apparel. A review of the ranking with an eye on apparel companies shows Louis Vuitton ranking #16, H&M ranking #21, Nike ranking #26, Zara ranking #50, adidas ranking #62, Hermès ranking #70, Gap ranking #78, Prada ranking #87, and Puma, Burberry, Polo Ralph Lauren ranking #97, #98, and #99 respectively (Helm & Boyle, 2009).

Liu's (2009) study of manufacturers located in the Yangtze River Delta area of China found that "market pressure played a significantly positive roles in improving the environmental behavior of firms" (p. 1485). Apparel manufacturers made up 29.3% of the sample population for this study, which strengthen its relevance to this research. Liu (2009) is among the first to evaluate external pressures exerted by stakeholder groups in one of China's largest manufacturing sectors.

Other researchers surveyed Hong Kong-based small, medium, and large-sized enterprises found that "the key drivers for embarking on environmental initiatives were competitive advantage, enhanced reputation, and improved management" (Studer, Welford, & Hills, 2006, p. 421). These three factors could lead to enhanced competition between apparel manufacturers. This work is of special relevance since many apparel brands and retailers utilize production facilities in Hong Kong. This study goes on to note that

stakeholders' demands influenced both small and large companies, but not necessarily in the same areas. While 50% of the larger companies publishing environmental, social or sustainability reports had been encouraged to do so by their stakeholders, this had happened to none of

the small and medium-sized enterprises (SMEs). On the other hand, stakeholders' demands were the main driver for adopting initiatives relating to extended producer responsibility in SMEs, but only a minor factor in larger companies. (Studer, et al., 2006, p. 422).

Studer, et al. do not identify exactly which stakeholder group are making the demands which are causing change in the publishing of environmental performance and information about that performance, which is what this study proposes to do.

These studies demonstrate how competitive the apparel industry is and how improved environmental performance can lead to competitive advantage for a company. By understanding stakeholders' expectations for environmental performance in the apparel industry a company may be provided with a larger competitive advantage over a competitor (Rueda-Manzanares, 2008; Studer, et al., 2006).

Public Agencies

Engaging public agencies with regard to developing environmental policies may be another area of competitive advantage the apparel industry could capitalize on. The Government of Alberta's Public Agencies Governance Framework defines a public agency

- as a board, commission, tribunal or other organization established by government but not part of a government department;
- that has been given responsibility to perform a public function;
- that is accountable to government:
- that has some degree of autonomy from government; and
- for which the government holds the primary power of appointment (Government of Alberta).

With this definition in mind, one could state public universities and colleges are public agencies that should be considered a secondary stakeholder by the apparel industry. Of equal importance is the academic research conducted and published by these universities and colleges.

In their 2008 work entitled "Going Beyond Green: The "why and how" of Integrating Sustainability into the Marketing Curriculum", Bridges and Wilhelm lay the foundation of important sustainability concepts they believe should be part of a marketing curriculum. They note, "teaching sustainable marketing practices requires that curricula advocate a "triple bottom line" approach to personal and marketing decision making, emphasizing requirements for a sustainable lifestyle, company, economy, and society" (p. 33). These requirements include environmental/ecological, social, and economic stewardship. Bridges and Wilhelm (2008) believe that the "move toward more sustainable business practices and education is a direct result of an increasing awareness of the significant environmental degradation and social inequities existing across the globe" (p. 35). These researchers make suggestions to incorporate sustainability principles into a university's marketing pedagogy.

The University of Delaware through its Graduate Certificate in Socially Responsible and Sustainable Apparel Business has developed an online curriculum of classes that incorporates environmental sustainability and corporate social responsibility (University of Delaware Fashion & Apparel Studies Department, 2010).

This certificate program would be very helpful to industry professionals seeking to put into place sustainability initiatives at their companies.

The apparel industry could work in partnership with a public agency, such as a university to incorporate sustainability principles into the apparel design or merchandising program at a school. This imbedded learning would produce a new wave of young professionals who would be knowledgeable about environmental sustainability and could apply this knowledge to engage stakeholders.

The U.S. Environmental Protection Agency (EPA) is another public agency whose mission includes education on environmental issues. Part of the EPA's mission is to safeguard the natural environment -- air, water and land. (Environmental Protection Agency, Mission). The agency's purpose includes ensuring that:

- all Americans are protected from significant risks to human health and the environment where they live, learn and work;
- federal laws protecting human health and the environment are enforced fairly and effectively;
- all parts of society -- communities, individuals, businesses, and state, local and tribal governments -- have access to accurate information sufficient to effectively participate in managing human health and environmental risks (Environmental Protection Agency, Mission).

This mission addresses stakeholder concerns and acknowledges that they may differ across groups. In order to accomplish their mission, the EPA works closely with the U.S. Congress so when an environmental law is written, the EPA is able to write regulations and national standards making the law an effective environmental management tool. The EPA also works closely with states, companies, and tribes to

ensure understanding and compliance with their regulations (Environmental Protection Agency).

Media Agencies and Media Coverage

"Corporate social responsibility (CSR) is increasingly being recognized by firms as central to core business activities, as opposed to a peripheral consideration largely associated with philanthropy" (Bhattacharya, Smith, & Vogel, 2004, p. 6). This trend has major ramifications in terms of a company's marketing strategy and the resulting media coverage. The media can play an important role, as a secondary stakeholder, in the success of an apparel company's environmental strategies.

As Waddock and Bodwell (2004) explain, "many brand name companies have suffered significant reputational damage from lack of attention to important issues related to corporate responsibility" (p. 35). Similar to NGOs, the media has the ability to scrutinize apparel companies that are not meeting bare minimum environmental laws in a developing country (O'Rourke, 2005; Spar & LaMure, 2003). A few researchers have noted the link between information reporting, the media, and social responsibility.

Hamilton used the pollution data published in 1989 thru the EPA's Toxic Release Inventory (TRI) to compare media coverage and company stock prices. He noted that companies with higher pollution data were more likely to be negatively profiled in the media within two to three days of the press release. He also found that

stock prices were negatively affected by the media coverage of this pollution data.

Investors also found this pollution information of interest, since nearly three quarters of the TRI pollution releases came from publicly held companies. Stockholders in firms reporting TRI pollution figures experienced negative, statistically significant, abnormal returns upon the first release of the information. These abnormal returns translated into an average loss of \$4.1 million in stock value for TRI firms on the day the pollution figures were first released (Hamilton, 1995, p. 98).

This indirect cause and effect relationship between a primary stakeholder group (the investors) and a secondary stakeholder group (the media) are important to note. As this study was published in 1995, one can imagine that the cause and effect relationship has strengthened over time. This may be due to the advent of radically different information systems, such as high definition television, wireless Internet technology and social networking communities (Elkington, 2004).

In their 2008 work, Dickson and Eckman make the connection between the media and apparel companies' voluntarily reporting on CSR practices. They note

voluntarily reporting about a company's social performance to investors and other stakeholders and activists...must be unsettling to corporate executives. Credible reporting requires details about firm shortcomings and the company's efforts must be externally verified through assessment by stakeholders or an independent third-party group (p. 726).

Other researchers have found that companies in other sectors have expressed similar concerns about releasing CSR information to the media (Savage et. al, 1991; Waddock & Bodwell, 2004; Wright, Smith, & Wright, 2007). Setting aside the executive board's concerns, Dickson and Eckman report "publicly reporting the results of companies"

performance in the social and environmental components of their work helps build trust with employees and stakeholders" (2008, p. 725). They go on to conclude that the relatively small number of apparel companies

participating in the Fair Labor Association (FLA) or other forms of third- party public reporting on company.... practices suggest that many businesses are concerned about how the media would handle their public disclosure of the extensive issues they face in the workplace (2008, p. 740).

This concern about how company environmental performance information will be handled by the media may hinder apparel brands and retailers from publicly releasing the information.

Building on this work with the FLA, Katz, Higgins, Dickson, and Eckman (2009) examined the link between external third party monitoring, public reporting, and media coverage by reviewing the financial metrics of global apparel companies. This research team identified three FLA public reporting milestones and compared company stock prices before and after media coverage. A longitudinal comparison was used "to determine how society interprets the [reporting] event on the future of the companies" (Katz et. al, 2009, p. 498). This interpretation may have been confounded by media reports on other company related activities, such as stock buyouts and shareholders meeting reports. Katz et al. (2009) concluded "the external monitoring of business activities reduces the level of unknown information allowing

society to more accurately assess business reputation and determine risks associated with valuing the firm" (p. 504).

All of these findings reflect the importance of media coverage in the apparel industry. Since this secondary stakeholder group is capable of impacting various other stakeholder groups, both primary and secondary, one can say that the media has a large sphere of influence in the apparel industry. It could be said that the media, like NGOs, revel in causing problems within the industry. Indeed researchers have noted that "the nature of the media coverage [on the apparel industry]... seemed to emphasize problems in the factories" (Katz et al., 2009, p. 506). The media's sphere of influence as a secondary stakeholder is large and should be considered by apparel brands and retailers as they seek to lessen their impact on the environment.

Purpose

The dual purpose of this research was to a) identify current stakeholder groups' expectations for environmental performance on key environmental issues within the apparel industry and b) evaluate stakeholder interactions with apparel companies in attempting to improve environmental performance. This review of literature described potentially influential stakeholder groups within the apparel industry for each of the primary and secondary categories established by Clarkson.

Demands on companies to measure, document and disclose information about environmental performance will become more invasive—i.e. as the result of pressures from employees, neighbors, the general public, environmental groups and regulatory agencies. In the same way that

public companies are measured by their financial results, environmental performance will increasingly become a critical factor to scrutinize (Greeno & Robinson, 1992, p.223).

The previous review of various primary and secondary stakeholder groups that may have an influence on an apparel company's environmental strategies leads us to the importance of understanding and evaluating their expectations.

Within the past couple of years, apparel companies have begun to think "green" and seek out solutions to social, economic, and environmental concerns.

If the greening of corporate strategies can be interpreted as an attempt to meet stakeholder expectations, then identifying salient stakeholders becomes a critical step in corporate strategy formation. Yet not all stakeholders are equally important for corporations when crafting environmental strategies (Buysse & Verbeke, 2003, p. 453).

Results of this research will provide apparel companies with an understanding of key stakeholder groups and their expectations for environmental performance; hence aiding companies when crafting their own environmental strategies. Results of this research could also guide apparel companies' as they interact and communicate with stakeholders.

Crane and Livesay note the importance of stakeholder communication in their 2003 paper entitled "Are you Talking to me? Stakeholder Communication and the Risks and Rewards of Dialogue". They state "stakeholder communication is clearly complex and multifaceted... It is no longer sufficient to simply promote and propound the development of stakeholder communication per se, at least not without a clear

understanding" of what the stakeholders want and need (Crane & Livesay, 2003, p. 51). With the dual purpose statement this research begins to bring to light stakeholder groups' expectations so that apparel brands and retailers may understand them better.

Chapter 3

METHODS

The dual purpose of this research was to a) identify current stakeholder groups' expectations for environmental performance on key environmental issues within the apparel industry and b) evaluate stakeholder interactions with apparel companies in attempting to improve environmental performance. As such this work sought to answer the following research questions:

- What are stakeholder groups' expectations for environmental performance of apparel brands and retailers?
- Does the environmental performance of apparel brands and retailers meet stakeholder groups' expectations?
- What do apparel brands and retailers need to do in the future in order to improve environmental performance?
- How have stakeholder groups influenced changes in environmental performance within the apparel industry?
- How has the environmentally-focused work of stakeholder groups been influenced by the apparel industry?

By focusing on these questions, this work brought to light the interests, concerns, and expectations of varied groups that influence the apparel industry, or the industry's stakeholder groups, as Freeman's theory states.

As part of this process, it was useful to look at the strategies stakeholders groups are using to influence the environmental performance of apparel brands and retailers in the industry. In order to ascertain these expectations and methods, a qualitative case study research methodology was employed. Each case study was developed using a combination of the following data collection techniques: website analysis, semi-structured interviews, and archival records search. This methodology assisted in determining what stakeholder groups are looking for from apparel companies when it comes to environmental performance and the ways the stakeholder groups are interacting with the industry to influence change in environmental performance.

A case study is defined as "an in-depth analysis of …an organization" (Touliatos & Compton, 1988, p. 244). Case study research aims at a "deep understanding of the actors, interactions, sentiments, and behaviors occurring for a specific process over time" (Woodside & Wilson, 2003, p. 497). A defining feature of case study research lies in the importance placed by the researcher on the data acquired to describe, understand, and predict interactions and expectations (Woodside & Wilson, 2003). This outsider's (etic) perspective must be carefully balanced with the inside (emic)

information that is gathered through the case study process.

Etic representation in case study research often includes description and explanation of emic meaning as well as building composite accounts of the process based on data from triangulation (Woodside & Wilson, 2003, p. 499).

For this research, the sample population was identified using an emic perspective.

Sample Identification Process

In order to identify important stakeholder groups within the apparel industry, the researcher and research advisor contacted industry professionals currently working in the area of CSR and environmental sustainability. For this research, ten major brands, two garment manufacturers, one industry consultant, and one component/contract supplier were contacted via email. This email communication requested that they identify four to five key stakeholder groups or organizations that are most influential or have caused change in their own apparel companies' or another's environmental practices or performance. Eight corporate professionals engaged in the area of environmental sustainability responded to this email request, including professionals from five major brands, two garment manufacturers, one industry consultant, and one component/contract supplier. The chart below lists all the different stakeholder groups these professionals listed as being influential, as well as the frequency with which each group was mentioned.

Primary Stakeholder Groups					
	Global Impact				
	Investing		RiskMetrics		
Investors	Network	FTSY4GOOD	Group	DJSI	
Suppliers					
Employees					
Consumers					
Governments &		CA Green Chem.		Eco-	
Communities	DEFRA/UK	Init. & Prop 65	CPSC	label/EU	
		OIA/EOG Eco			_
		Working Groups			
Trade associations	AAFA x3	x3			
Secondary Stakeholder Groups					
	Organic	idary Stakeholder G	Better Cotton	Oeko-Tex	WWF
NGOs	Exchange x4	CERES x3	Initiative x 3	x3	x2
Competitors	Patagonia	Levi Strauss x2	Wal-Mart x2		
Public agencies	EPA/USA x2				
Media agencies	Treehugger	Eco-Textile News	GreenBiz.com	Grist	

Table 3.1- Stakeholder groups identified by industry experts

Taking note of the groups most widely mentioned by industry experts, it was decided to compile case studies on the American Apparel & Footwear Association, a trade association, Organic Exchange and Ceres, both NGOs. These groups are highlighted in green in the chart above.

Data Collection

In order to gather rich, deep insights into what is happening within an organization and why, case study research should use mixed-methods for data collection and analysis (Woodside, 2010; Woodside & Wilson, 2003). Achieving deep understanding in case study research usually involves the use of multiple research

methods across multiple time periods (i.e. triangulation). Triangulation often includes:

- Direct observation by the research within the environment of the case:
- Probing by asking case participants for explanations an interpretation of operational data
- Analysis of written documents (Woodside & Wilson, 2003, p. 498).

The researcher developed case studies on a total sample of three primary and secondary stakeholder groups initially identified by industry experts. Each case study was developed using data collected through website analysis, semi-structured interviews, and archival records analysis. The use of multiple data collection methods in case study research "usually contributes to increasing accuracy, complexity and coverage in a study more so than generality" (Woodside, 2010, p. 71). Case study research has been found to be high in accuracy, yet low in generalizablity (Woodside, 2010). This is an appropriate tradeoff for this research because the goal is to develop a complete understanding of each group.

Website Analysis

The first data collection technique used in the development of each stakeholder group's case study was website analysis. This information gathering technique was conducted on each of the suggested stakeholder groups' website. The procedures for the website analysis determined the following information about each group:

1. The group's mission statement

- 2. The environmental issues on which the group focuses. The mission statement may refer directly to the group's core environmental concern (such as OIA's focus on outdoor preservation, recreation, and education). This statement may also refer to areas of prime concern for the group (such as the EPA's focus on air, water, and land issues).
- 3. A list of the current environmental issues the group is working on.
- 4. A listing of current member companies. This listing provided insight into the partners the group is working with to effect change in the apparel industry's environmental performance.
- 5. A listing of recent improvements [occurring within the last two years -2007 to 2009] in environmental performance within the apparel industry the group has been involved in. This accomplishments list was used to determine if the group is effective at creating change within the apparel industry.

The website analysis assisted the researcher in developing a broader understanding of the group's work and in preparing to interview stakeholder group representatives.

Interviews

In an effort to gain a better understanding of how stakeholder groups operate within the apparel industry and the strategies that they use to effect environmental change, the researcher conducted interviews with representatives involved with each

of the stakeholder groups for which a case study was developed. Representatives interviewed were members of the leadership team for the organization or executives for companies working with the organization on environmental-related initiatives. These representatives were introduced specifically to the researcher for purposes of this project. Interviews ranged from 30 to 90 minutes, averaging 45 minutes. Along with a semi-structured interview format, the researcher employed a "funnel sequence [where] the most general question is asked first (requiring a free response) and then the more restricted questions follow" (Touliatos & Compton, 1988, p. 180). This funnel sequence of questions encouraged the interviewee to share general information at the onset of the meeting, which led to the development of rapport between the researcher and the interviewee. According to Senge, Smith, Kruschwitz, Laur, and Schley's (2008) "Stakeholder Dialogue Interview" format as well as Touliatos and Compton (1998), rapport building is important to a successful interview with a stakeholder. The interview opened with a few questions about the organization and the interviewee's role with the organization. This background information was used in the development of the case study. From these general questions, the

¹ See Appendix 1 for email communication requesting an interview with group representative.

researcher began to drill down to group's involvement within the apparel industry as well as their effectiveness at influencing change.²

All interviews were audio recorded and full transcripts were created. As such the University of Delaware's IRB Informed Consent form, which each interviewee completed prior to the interview, alerted them to this recording process.³ The request to audio record the interview "permit[ed] a complete and unbiased transcription of the responses" to happen immediately after the interview (Touliatos & Compton 1988, p. 184).

As part of this data collection process, the researcher compiled reflections and thoughts from the interview immediately after the interview was completed. This interview reflection process captured small nuances, thoughts, and reactions based on the interview. Both the recording of and reflection on the interview process were critical to ensure accuracy and reliability when it came to data analysis. Through the use of a semi-structured interview format along with a funnel sequence of questions, this work "yield[ed] more accurate information and a greater depth of response" to the proposed research questions (Touliatos & Compton, 1988, p. 186). This data collection technique provided rich information on each stakeholder groups.

² See Appendix 2: Interview questions and how they relate to the research questions.

³ See Appendix 3: University of Delaware IRB documents and interview instrument.

Archival Records Analysis

Using keyword searches in the Lexis Nexis Academic database and the World Wide Web, the researcher sought out Associated Press articles, media reports, stockholder reports, press releases, blog postings, and magazines and newspaper articles that were associated with each stakeholder groups. The data collection strategy of analyzing archival records was used to understand major projects the groups were working on regarding environmental performance within the apparel industry. These documents also revealed important environmental issues that stakeholder groups were working on. Analyzing archival media reports and news articles added more background information to each case study. Using the data collection technique of analyzing archival records, also contributed to an etic perspective on the stakeholder group. In many cases, these external sources validated and supported the groups' effectiveness claims. It is important to note that negative opinions about the three stakeholder groups (AAFA, OE and Ceres) were not found during this archival search process. This too may speak to the groups' effectiveness claim. With the information gathered through website analysis, semi-structured interviews, and archival records analysis, the researcher assembled a case study on each of the suggested stakeholder groups.

Data Analysis

The data analysis process used for case study research is challenging to formally identify and quantify (Boyle, 1994; Touliatos & Compton, 1988, Woodside & Wilson, 2003; Woodside, 2010). The same three-step process was used to analysis the data culled from the data collection techniques of website analysis, semi-structured interviews, and archival record searches. First, the researcher assembled a "bare bones" case study, using the research questions as a guide, based on the information discovered during the website analysis. Then the rich data provided through the semi-structured interviews with group representatives was added to the case to provide further details about the organization, as well as environmental issues of concern. Lastly, archival record searches were conducted to add fuller data and details to the case study. This three-stage process to assembling the case studies brought forth a fuller perspective on each issue and the stakeholder group's role in effecting change.

Data analysis and synthesis occurred as the information was collected and processed during the website analysis and subsequent interview process. With this "approach to data analysis, the analysis process starts very early in the data collection and continues throughout the project" (Boyle, 1994, p. 180). As data was collected, the researcher looked for "patterns in the data and for ideas that help explain the existence of those patterns" (Boyle, 1994, p. 174). With this approach to data analysis, the researcher noticed various patterns as the data was analyzed repeatedly. It was also

important to seek out the underlying meanings and motivations to the interview data that was collected.

A researcher can code communication in terms of its manifest content (what was actually said) or its latent content (it's underlying meaning). Coding of manifest characteristics of messages, such as word frequencies, can be done relatively easily and reliably by humans or computers. Coding of latent character tics of texts, such as thematic analysis, is more complicated (Touliatos & Compton, 1988, p. 303).

This manifest and latent analysis process was used when reviewing interview transcriptions, with more careful attention paid to the latent content of the interview transcriptions.

Through the development of case studies on three stakeholder groups, the researcher was able to identify issues of concern and patterns that applied to all three groups, as well as issues and concerns that applied to just one or two of the groups. The researcher attempted to explain how these common patterns applied and operated within the stakeholder group, as well as the apparel industry. These patterns and explanations are discussed in detail in Chapter 5.

Chapter 4

CASE STUDIES

This chapter presents a complete case study on each of the three stakeholder groups that were identified by industry professionals as being prominent within the apparel industry for influencing environmental performance within. Each case study was assembled using data collected through website analysis, semi-structured interviews, and archival record searches.

Trade Association - American Apparel & Footwear Association

The American Apparel & Footwear Association (AAFA) is the national trade association representing apparel, footwear, and other sewn products companies in front of the United States government on policy matters and trade agreements. As a trade association, AAFA is considered a primary stakeholder within the apparel industry. The AAFA was formed in August 2000 through the merger of two highly regarded trade associations: the American Apparel Manufacturers Association (AAMA) and Footwear Industries of America (FIA). The AAMA was founded in 1960 as the national association representing U.S. apparel manufacturers. At the time, AAMA's mission was to "help create an environment in which the U.S. apparel

industry could operate competitively and profitably in a global economy" (American Apparel & Footwear Association [AAFA], 2009) To handle the challenges faced by the apparel industry at the time, the AAMA developed partnerships with the National Association of Shirt, Pajama, and Sportswear Manufacturers to form an organization that represented every segment of the industry, regardless of company size, location, product line, or type of distribution (AAFA, 2009). This early partnership resulted in a trade association focused on "advocacy towards Congress and federal agencies as well as strong programs in economics, education, technology, government affairs, marketing, communications, and industry relations" (AAFA, 2009).

The Footwear Industries of America's (FIA) history reaches back even further to 1869. This group served as the only national association for footwear manufacturers, importers, distributors, and suppliers. FIA helped u.s. footwear companies achieve growth through education, advocacy, research, and networking opportunities (AAFA, 2009).

Historically, these two trade associations through industry partnerships, advocacy, and education established strong reputations within the apparel and footwear industry as well as within political circles. Hence, in 2000 a logical partnership occurred between these two groups to form the AAFA.

As of 2010, the AAFA boasted more than 400 member companies. Drawing from a broad, diverse, technically strong membership base, AAFA member companies

produce more than 80% of apparel and footwear sold at wholesale each year in the United States (AAFA, 2009). According to the January 2010 President's Corner message "these companies account for more than \$225 billion in yearly retail sales" (Burke, 2010, p. 1). Supplier members deliver a wide assortment of materials, knowledge, and products for all of the leather and needle trades, including leather, chemicals, machinery, components, synthetics, textiles, upper and soling materials, computer technology, and more (AAFA, 2009). While footwear and apparel brand retailers represent a broad price point spectrum as well as every facet of apparel from infants to men's wear (AAFA, 2009).

Thirteen staff members located at AAFA's Arlington, Virginia offices serve the trade association's member companies. With this location near the nation's capital, AAFA is able to closely work with government officials from all 50 states, as well as international ambassadors and visitors. AAFA staffers are assigned to cover issues such as the Central American Free Trade Act- Dominican Republic (CAFTA -DR), children's wear, supply chain leadership, licensing, and labeling. Many staffers have a portion of their assignment focused on addressing environmental issues, such as the restricted substances involved in the manufacturing of children's sleepwear or the carbon footprint issues that arise out of supply chain management.

Taking into account the various environmental concerns within the apparel industry, the AAFA is committed to bring attention and awareness to these issues

within the apparel and footwear industry. AAFA staff members are assigned to supply members with brief synopsis and evaluations of pertinent legislative bills as they are raised in Congress. As an example, on July 16, 2008, AAFA staffers put out a brief summary on the Introduction of the Recreational Performance Outerwear Apparel Act. The synopsis stated which senators introduced the bill, which industry groups assisted in its development, and if a partner bill was making its way through the House of Representatives. The AAFA lent support to this act since its passage "would make US imports of specific types of recreational performance outerwear duty-free while providing new funding for research into new US technologies and jobs that focus on sustainable, environmentally-conscious manufacturing and streamlined supply chains" (Lamar, 2008, p. 1). This summary article was sent to all Environmental Committee members for their knowledge and benefit.

A December 8, 2009 press release revealed the high concern the AAFA places on product safety and in turn the environmental performance expected of companies as the AAFA worked to educate member companies on the newly passed Consumer Product Safety Improvement Act (CPSIA). According to this press release, the AAFA worked to educate manufacturers as they revisited their supply chains and examined their manufacturing processes in order to be compliant with the new law.

In order for our industry to quickly learn about these new standards and adapt their manufacturing processes, AAFA stepped up and led an industry-wide educational program that touched every link in our supply chain... AAFA led seminars in the United States, China, and

India to help producers maintain their commitment to product safety (Elmore, 2009, p. 1).

Prior to this education program in October 2008, the AAFA formed a Product Safety Council at the request of its member companies (Van Dyke, 2008). This council was tasked with focusing on product safety regulations and related issues.

This commitment to effective change can be seen in the group's careful and purposeful lobbying for realistic implementation of environmentally focused legislative bills, such as California's Green Chemistry Law, also known as Proposition 65. This law has a direct impact on how apparel companies handle production and the hazardous chemicals that are related with apparel and footwear products. California's Green Chemistry Law was recently implemented as a "coordinated strategy to reduce or replace the upstream introduction and use of toxic substances, and to provide greater information to the public about their risks" (Hsiao, Linden, & Reinhard, 2008, p. 1). The law mandates that products sold in California containing one of over 800 listed chemicals require a warning label noting that the chemicals in these products may cause cancer, birth defects, or reproductive harm unless products meet statedefined limits (Intertek Group, 2010). This legislation, modeled after Europe's Registration, Evaluation, Authorisation, and Restriction of Chemical Substances (REACH) regulations, has posed many challenges to U.S. chemical and consumer products manufacturers because "policy and data gaps exist in the current chemical regulatory system, including a significant lack of information on chemical uses and

safety, and insufficient private or public investment in green chemistry research, development, education, and technical assistance" (Hsiao, et al., 2008, p. 1).

The AAFA is working with its member companies to educate them on this new law and how they can comply with it. It is working to close data gaps that currently exist, by providing members with technical assistance through the AAFA Restricted Substances List (RSL) and various knowledge building tools, such as the RSL implementation Toolkits. Using these sets of tools and the RSL supplied by the AAFA, apparel brands and retailers are able to realistically meet the new standards this law has set. As a trade association comprised of companies that deal with chemical compliance issues on a daily basis, the AAFA lobbies for the realistic implementation of laws that will affect businesses.

Mission Statement

The AAFA's mission "is to promote and enhance its members' competitiveness, productivity and profitability in the global market by minimizing regulatory, legal, commercial, political and trade restraints" (AAFA, 2009). It seeks to achieve this mission by:

- Representing the points of view and pursuing the concerns of AAFA members before the public and all branches of government to advance the association's legislative, international trade and regulatory objectives.
- Ensuring that individuals employed in the sewn products industries are afforded opportunities, and are treated with fairness and respect.
- Communicating information to promote the apparel, footwear and other sewn products industries worldwide.

 Creating a favorable environment for the advancement and exchange of best practices and technological innovations (AAFA, 2009).

The AAFA has divided its work among 15 committees and councils. These groups handle issues such as Government, Trade and Regulatory Policy, which includes the following work groups: Government Relations Committee, Brand Protection Council, Government Contracts Committee, Social Responsibility Committee, Environmental Committee, and the Product Safety Council; Management Issues is the umbrella group for the Financial Management Committee, the Human Resources Leadership Council. and the Supplier Resource Committee; Divisions and Specialty Markets are covered by the Footwear Division and the Intimate Apparel Council; lastly Technology Issues are discussed by the Supply Chain Leadership Committee, Information Systems Committee and the Product Innovation Council. Through these varied work groups and committees, the AAFA is able to effectively serve all the different facets of the apparel and footwear industry and engage with member companies. Each committee has 2-3 AAFA staff members assigned to work directly with the participating member companies. Other forms of member engagement include participation in AAFA sponsored events and professional networking opportunities. All member companies pay yearly dues to be a part of the AAFA.

The AAFA's Environmental Committee (EC) was of prime interest to this study. The EC meets 3-4 times a year as a committee to provide a forum for apparel,

footwear, and textile executives as well as labs, testing facilities, and other solution providers to discuss proper environmental stewardship and share best practices as they relate to environmental concerns (AAFA, 2009).

We started the Environmental Committee as a task force under the Social Responsibility Committee. We were a task force under that for about 4 to 5 years. We may have had about 30 members join. Because 30 AAFA members thought it was important. Before too long, more and more people starting seeing the minutes and reports from the meetings and today we have 110 members. We are now a separate committee. So we are no longer a task force under the Social Responsibility; we are our own committee. We have seen the committee grow and the interest grow. More members are asking for information on the committee (AAFA Interview 1).

EC member companies represent every aspect of the supply chain, from textile mills to production facilities to dye houses to testing labs, as well as various apparel brand and retailers, such as Levi Strauss, L.L. Bean, Carhartt, Timberland, Polo Ralph Lauren, Ann Taylor, and Liz Claiborne. Many companies have various employees attend EC meetings and make presentations at the meetings to share projects they are working on or improvements they have made in supply chain management. "At each meeting, a sustainability case study is presented from one of our member's, so that the rest of us can learn and come up with our own programs within the industry to improve the image of the industry" (AAFA Interview 1). EC meetings are useful learning and networking sessions for member companies to participate in. According to the committee's website

the Environmental Committee has taken a strong and visible role in educating the industry on restricted substance lists and chemical management systems and in providing information on best practices. For companies interested in environmental sustainability, it is a critically important forum. It is the group's responsibility to ensure that member companies are apprised of environmental legislative and regulatory developments that could impact their global operations and to educate policymakers on the group's efforts to be responsible environmental stewards and minimize pollution (AAFA, 2009).

The growth of this committee as well as its information sharing agenda demonstrates the AAFA's commitment to addressing environmental performance issues within he apparel and footwear industry.

Through the formation and attention the EC commands from AAFA staffers it is evident that this stakeholder group is committed to addressing environmental issues. Though addressing the environmental performance of the apparel industry is not an immediate part of the group's mission statement, their commitment is evident through the resources dedicated to informing and working with EC member companies.

Environmental Issues: Current Expectations and Next Steps

The AAFA expects all its members to be "knowledgeable about the issues and how they may affect their business" (AAFA Interview 2). An AAFA representative further described this expectation of knowledge stating that

So what the AAFA expects its members to do is at a minimum meet compliance levels no matter what area you are talking about, be it product safety, RSL, sustainability, regulatory compliance. So we have these meetings almost once a quarter and we have conferences all over the world, India, China, and Europe talking about what is expected and raising the level of awareness. But the implementation and execution of

these issues have to happen at the company level and only they can do it. But [the AAFA's] expectation is compliance and going beyond compliance (AAFA Interview 1).

The AAFA holds general membership meetings four times a year all across the United States and conferences on a global scale in order to make members aware of and enable them to meet and or exceed compliance laws. As part of these meetings and conferences, the EC has made it a point to host timely presentations on relevant topics such as the CPSIA, Climate Change, Security's Exchange Commission environmental disclosure rules, and California's Green Chemistry Law.

Environmental issues of concern. AAFA representatives noted five environmental concerns their members are currently attempting to deal with. These issues are water usage, carbon foot printing, product safety and restricted substances, regulatory compliance, and sustainability. From the perspective of the AAFA, there is a significant management component to all these environmental issues that member companies must come to terms with. This section outlines the environmental issues of concern to the AAFA and suggests the next steps apparel brands and retailers need to take to address them.

Water usage. The amount of water used during the production of apparel products is a major environmental concern that apparel brands and retailers should be addressing. The dyeing and finishing of apparel products is an area of critical concern

because so much water is consumed and contaminated during this production process. Currently, one-way of handling this issue is to have "a water purification facility right next to the factory, so they can treat the water and they can return it" (AAFA Interview 2). Having a water purification facility to treat production grey waters may also allow the supplier to sell it back to the municipality, which then becomes a source of revenue (AAFA Interview 2). Grey water is defined as any "wash water that has been used in the home or business place, except the water from toilets. This water comprises 50-80% of residential "waste" water and may be reused for other purposes, especially landscape irrigation" (Oasis Design).

Another way AAFA member companies are being more careful with water usage is by being smarter with their production. One example of smarter production is to "sequence dyes, so that you go light to dark. If you dye something dark and then you have to wash off the dark dye from the machinery that takes a lot more water then washing the light dyes off" (AAFA interview 2). These are two successful examples of current practices AAFA has seen from member companies attempting to get a better handle on water usage.

As a next step towards improving water usage, apparel brands and retailers should have "an articulated set of guidelines for minimizing water usage and minimizing or eliminating water outputs that might be detrimental. A lot of times these exceed what the local government might do" (AAFA Interview 2). It is

important for companies to share these guidelines with suppliers, so they are able to follow them and assist the brand in consuming less water.

Carbon foot printing. AAFA representatives noted that the importance of a company accurately determining its carbon footprint. The term carbon footprint refers to "an estimate of how much carbon dioxide is produced to support" a company's production processes ("Carbon Footprint", 2010). This estimate, usually expressed in equivalent tons of carbon dioxide (CO2), measures a company's impact on the climate based on how much carbon dioxide they produce. Currently, there is a "societal need for proper natural resources accounting systems ... [that] achieve the required scientific rigor" of traditional accounting procedures (Chapagain, Hoekstra, Savenije, & Gautam, 2005, p. 9).

The first thing they really have to do is measure what their carbon footprint is. And they have to understand exactly what they are measuring. Are you measuring the entire carbon footprint from dirt to shirt back to dirt again or are you measuring the carbon footprint as you produce it (AAFA Interview 2).

It is possible for companies to define their carbon footprint as that which they create thru the production and sale of their garments. However, this definition ignores the area that has the largest impact, consumer use. An AAFA representative goes on to explain that if the company decides to take on the consumers' behavior, with respect to the shirt or the clothing, then it will have to answer questions such as

How do you design your garments so that the consumer is going to consume that product in a manner that is more carbon friendly? Are

you going to use fabrics that do not need to be dried in a dryer? Can wash instructions be given that encourage people to hang their clothes to dry instead of putting them in the dryer? (AAFA Interview 2).

These questions must be addressed from the inception of the design process and should be considered throughout the entire product offering.

As a next step it is critical to "really, really understand what the carbon footprint is for each aspect of the supply chain that [is under] your control" (AAFA Interview 2). Along with this understanding comes learning which parts of the company's carbon footprint falls under someone else's control. There is also the possibility of adopting new technology, in terms of "carbon counting... For example [some companies are] starting to account for aspects of their supply [chain] and in other cases they are putting it on their clothing: what's the carbon content of the shirt? What is the carbon footprint of this shirt?" (AAFA Interview 2). These carbon content labels are being incorporated as part of the use and care labels

Product safety and restricted substances. Hand in hand with the industry education work the AAFA does, it also has created a Restricted Substances List (RSL), which applies to the apparel, footwear, and home textiles industry. The AAFA's RSL was first released in the summer of 2007 as a joint partnership between the AAFA and its member companies. The list covers chemicals and other substances for which "presence in a product is restricted through a government regulation or law" (Elmore, 2009, p. 1).

It is a free list that identifies the most restrictive regulatory requirements for chemicals around the world. It is a very simple list to understand and use. We update every six months. It is going thru its sixth revision right now. Companies are using this list as the basis for their own chemical management programs (AAFA Interview 2).

The sixth and most recent edition of the AAFA's RSL was updated as a result of changes spurred by the CPSIA, as well as new state and international chemical management regulations. This list has "become the global industry standard for RSLs" (Elmore, 2009, p. 1). The AAFA's RSL list "includes chemicals that are restricted or banned in finished goods because of a regulation. For each restricted substance -- including chromium, the flame retardant DecaBDE, hydro fluorocarbons, dioxins, PERC, disperse dyes, azo dyes, and pesticides - the most restrictive regulation is noted" (Oakes, 2007, p. 1).

Currently, the AAFA highly suggest that companies implement its RSL list using the online toolkit developed by the Apparel and Footwear International RSL Management Working Group (AFRIM). AFIRM was formed in "July 2004 with the goal of bringing together product chemistry, safety, regulatory, and other experts within the apparel industry to discuss emerging restricted substance topics, share information and experiences" (Apparel and Footwear International RSL Management [AFIRM], 2010). AAFA and AFRIM have a strong partnership when it comes to RSL development and implementation in the apparel industry. AAFA representatives

plainly state how important it is for companies to have an RSL that is implemented using well-developed tools.

The AAFA's list is a very good list to adopt because it is updated every 6 months and it is a global list that is a minimum regulatory limit kind of a list. Adopt [an RSL] on your own and set up policies how you expect your suppliers to comply with this (AAFA Interview 1).

RSLs are becoming more commonplace in the apparel industry. However, many companies do not understand their importance or significance and as such have not implemented good managerial policies to ensure that suppliers properly follow their RSL.

Do not just adopt an [RSL] list, have a certificate in the back, and say [to your suppliers] sign the certificate and send it back to me... You will have a certificate the next day. No problems. They will not even read the RSL policy (AAFA Interview 1).

In order to truly see the benefits of an RSL, companies must have a

real understanding of how their whole supply chain works from a chemical point of view. The analogy there is to think about the questions they ask you when you get on an airplane. Has your suitcase been with you? Has anyone else touched your suitcase? Has anyone given you anything to take on the aircraft? These are the same sort of questions you need to ask of your clothing. Do you understand all the chemicals that have come in contact with this clothing? Or all the chemicals that have interacted with your clothes? (AAFA Interview 2).

Apparel brands and retailers must have a good understanding of their supply chains in order to successfully implement a chemical management process through the use of an RSL.

As the next steps to improving product safety and the use of restricted substances the AAFA offers apparel brands and retailers a two-prong approach. It is suggested that apparel brands and retailers have

a chemical management program, where someone at the top [is] responsible [so that] somebody can go to them and ask questions. Right now, everyone is talking about cadmium. So you could go to them and ask, "Do we have any cadmium issues?" They can say "no cadmium is not a problem for us" or "yes we do and here is how we need to fix it" (AAFA Interview 2).

The heavy metal cadmium and its use in consumer products is currently under scrutiny. Recent Associated Press investigations found high levels of the heavy metal in a sampling of products, including children's jewelry (Casabona, 2010). These news reports prompted the Consumer Product Safety Commission to launch an investigation into this metal which is known to cause brain damage in children. As such many apparel brands and retailers are reviewing their products' material safety sheets to determine if cadmium is of concern to them.

A second next step that applies to product safety and restricted substances is working with a smaller, carefully selected group of suppliers.

I think I am going to repeat myself- have your own policies and procedures in place and enforce them across the table. And show your suppliers that if they fail compliance, you will stop dealing with them/ you will stop doing business with them. Until you mean that strongly, suppliers will always try to cheat because they already feel you are not paying them enough to do a lot. So you absolutely have to be serious about this. Give them more business when they comply and take

business away from them when they do not do what your policies state. I think the only way you can do this is to nominate your suppliers and deal only with those. And let the rest of them go bankrupt (AAFA Interview 1).

As this quote states it is possible for apparel brands and retailers to incentivize compliance by giving more business to the suppliers that are willing to abide by a company's product safety requirements and restricted substances list. This incentive will lead apparel brands and retailers to work with a smaller set of nominated suppliers.

Regulatory compliance. As a trade association, one of the AAFA's main concerns is regulatory control that affect the apparel and footwear industries. As such it carefully monitors and lobbies the U.S. government when it comes to international trade laws such as CAFTA-DR and import tariff laws. When it comes to regulatory compliance, it is especially difficult for apparel brands and retailers to comply

Because companies are in so many countries, [regulatory compliance] is always an issue. I find that from a regulatory stand point, about 85 to 90% of all the regulations are the same. There may be a little bit of difference here and there. But the biggest problems come in lack of enforcement by the regulatory bodies in foreign countries and corruption. You can have all the right laws, but if you under-design your system and put the cheapest materials in, it will fail after six months. Most of the systems are not started or when the inspector comes they tell them what they want to hear and go away. So companies have to set the stage and have policies and procedures in place to know what they are looking at to make sure there is compliance. If you don't send the right people to audit you will never catch some of these companies' behaviors (AAFA Interview 1).

Hence, it is important to have qualified auditors who are well-trained in order for them to spot inaccuracies in record keeping, water usage rates, chemical management, and other areas of the audit. It is also important for apparel brands and retailers to work with and support local regulatory bodies and government agencies so they can build enforcement practices free of corruption.

The next steps associated with this concern are in line with those mentioned above under product safety and restricted substances. It is also important to review the sourcing department's bonus structure to ensure that it falls in line with the company's goals of meeting regulatory compliance.

The only way to do it properly is to identify suppliers that you know are in compliance and are doing it properly. Then nominate those suppliers, so your sourcing people can only source from them. You cannot allow your sourcing department to buy the cheapest product, whatever that may be shirts, blouse, jeans, whatever it is that they can find anywhere in the world. You cannot structure the bonus and the incentive programs of the sourcing manager based on the cheapest products they can buy because now you are forcing them to cheat. That has been the biggest problem in this industry (AAFA Interview 1).

It is important for companies to review the sourcing department's policies and bonus structure to align them with regulatory compliance goals, not low price markers. This shift from price driven to compliance focus is the next step the AAFA suggest on this issue.

Policies for sustainability. As noted in the review of literature, suppliers are a primary stakeholder group. As such their support and

participation are critical to firms' environmental policy development and implementation (Christmann, 2004). It is important for companies to define exactly what sustainability means to them and how their suppliers will assist them in attaining their sustainability goals. In order to successfully do this, the AAFA suggests that you

write your own policies and procedures on sustainability. Then audit your suppliers, expecting or requesting them to show they are achieving sustainability. Because this is a gray area. Sustainability can be a lot of things. You have to write your policies to explain what sustainability is (AAFA Interview 1).

As a next step, it is important for apparel brands and retailers to have sustainability policies in place that allow them to continue producing goods without depleting the earth's natural resources. The AAFA "publishes a lot of resources and puts on a lot of educational programs to pair people up with either information on what their peers are doing or information on solutions that are out there" (AAFA Interview 1). It is possible for apparel brands and retailers to use the AAFA's published guides and educational conferences to fine tune their sustainability policies and set attainable goals.

Is the AAFA an Effective Change Agent?

This research considered whether each stakeholder group was effective in influencing improved environmental performance in the apparel industry. AAFA staffers confidently point out how the group has brought about a greater level of

"awareness and desire by companies to tackle these [environmental] issues" (AAFA interview 2). Another AAFA representative shared how as

a trade organization, [the AAFA] does not have any enforcement powers [when it comes to laws and regulations] and we don't want them. It's a trade organization. It's a group that is trying to help its members to help them raise awareness and tell them what is expected when it comes to compliance. So as an industry we can have a good name (AAFA Interview 1).

By noting the lack of enforcement power the AAFA has, this representative touched directly on one of the limitations of this group. By definition, trade associations are composed of business competitors and suppliers interested primarily in the commercial promotion of products or services (National Science Foundation). Trade association activities typically fall into one or more of the following areas: business ethics, management practices, government lobbying, standardization, research, publication, marketing, promotion, and public relations (National Science Foundation). None of these activities have enforcing rules and regulations as part of their focus; however, that does not mean the AAFA is not committed to making effective change within the apparel industry. As a trade association, the AAFA is able to listen to the concerns of many of its members, then partner with them to resolve issues or bring forth educational opportunities or develop tool kits.

Yet, despite this limiting factor, a variety of indicators suggest that AAFA is influencing improved environmental performance in the apparel industry. From archival records searches, it is evident that the AAFA is regarded as the apparel and

footwear industries' spokesperson on topic as diverse as pirated goods, copyright infringement, trade policy, and import quotas. A database search of LexisNexis Academic using the key words "American Apparel & Footwear Association" showed that from 2004 to 2010, the AAFA was referred to in 20 media articles. Many of these articles were press releases generated by the AAFA, but the overwhelming majority were industry based magazines and newspapers seeking the group's opinion on relevant topics.

From the World Wide Web, an initial search using the keywords "AAFA + trade association" brought up 5,690 mentions on the Internet. Another Internet search using the keywords "American Apparel & Footwear Association + environmental policy" broadened the scope to 18,900 Internet articles. These articles were featured in all sorts of media channels from magazine and newspaper articles, to blog sites, to social networking sites, to company's websites, to other Internet sites. Various blogs and other social media sites mentioned the AAFA in connection with recent industry conferences or trade policy amendments. On "EnviroMedia: Social Marketing's" blog, the author noted the positive response his presentation on green washing and bamboo fibers received at a recent AAFA EC meeting (Tuerff, 2009). Other company sites, such as Levi Strauss, Nike, Intertek, Bureau Veritas, and Timberland, posted articles

⁴ Refer to Appendix 4 for a reference list of articles and web pages reviewed for these searches.

touting their partnership with AAFA. AAFA is mentioned quite often in both academic databases and the World Wide Web in connection with recent law amendments, member companies, and trade conferences. One could view this positive presence in the media community and blogosphere as a measure of effectiveness.

For this work, effectiveness is also measured by the extent to which the group is meeting its mission statement. As noted above, the AAFA's mission "is to promote and enhance its members' competitiveness, productivity and profitability in the global market by minimizing regulatory, legal, commercial, political, and trade restraints" (AAFA, 2009). From the case study it is evident that the group is meeting this mission through the EC's strong leadership, large membership, collaborative nature, and educational focus within the apparel industry. The EC allows for the representation of varying viewpoints on environmental issues currently affecting the industry. Another way the AAFA is accomplishing its mission and hence adding to its effectiveness is through the various communication formats they use to educate, promote, and publicize issues affecting the apparel and footwear industries worldwide. The AAFA is "constantly updating the way [it] communicates with members, be it face to face or electronic. Using webinars, social media, and all sorts of tools. However people want to hear the message, we try to bring it to them" (AAFA Interview 2). This strong media connection is one way that the AAFA has made itself an effective change agent. Due to the high visibility and strong leadership of the Environmental Committee, the AAFA has become an effective change agent in the apparel and footwear industries when it comes to influencing apparel companies' adoption of policies and procedures that should improve environmental performance. Part of this effectiveness comes from listening to their members and responding to their needs, which is another measure of effectiveness for this work.

When we started we did all our training programs on sustainability, product safety, and RSL in the US. Last year [in 2009], we changed that style to a great extent because our members said very clearly to us "100% of our suppliers are in Asia so instead of me going over there and I do not have the expertise, the time, the resources to train all of our suppliers. AAFA why don't you put these training conferences in these countries and we will ask all our suppliers to attend, that way we will have the brand names and retailers represented." So we shifted our training and conference strategy to Asia, simple because of the need and at the request of our members (AAFA Interview 1).

The willingness to work shift locations to educate member companies' suppliers where they are located is part of the reason the AAFA is an effective change agent.

The AAFA can also be considered an effective change agent due in part to the many industry partnerships they have established.

We do not have the time or the resources to be reinventing the wheel or duplicating efforts. We work closely with AFIRM. We work very closely with Öeko-Tex because their testing is linked to a great extent with our RSL. We work very closely with the Outdoor Industry Association. We are very closely connected with the International Apparel Association. We try to cooperate wherever we can, so we do not duplicate any efforts and reach a wider audience.

Through these industry partnerships, AAFA has established itself as a cooperative force that can bring about positive change in the apparel and footwear industries. Through the AAFA's involvement with companies and the work of the Environmental Committee, "a little bit of this [has] been demystified. To some extent it does not look like such a huge issue to tackle. You can bite off smaller bits and pieces to really tackle" these issues and still make a difference (AAFA Interview 2).

Effect the Apparel Industry has had on the AAFA

From the review of literature, one notes the two-way effect the apparel industry has on its suppliers and other primary stakeholder groups. As such it is important to note if the industry has impacted how this trade association operates. Since its inception, the AAFA has focused on working with the apparel and footwear industries. Therefore it is difficult to say whether these industries have had a direct effect on the group and how it operates. The group has responded time and time again to the needs of the industries, by shifting educational conferences to Asia and moving meeting locations around the United States.

We meet in different cities to attract more members in that region. We have met in New York, Washington, and Baltimore. We are talking about holding a meeting in the South. Our conferences are being held in China, Europe, and India. I think the answer I can give is AAFA saw a need in this area about four to five years ago and formed [the environmental] committee. It was created and has grown and has gotten to address at lot of these areas, product safety, RSL, sustainability, and

regulatory compliance. So I think it has been a perfect link and is going in the right direction (AAFA Interview 1).

Non-Governmental Organization: Organic Exchange

Organic Exchange (OE) is a non-profit, non-governmental organization (NGO) committed to expanding the amount of farm land dedicated to organic agriculture, with a specific focus on increasing the farming production and commercial use of organically grown fibers such as cotton (Organic Exchange [OE], 2010). As an NGO, OE is considered a secondary stakeholder within the apparel industry. Since its founding in 2002, OE has worked closely with the entire value chain, from farmers to retailers, to help develop organic fiber programs and improve the sustainability of textiles (OE, 2010). Preserving the natural environment is critical to OE's success.

With an administrative office based in Texas at the heart of the U.S. Cotton Bowl, OE is well positioned to work with area farmers to achieve organic certification for their farm fields. OE also has a European presence with an office in Ireland. Through their membership partnerships with organizations such as Japan's Organic Cotton Association, Biocoton India, Cotton Blossom India, Thai Alliance Textile, Thai Textile Industry, Africa Ecology, and Asociación Otro Mercado al Sur, OE is able to extend its reach into the global community.

[OE] is a very virtual organization. We do not necessarily have offices; we have people. The only thing that is an office is an administrative unit in Texas. We have got someone in Portland, California, Maine. I am in Canada. I think the EU does have an office, but it is probably 1 to

2 people. We have someone in Ireland, UK and Spain. Then we have Africa, South America and India. The last three really to do the farm work. The European's are... [focused on] outreach to brands. The rest of us do a bit of everything; focus on global initiatives; focus a bit more on local brands and events (OE Interview 1).

OE's 21 staff members work to educate farmers, apparel brands, and retailers about the benefits of organic cotton growth and use. OE's boards of directors, comprised of industry professionals from various apparel companies, are able to have a direct impact on the apparel industry by implementing OE's guidelines within their companies. OE's partnerships as well as their geographically diverse employee locations, provide OE with many local agents who are able to enforce their organic growing standards, certification processes and labeling criteria.

Mission Statement

OE's mission statement is at the heart of the guidelines they have developed and published. OE's mission is to "catalyze market forces to deliver sustained environmental, economic and social benefits through expansion of organic fiber agriculture" (OE, 2010). Their vision statement further supports their mission statement. OE's vision

is to create a different kind of market where the promise of organic farming can be realized. A market where farmers are known and celebrated, where innovation design, social equity and stewardship of the land go hand in hand, where healthy and fair returns are shared by everyone in the supply chain and culminates in the delivery of functional, beautiful, sustainable products to consumers everywhere (OE, 2010).

OE has developed various strategies, such as brand outreach, farm investment, tool and services development, and communication forums to implement their mission and make their vision statement a reality. All of these strategies allow OE to engage with and support member companies.

Through brand outreach, OE is able to work directly with apparel brands and retailers to develop and implement goals to introduce or transition some or all of their cotton use to organic cotton (OE, 2010). Member companies engage with OE through educational conferences, online discussion forums, and on-site verification checks.

When explaining the influence OE has had on the apparel industry, an OE representative stated

The biggest influence is on a company-by-company basis. There have been many cases where a company goes from saying "Organic means nothing...I am not even interested" to saying "OK I am going to make a significant effort around organic" or right up to the point where they say "I am going to convert my entire product line to organic" (OE Interview 1).

OE's staff members have considerable expertise in all areas of farming, supply chain management, product development, and marketing in order to see these implementation goals through to fruition.

Farm investment and development allow OE to work directly with existing organic farmers as well as develop relationships with new producers, to secure contracts for their existing cotton harvest, and ensure rotation crop production. OE

also assists farmers in developing expansion plans that can be supported by their member companies. India currently produces "32% of the global organic cotton supply" (OE, 2010). To assist these farmers, OE has regional farming coordinators located in India, as well as Africa and South America. These regional coordinators interact with member companies at various levels of the supply chain.

Apparel brands and retailers can also benefit from OE's tool and service development strategy. OE offers apparel companies information, a certification process, labels, consulting services, and a range of tools such as quarterly newsletters, website information, on-line tracking service, a sourcing directory, supplier listing, conferences, and regional training sessions. All of these tools allow member companies to engage with OE staff members. OE is committed to educating apparel brands and retailers in order to implement the organization's mission statement and attain its visionary goal. Working within this strategy, OE further supports apparel brand and retailers as they develop, market, and implement organic cotton as part of their product offering.

OE's membership list is quite lengthy and diverse. OE is comprised of 211 organizations that span the entire supply chain from farmers, to spinners, to mills, to production factories, to branded retailers, to sourcing agents, to other non-governmental groups working on almost every continent around the globe. Currently, there are 11 companies that have invested more than \$7,500 in OE's work. These

apparel brands and retailers are adidas Sourcing, Internet Textile, Patagonia, Anvil Knitwear, Marks & Spencer, Tchibo GmbH, Genencor - A Danisco Division, Nike Inc., Walmart Stores Inc., H&M, and Nordstrom (OE, 2010).

What really makes me feel we are in a good spot is that OE has very serious commitments from a lot of very large brands and retailers. By their nature they are big ships that are slow to turn around, so it is going to take a while for the impact of their commitment to be felt in the industry (OE Interview 1).

According to a September 2008 *South China Morning Post* article "brands such as Nike, Gap, Marks & Spencer, Levi Strauss, Liz Claiborne, Wal-Mart and Tesco were the big names most active in purchasing and promoting eco-friendly textiles and clothing in the retailing industry" (Wu, 2008, p. 9). This article goes on to note that in 2008 "Wal-Mart bought more than £12million [\$172.9 million] of cotton from farmers who transformed from conventional to organic cotton production with the aim of increasing [the] supply in the market" (Wu, 2008, p. 9). Many of these companies are seen as leaders in the apparel industry when it comes to both engaging with diverse stakeholder groups and establishing relevant environmental policies.

To further support their member companies, OE has developed various fiber source and labeling standards. These standards are unique in that they focus on the organic fibers, by addressing the source of the fiber. "To date, there have not been any standards that address the use of 100% organic fiber, despite the fact that this is the level of certification that many companies have been opting for. The OE 100

certification standard has been developed to address this gap, so that companies have a means to ensure the validity of their "Made with organically grown cotton" claims (Organic Exchange [OE], 2009, p. 6). The OE 100 Standard "is for tracking and documenting the purchase, handling and use of 100% certified organic cotton fiber in yarns, fabrics and finished goods" (OE, 2010). The OE Blended Standard is used to track and document "the purchase, handling and use of certified organically farmed cotton fiber in blended yarns, fabrics and finished goods. The standard applies to all goods that contain a minimum of 5% organic cotton" (OE, 2010). These standards list specific criteria farmers, processors, suppliers, and retailers must meet in the following organic cotton fiber handling stages: spinning, ginning, warehousing, manufacturing, weaving, knitting, dyeing, and finishing.

OE's web site provides member brands and retailers with a list of suppliers and factories that have met both of these standards and are following the processing and cleaning requirements associated with them. It is important to note that these are voluntary, private standards that companies choose to follow. OE has also developed logos for each of these standards that member brands and retailers are encouraged to proudly display and incorporate as part of their sales and marketing efforts. This logo indicates that garments have met either the OE 100 or OE Blended standards (OE, 2010).

Further adding to OE's list of standards, the group is a strong supporter of the Global Organic Textile Standard (GOTS) and as such is working to align their accreditation and certification system with this standard. GOTS is a comprehensive standard that allows companies to ensure that their organic fiber products are produced to strict criteria relating to quality, tracking, and social and environmental considerations (Global Organic Textile Standard [GOTS]).

Environmental Issues: Current Expectations and Next Steps

Taking OE's commitment to working with the entire value chain, it makes sense for the group to expect apparel brands and retailers to work closely with their supply chain. OE representatives state with clarity what they expect of apparel brands and retailers when it comes to environmental performance.

We expect them to learn their supply chains more deeply. We expect them to be more transparent. I say "more" as a loose term because we realize it takes time to move along the continuum of sustainability. We expect them to, particularly for organic cotton, do their due diligence in terms of the certification and verification (OE Interview 1).

Environmental issues of concern. OE representatives identified two issues as being top priority for them. They are chemical and water usage. As the organic fiber market continues to grow. Demand for organic products is on a steady rise and there are many opportunities for apparel brands and retailers to tap into this growing market. However, along with the benefits that organic fibers bring the company, there are risks as well. One of these risks is product integrity, which is another major environmental

concern for OE that was identified from archival record searches. As listed above, OE has developed various tools, guides, and services to help apparel brands and retailers meet these expectations.

This section outlines the environmental issues of concern from OE's perspective, as well as the next steps apparel brands and retailers need to take to address these issues. From OE's perspective there is still much to done by apparel brands and retailers to meet these expectations. When asked how satisfied they were with the work apparel brands and retailers are doing on key environmental issues, an OE representative commented

Ahhh... never. It is very dependent on the company. Some companies we are thrilled with and cannot wait to publish their stories. While others say that they care and that they want to do the right thing, but we are not seeing a lot of action (OE Interview 1).

OE believes it is important for apparel brands and retailers to follow through on their commitments made to their supply chain in order to improve environmental performance.

Chemical use. "Organic farming brings many social and environmental benefits; eliminating the use of harmful and toxic chemicals" is one of these benefits (Pepper, 2010, p. 1). The use of chemicals is highly restricted when it comes to organic farming. Growing, processing, and working with organic fibers encourages farmers, suppliers, brands, and retailers to eliminate harmful

chemicals from their processing and products. When it comes to an expectation around chemical use, the

...obvious one for us is to buy organic cotton. Or the second step would be to look at another low impact cotton alternative because there are things like integrated pest management cotton, better cotton. There are a number of initiatives out there that support growing cotton with less chemical inputs (OE Interview 1).

The above mentioned lower impact alternatives could be phased in as part of a company's product offering or used to completely replace traditional cotton fiber use.

OE believes that one way apparel brands and retailers could take the next step to improve on this issue would be to implement a chemical management program. Through this program, apparel brands and retailers would be able to determine exactly which chemicals are currently being used in their supply chain and for what purpose. With this information apparel brands and retailers could evaluate other safer, less toxic non-chemical options.

Another next step involves a company investing in its supply chain by making commitments to the farmers to improve education, place steady volume orders, and secure a safe supply chain. OE representatives explained that a company should become

engaged right down to the farm level in India and... invest directly in the development of farms to secure a good [supply]... to train the farmers on how to farm organically. It is not just for their own needs; it is really going to have a lot of benefits for the whole organic farming

industry in that area. They are specifically engaged in developing the farming program and paying a lot of attention to transparency, traceability and certification (OE Interview 1).

The attention will result in a steady supply chain that is able to offer lower prices due to consistent volume orders and efficient harvesting and production processes.

Product integrity. A recent news article in the German edition of the *Financial Times* accused major retailers H&M, C&A, and Tchibo, all OE member companies, of knowingly selling genetically modified (GMO) cotton from India as organic cotton. This article made unsubstantiated claims including "not every product that is labeled as organic cotton is truly organic" ("Biobaumwolle Die Kunden," 2010, p. 1; Chua, 2010). In response, H&M, C&A, and OE all released strongly worded statements refuting the information published by the *Financial Times*. OE senior management released a statement explaining that

When a crop is grown organically, it means that the farmer has followed all the principles and systems of organic farming. In some cases, a very small amount of contamination may occur due to factors outside of the farmer's control such as cross-pollination from GMO crops that may be growing in other fields away from organic cotton (Salm, 2010, p.1).

OE went on to explain that nearly 70% of conventional cotton currently grown in India is produced using GMO seed. Accidental cross contamination is possible as these GMO farm fields may be close to the organically managed fields. However, OE further explained that

organic farming standards deal with this by setting "buffer zones" which specify the distance required between organic and conventional fields. There is no doubt that in India the widespread use of GMO poses a threat to the integrity of the organic cotton industry, but it is an issue that it being taken seriously by all stakeholders (Salm, 2010, p.1).

Named in the *Financial Times* news article, H&M issued a press release stating that the company had "no reason to believe that the organic cotton used for H&M's garments was grown using genetically modified seeds" (Grady, 2010, p. 1). H&M representatives went on to state that the company would reevaluate its organic sourcing guidelines and labeling standards in order to ensure source validity. As of spring 2010 this environmental issue was not fully resolved, as is noted by OE representatives, when discussing environmental performance.

It is coming back to whatever claim is made about a product, that it is actually true. I think the biggest disservice that can happen is that we sell a million organic cotton t-shirts, but they do not actually come from organic cotton. Because either there was deliberate fraud somewhere along the supply chain, or what more likely [was a] lack of attention paid, or sometimes mistakes born out of ignorance and innocence. The more we can tell people about what is happening and keep them well informed and aware, the more we can plug that up. To me in the end, environmental performance means that there is actually a real and meaningful difference happening at the ground level, not green washing (OE Interview 1).

Organic integrity is essential to the success and growth of the organic fiber industry. "Integrity means that all claims made are valid, and this involves effective standards and certification processes, transparent supply chains,

strong cooperation and communication, and all players understanding the requirements for organic textiles" (OE, 2010).

In the United States, there is a legal requirement that the cotton has been certified at the farm level to the National Organic Program standards for any product using the term 'organic'. In addition, truth in labeling laws apply (in the US, Canada, Europe and Japan), so it is the responsibility of the brand to ensure that all of its claims are accurate and can be backed up (OE 100 Standard, 2009, p. 6).

However it is critical for apparel brands and retailers to note that there are two aspects to working with organic fibers.

One is to choose organics and/or this other type of [lower impact] fibers. And [the other is] ... to be sure that they can verify that the fibers they think they are buying are actually ending up in their products. Which means there needs to be either third party certification to a valid standard or some kind of well developed verification process and obviously transparency (OE Interview 1).

The second part of this quote speaks to the importance of product integrity.

Certification to a recognized standard provides excellent backup for apparel brands and retailers looking to label their products "organic". OE continues to work closely with its member companies to ensure that all of their growing and labeling standards are adhered to in order to promote pure organic products that consumers can trust.

As a next step to improving product integrity "everyone involved in the production and sale of organic textile products must take their responsibility to product integrity very seriously" (OE, 2010). It is possible to sum up future

steps for this key environmental issue through the use of enhanced certification and verification processes. OE is in the process of developing a farm program that will assist apparel brands and retailers to verify their supply of cotton.

One of the things that Organic Exchange has done thru a farm program is develop a set of Key Performance Indicators (KPIs). These are a number of key indicators or data points that we collect from the farms. The farmers self report on changes in the amount of water, chemical use. There are social components to the KPIs, such as changes in income. We are just starting to collect that data. As we collect that data, we will be able to report more concretely on it (OE Interview 1).

Apparel brands and retailers that become members of OE would have access to these KPI reports and could more easily verify their supply chain down to the farm field. OE has developed tools and resources that will help support a strong and trustworthy organic industry, including standards, guides, and training presentations.

Water usage. The growth of cotton, regardless of chemical use and product integrity, is a water intensive process. According to a 2005 report, entitled "The Water Footprint of Cotton Consumption", cotton production affects "water quality both in the stage of growing and the stage of processing" (Chapagain, et al., 2005, p. 19). This report goes on to demonstrate how the global consumption of water for cotton growth varies greatly from country to country. The researchers compare the amount of crop water required to grow an acre of cotton with the annual rainfall in the top 15 cotton producing nations, in an effort to determine how much water is required

to grow an acre of cotton (Chapagain, et al., 2005). Countries such as Brazil that receive a lot of natural rainfall consume less water than dry Middle Eastern countries such as Egypt and Pakistan. With this information, apparel brands and retailers can choose to purchase cotton grown in countries with heavier rainfall that requires less irrigation (Chapagain, et al., 2005; Swapna, 2008).

There are several aspects to water usage. One is to minimize the amount of water that is used. That can come into play in farming practices. Although, water usage is pretty much the same among different types of farming. It depends more on regions and what part of the world. Whether they have sprinkler systems vs. underground drip systems. Certainly there is a lot that can be done with farming practices. So if brands and retailers can support low water usage by subsidization of drip irrigation systems- that would be great. Or if they specifically chose to buy rain fed cotton over irrigated (OE Interview 1).

Being able to make these types of detailed purchasing decisions goes back to OE's expectations that apparel brands and retailers get to know their supply chain very well.

Another way for apparel brands and retailers to have a positive effect when it comes to water usage is to support supply chains that are already committed to addressing water issues.

There is a factory... Pratibha Syntax. They have a new facility they developed that is going to be a zero net water usage faculty. They are very progressive. There are a number of factories that are going that way. This is because they collect their rainwater and treat it thru reverse osmosis and divert some of it to gray waters and some of it goes back to clean water. It's quite innovative. In the main facility their water recapture rate is above 90%. There are more and more factories taking

strong steps to clean their water after use and actually reusing it, so they are really drawing less and less from the system (OE Interview 1).

Again this requires knowledge of and a commitment to working with the company's supply chains. Apparel brands and retailers would also need to have open, honest communication lines with their supply chain members, from the farm level up, in order to support these water management initiatives.

Apparel brands and retailers can make better water usage decisions, by "requesting to their factories that they use low impact fiber reactive dyes" (OE Interview 1). This simple request will result in the use of less water as garments are dyed and finished.

There is no escaping the fact that water is required to grow cotton and other natural fibers. However, apparel brands and retailers can commit to purchasing only cotton that is grown using recaptured water (Burke, 2009) as a future next step to this issue. It is also possible to purchase solely rain fed cotton, which will greatly reduce the amount of water consumed by a company's supply chain. Apparel brands and retailers can also "support low water usage by subsidization of drip irrigation systems" at the farm level (OE Interview 1). The future of the water usage issue is also closely linked to supply chain management.

From engaging all the way thru your supply chain. Mapping your whole supply chain. Creating transparency thru to your fiber source, which are the farms. Engaging with the farms. Ensuring that you have a very robust certification system and that it is being applied evenly throughout the chain. And then looking to next steps which is

addressing the processing, whether thru meeting the GOTS standards or Blue Sign or Öeko-Tex or something similar (OE Interview 1).

The steps listed above apply to all of OE's key environmental issues.

Is OE an Effective Change Agent?

A measure of effectiveness is how well the group is meeting its mission statement. As a review, OE's mission is to "catalyze market forces to deliver sustained environmental, economic and social benefits through expansion of organic fiber agriculture" (OE, 2010). One can look to the phenomenal growth in organic cotton sales within the last 5 years and confirm OE as an influential agent of change.

According to a 2008 survey, conducted by Lieberman Research Group on behalf of Organic Trade Association, that measured the sales growth of U.S. organic foods and beverages as well as non-food categories such as organic fibers, "organic non-food sales grew by an astounding 39.4 percent" in 2008 (Organic Trade Association, 2009 May). The "demand for eco-textiles and organic raw materials, such as cotton, wool, and hemp... is on the rise" (Wu, 2008, p. 1).

According to the fourth annual Organic Exchange Farm and Fiber Report 2009, "organic cotton production grew an impressive 20 percent over 2007/08 to 175,113 metric tons (802,599 bales) grown on 625,000 acres (253,000 hectares)" (Organic Trade Association, 2009 February). Organic cotton now represents 0.76 percent of global cotton production.

In the global context, ... excuse the pun, it is really just a drop in the bucket, because organic sales are still less than 1% of global sales. But the amount of growth we've had from where we started is very significant. Also, the fact that organic has become mainstream and even though it is often just a small niche. I think it is becoming more not only more broadly accepted, but expected. That is going to contribute to the extent of the growth (OE Interview 1).

One could infer that OE is at least partially responsible for these positive improvements to the farm community and apparel industry.

For now you can take a look at the growth in organic sales. You can convert it all the way back down to the impacts we know about, which are reduction of pesticides, better incomes for the farmers, better health for the communities, etc (OE Interview 1).

The increase in sales of organic cotton products as well as the commitment from large brands and retailers to incorporate organic fibers into their product lines may also be seen as measures of OE's effectiveness.

As a non-profit, non-governmental organization, OE is technically not allowed to lobby or advocate government officials to make policy changes. However, using their international clout and industry partnerships, they have been able to impact the development of various countries' organic growing and labeling laws, which is another effectiveness measure for this work.

By definition as a 501-3 company, we are not allowed to advocate... However, I think we are making quite a difference on a number of levels. Certainly when it comes to legal or country policies, we have been approached by a number of countries to give input on different subject matters. Whether it is the development of FTC guidelines around textile sustainability [or] guidelines for Japan around organic certification. We also have influence in India. Pretty much every

country we are in, we have connections where we can have input and a degree of influence on policy development. The work we do with certification bodies and other standard setting organizations. We have worked with them to help develop their procedures and their positions on certain things. I think we have quite a bit of influence on developing policies (OE Interview 1).

OE has been able to use their influence to advance their mission to increase the production amount of and commercial use of organic fibers.

Taking archival records searches into consideration, it is also possible to support OE as an effective change agent. A data base search of Lexis Nexis Academia using the key words "Organic Exchange" brought up thirteen articles, in which OE was prominently featured. Looking towards the World Wide Web, a search using the keywords "Organic Exchange + NGO" produced 1, 270 articles about the OE in connect with recent certification and labeling policy amendments, conference presentations, and member companies. OE has become an effective change agent in the apparel industry through

a whole bunch of ways: We have a lot of communication tools [on] our website. We have published a number of resources that are available for free because that is part of our mission to really change the industry; though some of them are available to members only. We have done some specific tools around ensuring that you have the proper certification processes in place and read and understand the documentation around that. We have done another guide around labeling. We have a number of publications that talk about farms or peripherally environmental issues such as pesticide use or alternative

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⁵ Refer to Appendix 5 for a reference list of articles and web pages reviewed for these searches.

fibers, etc. We have developed our own standards. We speak at a lot at public event. We also work specifically with brands on certain projects, like that farm project in India... Sometimes we just go to a brand as pure outreach to try and sell them on the concept of organic cotton and get them engaged (OE Interview 1).

OE is working to "really change the industry" and they are succeeding.

OE has various industry partnerships that are helping them to succeed and assisting them in making effective change in the apparel industry. OE developed *String*, an online tracking and traceability service, in partnership with Historic Futures (UK) to help "companies and their supply partners easily and efficiently document the purchase and use of certified organic cotton. This is an excellent tool to facilitate tracking and certification" (OE 100 Standard, 2009, p. 17).

We have also partnered with a company called "Historic Futures" to develop an online tracking system, which will give organizations full transparency for their supply chain. "Historic Futures" is a private organization; they are not a work group. They have developed a technology. But we certainly do work with other groups... We are a member of the Organic Trade Association. We work in collaboration with another group called "Made By" in Europe. They do a lot of education particularly around transparency and sustainability in textiles (OE Interview 1).

As noted above, OE is a member of the Organic Trade Association. This association works closely with government officials and its members on trade policy and import laws that would affect OE members companies. In 2009, MADE-BY and Organic Exchange hosted a two-day seminar on sustainable

fashion in London. This seminar brought together experts and industry professionals to discuss supply chain management and provided an open forum to discuss important, issues, innovations, and best practices on developing sustainable fashion production. Through these industry partnerships and conferences, OE is able to offer more services to their member companies.

Effect the Apparel Industry has had on OE

Since its inception, OE has focused on working with the apparel industry. As such it is difficult to say whether the industry has had a direct effect on the group and how it operates. However, OE representatives note the importance of business relevant communication with the apparel industry in order to get their message across.

As an NGO that is mission based we tend to focus on our hearts with the benefits to the farmers, a better world, a better life, and all that. But when it comes to working with the supply chain and making these changes effective, we need to talk to brands and retailers and the supply chain about the bottom line impacts this is going to have to the businesses and be very open about the amount of extra costs and resources you are going to need to do this. But here are the benefits you are going to have such as risk management, expanding into new market opportunities, brand enhancement, security of supply chains, long term forecasting to give you better price stability, etc. We have to really understand what their business needs are and them translate them into our own model to achieve what we want to at our own level (OE Interview 1).

In order to keep communication lines open and accessible, OE has recently begun an online communication tool called the Integrity Forum that

is working with certifications professionals. So that certifiers, accreditation bodies, standard-setting bodies and other NGOs address

issues around integrity and fraud and try to tighten up the system. So we can make it as reliable as possible. So we can ultimately keep cost down (OE Interview 1).

This forum is another example of OE willingness and elicitation to making positive changes within the apparel industry.

To support their efforts, OE has successfully brought together apparel brands and retailers along with their supply chain members and business partners to learn about the social and environmental benefits of organic agriculture, and to work together to develop new business models and tools that support greater use of organic fibers (OE, 2010). This NGO has helped "create solutions, which improve environmental quality, enhance the livelihoods of farmers, increase profitability for innovative brands and their business partners and expand consumer choice" (Week, 2008, p. 1).

Non-Governmental Organization: Ceres

Ceres (pronounced "series") consists of a network of environmental organizations, non-profit groups, and public interest groups working together with companies and investors to address climate change and sustainability issues. Ceres, which stands for the Coalition for Environmental Responsible Economics, was formed in 1989 as a direct result of the Exxon-Valdez oil spill. This major environmental disaster shook public confidence in corporate America. Many were left to wonder how businesses could be held accountable for the environmental effects of their operations.

Six months after the disaster, a group of investors launched Ceres to tackle this problem.

Shortly after its founding Ceres introduced a 10-point code of corporate environmental conduct and strongly encouraged companies to adopt this code. The "Ceres Principles" as they became known offered a bold vision for the business community. Ceres envisioned a world in which businesses and investors promote the well being of society and the protection of the earth's natural resources, while maintaining a profitable bottom line. These 10 Principles established an environmental ethic with specific criteria that employees, managers, board members, investors, and external stakeholder groups can use to assess the environmental performance of a company. "Companies that endorse these Principles pledge to go voluntarily beyond the requirements of the law" (Ceres, 2010).

From their Boston, Massachusetts office, Ceres is working to bring attention to climate change and improve disclosure of environmental information in various industries, including the electric power sector, oil and gas, insurance, consumer products, chemicals, homebuilding, and, hotel and travel. Currently, Ceres employees 43 staff members, each with an industry of expertise. Through their staff members Ceres is able to interface with and to stay connected to their coalition members as well as their Ceres partner companies.

Mission Statement

Ceres mission statement is to "integrate sustainability into capital markets for the health of the planet and its people" (Ceres, 2010). This mission statement clearly reflects the group's focus on the environment. Ceres' staff members are able to advance the group's mission statement by bringing investors, environmentalists, and other stakeholder group together to encourage companies as they work to address environmental and social challenges found in their daily operations. Staff members are assigned to work directly with each member companies to assist as they work to adopt the Ceres Principles and become a Ceres company.

From its early day's apparel and footwear brands have supported Ceres' efforts. According the "Ceres 20th Anniversary" video, apparel and footwear manufacturer Timberland was an early adopter of the Ceres Principles. Timberland also came on board as a Ceres company early on in the group's history.

Ceres companies are committed to improving their environmental and social performance by engaging with environmental groups, investors and other stakeholders to integrate environmental and social factors into their business strategies. Ceres companies are able to achieve competitive advantages by integrating environmental and social performance into their business strategies. They understand that environmental and social issues pose potential risks for their businesses and are committed to addressing them. Ceres companies are committed to enhancing value through:

- In-depth engagement with stakeholders and shareholders,
- Disclosure of environmental and social commitments and results,
- Continuous performance improvement (Ceres, 2010).

Apparel brands and retailers seeking to establish or improve stakeholder relationships can make a public commitment to become a Ceres company. A Ceres company representative shared that

When we applied to become a Ceres company, we made a commitment to adopt their 10-point environmental code of conduct. That is one of the things... so instead of reinventing the wheel, they already had a code of conduct we felt comfortable supporting. But as part of that you also commit to stakeholder engagement, reporting your progress and continuously improving your environmental performance, and disclosure (Ceres Interview 2).

The following apparel and footwear brands and retailers are listed as Ceres partner companies: Eileen Fisher, Anvil Knitwear, Inc., Gap Inc., Levi Strauss, Nike, The North Face, The Timberland Company, and Promotional Product Solutions (Ceres, 2010).

Ceres supports these companies as they work to balance economic, environmental, and social performance through the four strategies of "Connect, Lead, Solve, and Inform" (Ceres, 2006). Ceres connects investors, environmentalists, and companies in order to create business solutions to sustainability challenges. By making these connections, Ceres is able to lead productive conversations that guide companies towards solutions to complex sustainability issues and environmental concerns. Ceres and their member companies are then able to inform the media, the investment world, and the business communities about the new solutions they have

created that will hopefully improve society. Member companies pay yearly fees to Ceres. In return they may receive the following support services

- Stakeholder team support on reporting including report development advice and report review by Ceres staff and coalition members
- 2. Monthly consultation and/or advice as required
- 3. Incident response advice, including correspondence with coalition members and contacts if required.
- 4. Communications service company link on Ceres website; electronic newsletter, press referrals, advance notice of Ceres publications and events
- 5. Participation at Ceres board meetings
- 6. Participation at Ceres annual conference and other Ceres events (Ceres, 2010).

Interacting with the Ceres coalition is another member engagement service that is unique to this group. As of 2009, Ceres had enlisted 130 environmental groups, investor firms, labor unions, and advocacy groups as part of their coalition (Ceres, 2009). The Ceres coalition engages directly with companies on environmental and social issues. This coalition, moderated by Ceres employees, brings together differing opinions from both within an industry and external to the industry to ensure that all are heard.

So we looked at partnering with a leading organization in each of our areas of interest: the environment, social, product, etc. So in the environment we did some research and we looked at Ceres. One of the reasons I was very interested in Ceres is the fact that they really represent a coalition. A coalition of investors, environmental organizations, NGOs, public interest groups, and it is rare to find all those groups working together for a common goal. And successfully I might add for the last 20 years (Ceres Interview 2).

The Ceres coalition group, through roundtable discussion groups, may be used as a "sounding board" for an apparel brand or retailer as they seek to develop their own environmental performance policies (Ceres Interview 2). Through the process of engaging with Ceres' coalition, "companies not only formalize their dedication to environmental awareness and accountability, but also actively commit to an ongoing process of continuous improvement, dialogue and comprehensive public reporting" (Ceres, 2010).

Industry relevant environmental policy improvements. Through strategic partnerships with both stakeholder groups and companies, Ceres' accomplishments within the apparel industry are impressive. These accomplishments include the creation of the Global Reporting Initiative (GRI), Business for Innovative Climate and Energy Policy (BICEP), and the Investor Network on Climate Risk (INCR).

The GRI was started in 1997 as a Ceres project. The goal of this project was to provide a "trusted and credible framework for sustainability reporting that could be used by organizations of any size, sector, or location" (Global Reporting Initiative, 2010). The GRI consists of a universal framework of measurements, concepts, and language required to publish sustainability reports. In 2001, the GRI became an independent institution at the suggestion of the Ceres board of directors and the GRI Steering Committee. Today, this international standard is used by thousands of companies for reporting on environmental, social, and economic performance. Some

apparel brands and retailers follow the GRI's reporting framework for their own annual CSR reports. The GRI's calculation methods and checklists are also incorporated in many supply chain audit reports and third party factory certifications. In 2005, the GRI piloted a sector specific reporting supplement for the apparel and footwear industry. This guide entitled "Sustainability Reporting Guidelines and Apparel and Footwear Sector Supplement" outlines and identities areas of the supply chain that apparel brands and retailers should report on for responsibility management.

According to Ceres' website, there are currently two specialized projects which are focused on key issues. Business for Innovative Climate and Energy Policy (BICEP) is one of these projects.

[BICEP] is a wholly owned initiative. It is not a separate corporation. It is very much contained within Ceres. It is a separate initiative designed to focus like a laser on policy, which Ceres had not done in the past (Ceres Interview 1).

BICEP is based on the strong belief that climate change will impact all aspects of the economy. As such BICEP is working with "key allies in the business community and with members of Congress to pass meaningful energy and climate change legislation that is consistent with our core principles" (Business for Innovative Climate and Energy Policy [BICEP], 2010). Apparel brands and retailers are participating in this project as well. Nike, Levi Strauss, and Timberland are listed as founding members of BICEP, with Eileen Fisher, Gap Inc., and The North Face as additional members.

BICEP's core principles are centered on businesses addressing climate change and improving energy usage. A few of BICEP's principles apply directly to the apparel industry including:

- Set short- and long-term greenhouse gas reduction targets
- Capture vast energy efficiency opportunities
- Encourage transportation for clean energy economy
- Assist developing countries in adapting to climate change and reducing carbon emissions (BICEP, 2010)

These principles apply to the apparel industry through supply chain management, product distribution, and retail selling. BICEP member companies have come together in a collaborative spirit to support the passing of effective climate change legislation and energy policy (BICEP, 2010).

Another project of Ceres is the Investor Network on Climate Risk (INCR). This is a network of investors, worth \$8 trillion, promoting better understanding of the financial risks and opportunities posed by climate change (Investor Network on Climate Risk [INCR], 2010). Members include asset managers, state and city treasurers, comptrollers, labor pension funds, foundations, and other institutional investors (INCR, 2010). Many of INCR's investment firms and foundations are shareholders in various apparel brands, and retail firms. INCR has recently been working with the Securities and Exchange Commission (SEC) on its 2010 information-filing requirement.

In late January 2010, the SEC published a report stating that it would require that "public companies warn investors of any serious risks that global warming might pose to their businesses" (Broder, 2010, p. B1). In the past the SEC had required companies to reveal possible financial risks or legal impacts that could arise due to their operations. However, the SEC had never specifically cited climate change or environmental impacts as bringing business risks or rewards that investors need to be aware of (Broder, 2010). The SEC put this new requirement into place in response to petitions from environmental and investor groups, including Ceres' INCR, who requested specific recognition of climate change as an important business factor that investors should be aware of. Ceres' INCR representatives stated, "the business risks of climate change cannot be ignored. With this guidance, investors can make more sound decisions based on better information" (Efstathiou, 2010, p. 1). Ceres continues to engage with the SEC and work closely with its member companies to assist them in complying with this new information disclosure requirement. BICEP and INCR have allowed Ceres to thoughtfully execute on their mission statement.

Ceres' commitment to addressing and solving environmental concerns is evident through their commitment to and implementation of their own 10 Principles. In 2006, Ceres took on this commitment with the release of their fourth sustainability report. Taking advantage of the report's online format the group was able to further lessen its environmental impact, while at the same time link to its sustainability report

to the its annual company report, as well as videos, blogs, press releases, and other communication mediums (Ceres, 2006). Ceres is committed to walking the talk in order to impact climate change.

Environmental Issues: Current Expectations and Next Steps

Engagement, teamwork, and collaboration are key concepts, when it comes to Ceres' environmental performance expectations of apparel brands and retailers.

We expect that collectively as an industry they come up with the best practices and then really put their competitive instincts to the side so they are able to promote and maintain those best practices. We have seen some of that in the supply chain work. When they can cooperate, they are going to get much, much further (Ceres Interview 1).

A Ceres representative goes on to state there is a difference between a current practice and a best practice. This difference may be difficult to distinguish.

Part of having a best practice is saying here is where we do not have a best practice and here is what we are working on. So an element of a best practice is to acknowledge that you are not at the best practice [level], but you are trying to get there. That is a tough one (Ceres Interview 1).

Establishing, promoting, and maintaining best practices for environmental issues that apply specifically to the apparel industry are where apparel companies can work to adopt Ceres' 10 Principles, which state the organization's expectations for environmental performance of companies. These principles are:

• *Protection of the Biosphere*- We will reduce and make continual progress toward eliminating the release of any substance that may cause environmental damage to the air, water, or the earth or its inhabitants. We will safeguard all habitats affected by our

- operations and will protect open spaces and wilderness, while preserving biodiversity.
- Sustainable Use of Natural Resources- We will make sustainable use of renewable natural resources, such as water, soils and forests. We will conserve non-renewable natural resources through efficient use and careful planning.
- Reduction and Disposal of Wastes- We will reduce and where
 possible eliminate waste through source reduction and recycling.
 All waste will be handled and disposed of through safe and
 responsible methods.
- *Energy Conservation* We will conserve energy and improve the energy efficiency of our internal operations and of the goods and services we sell. We will make every effort to use environmentally safe and sustainable energy sources.
- *Risk Reduction* We will strive to minimize the environmental, health and safety risks to our employees and the communities in which we operate through safe technologies, facilities and operating procedures, and by being prepared for emergencies.
- Safe Products and Services- We will reduce and where possible eliminate the use, manufacture or sale of products and services that cause environmental damage or health or safety hazards. We will inform our customers of the environmental impacts of our products or services and try to correct unsafe use.
- Environmental Restoration- We will promptly and responsibly correct conditions we have caused that endanger health, safety or the environment. To the extent feasible, we will redress injuries we have caused to persons or damage we have caused to the environment and will restore the environment.
- Informing the Public- We will inform in a timely manner everyone who may be affected by conditions caused by our company that might endanger health, safety or the environment. We will regularly seek advice and counsel through dialogue with persons in communities near our facilities. We will not take any action against employees for reporting dangerous incidents or conditions to management or to appropriate authorities.

- *Management Commitment* We will implement these Principles and sustain a process that ensures that the Board of Directors and Chief Executive Officer are fully informed about pertinent environmental issues and are fully responsible for environmental policy.
- Audits and Reports- We will conduct an annual self-evaluation of our progress in implementing these Principles. We will support the timely creation of generally accepted environmental audit procedures. We will annually complete the Ceres Report, which will be made available to the public (Ceres, 2010).

According to Ceres, every company, including apparel brands and retailer, should adopt these principles and work to implement them as part of their daily decision making process. Imbedded within the Ceres Principles is the mandate for companies to report on environmental management structures and results. From Ceres' perspective information disclosure is a key aspect to environmental performance.

One key part of environmental performance and this reflects working with investors is pure disclosure. So disclosure on whatever it is your doing and that is the full range from compliance disclosure. Disclosure about emissions, violations, initiatives to reduce your footprint, initiatives around sustainability in the supply chain, worker rights, labor compliance... water use, water disclosure, any and all pollution prevention and techniques (Ceres Interview 1).

In 1993, Sunoco became the first publically held company to fully adopt these principles. From there Ford Motor Co., Bank of America, and Timberland adopted the principles and began reporting on their environmental impact. By 2009, over 80 companies had endorsed the Ceres Principles including many Fortune 500 firms (Ceres, 2009).

The remainder of this section outlines the specific environmental issues of concern to Ceres and the next steps apparel brands and retailers should take to address these issues. Ceres believes the apparel industry has made progress on various climate change issues. However, in keeping with their commitment to continuous improvement, a Ceres representative shared that we are not completely satisfied. "We are impressed with the progress we have seen thus far and think there is a lot more work to be done" (Ceres Interview 1). When asked about the expectations stakeholder groups had for their company, a representative from a Ceres member company stated

I think that all these organizations drive us to do better and they come up with better ideas. I think the expectation is continual improvement, so that whatever you are doing you are continually improving and reporting on it. If there is an expectation that is it and that is the right expectation (Ceres Interview 2).

The need for continuous improvement applies to the key environmental issues Ceres is currently focused on.

Environmental issues of concern. A Ceres representative noted two environmental concerns the group is currently working on. These issues are water usage and materials use. From Ceres' perspective, it is important to consider both water consumption rates as well as waste water quality when discussing water usage. In addition, a representative from a Ceres' member company shared that measuring and reducing carbon footprint is a key issue Ceres is able to provide assistance on. These three issues are incorporated in Ceres'10 Principles.

Water consumption rates and waste water quality. The production of apparel products requires significant amounts of water. The impacts of fiber growing and apparel "production on the environment are easily visible and have different faces. On the one hand there are the effects of water depletion, on the other hand the effects on water quality" (Chapagain, et al., 2005, p. 10). Finishing and dyeing of apparel products are water-intensive processes fundamental to today's production methods (Nike, Inc., 2010). Even the production of leather for footwear demands water. At the factory stage, effluent may contain a number of toxics dyes and chemicals (Claudio, 2007). In many of the major textile processing areas, downstream sand banks show evidence "what was the latest color applied in the upstream textile industry" (Chapagain, et al., 2005, p. 10). Equally concerning are the leaks and emissions of chemicals into the wastewater. "Volatile monomers, solvents, and other by-products of polyester production are emitted in the wastewater from polyester manufacturing plants" (Claudio, 2007, p. A450). The EPA, under the Resource Conservation and Recovery Act, considers many textile-manufacturing facilities to be hazardous waste generators (Claudio, 2007). In an effort to quantify water use, Ceres suggest that the apparel industry establish

best practices. Occasionally we will benchmark companies. We recently put out "Murky Waters," a report ... [where] we benchmarked companies just on water disclosure (Ceres Interview 1).

The "Murky Waters: Corporate Reporting on Water Risk" report, published in February 2010, "evaluates and ranks the water disclosure practices of 100 publicly traded companies in eight key sectors exposed to water-related risks" (Fleming, 2010, p. 1).

The report shows that many companies are not including material water risks and performance data in their financial filings, nor are they providing local-level water data, particularly in the context of facilities in water-stressed regions. Moreover, none of the 100 companies are providing comprehensive water data on their supply chains, an especially glaring omission given that the vast majority of many corporations' water footprint is in the supply chain (Fleming, 2010, p. 1).

This report does not include the apparel industry. Taking into account the previously noted impact that suppliers have on the implementation of a company's environmental policies (Christmann, 2004; Liu, 2009; Rueda-Manzanares, et al., 2008), it seems likely that future "Murky Waters" reports would include the apparel industry.

Ceres' 2008 "Water Scarcity and Climate Change: Growing Risks for Businesses and Investors" report, however, did include the apparel industry. This report states clear action steps for Apparel brands and retailers seeking to evaluate and address water usage. These steps include:

- Measure your water footprint throughout your entire value chain, including suppliers and product use.
- Evaluate physical, regulatory, and reputational risks associated with your water footprint and align those with your broader sustainability plan.
- Integrate water issues into your strategic business planning and governance structures.

- Engage key stakeholders.
- Disclose and communicate water performance and associated risks (Morrison, Morikawa, Murphy, & Schulte, 2009, p. 28).

In an effort to reduce water use and improve wastewater quality, Ceres suggest that companies begin taking

...measurements. Are you measuring, tracking and disclosing the water quantity of and the quality of the water that you are using? Because by sheer disclosure I believe you can promote improvement (Ceres Interview 1).

These water disclosure reports may be included as part of the company's CSR report.

As a next step, a Ceres representative suggests that apparel companies "really examine water use in their product to identify the problems with cotton, with indigo" (Ceres Interview 1). The representative goes on to state that apparel brands and retailers need to closely examine a closed loop model for wastewater. In this model, all the wastewater is recycled and reused throughout the apparel process in some way. With a closed loop model, water recapture rates are tracked and improved upon.

Materials use and management. As a group that works with investors, diverse consumer product companies, as well as members of the U.S. Congress, Ceres is well aware of the risks associated with poor materials management. Materials management "includes the internal organizational transformation and movement of materials" (Sarkis, 1998, p. 162). This is one of the largest components of a green supply chain (Sarkis, 1998).

Ceres proposes that disclosure and reporting are once again key to establishing a strong materials use and management program.

Are you fully disclosing the nature of your materials? As well as having a vision or a plan to try to reduce the most toxic of those materials. It may sound really elementary, but I guess we find that unless folks do that it is hard to get very far (Ceres Interview 1).

This "elementary" step may be difficult for some apparel brands and retailers to take. However, it is critical if they are to move toward the suggested next steps.

As a next step, Ceres notes that apparel companies could become "committed to [a] considered design" approach (Ceres Interview 1). Nike is currently the leading advocate for considered design in the apparel industry (Herrera, 2009; Lee, 2008). Nike defines considered design as a "company-wide program that incorporates green principles into Nike's design guidelines to help the company create products with more environmentally friendly materials and fewer toxics and waste" (Nike, Inc, 2010). This concept is similar to the cradle-to-cradle design process, and the design for disassembly concept, both proposed by McDonough and Braungart in the early 1990s. In the GreenBiz blog, Nike's Hannah Jones, is quoted as saying "Imagine your old running shoes being disassembled into their parts, recycled into new materials and designed to produce a new pair or running shoes. All without using virgin materials, using closed loop as the model" (Herrera, 2009, p. 1). Ceres strongly believes this is part of the next steps for material use and management.

Additional next steps include to reuse waste products and reposition finished

second quality goods as a part of a company's product offering.

For example, what Eileen Fisher is doing. She sells recycled Eileen Fisher clothes at about 1/10 the cost. So you can go to her lab in New York and buy a piece of her clothing that is in perfect shape, but some else has turned it in and then you can buy it. Then all that money goes to good causes, which is even better (Ceres Interview 1).

By seeking creative ways to utilize waste products or resell used products, apparel brands and retailers begin to open up new market opportunities and create stakeholder value. Lastly, Ceres believes it is important for apparel brands and retailers to conduct "a full life cycle analysis. Then incorporate the materials use and the reduction of waste into this cycle and post-consumer as well" (Ceres Interview 1).

Measuring and reducing carbon footprint. When asked what issue Ceres had provided assistance on, a member company representative stated that

One of the things they started to work with us on was on a Green House Gas (GHG) assessment. So they started giving us advice on that, how to go about it, giving us some recommendations. We embarked on that process first (Ceres Interview 2).

From there the member company was able to accurately track and measure its true manufacturing footprint. As previously noted, apparel brands and retailers must be cognizant of the parts they are including as part of their carbon footprint.

So the trend is moving towards disclosure and commitments to reducing footprints. And most of the major brands seem to have made such commitments. It is all individual based on some brands own their factories, some do not... When we talk about reducing our footprint, we are not talking about our executive offices; we are talking about a manufacturing footprint. For some brands their footprint does not

necessarily represent... it represents the retail side, but not the manufacturing side. It is kind of apples to oranges (Ceres Interview 2).

As previously noted in the review of literature, employee participation and support are critical to the success of a company's environmental strategies (Ansett, 2007; Clarkson, 1995; Hill & Jones, 1992; Sharma & Vredenburg, 1998; Waddock & Bodwell, 2002). Part of a grassroots effort to reduce a company's carbon footprint, employees could

start an employee task force and have them figure out what they can do to reduce their energy usage. Another thing you can do is adopt an environmentally friendly purchasing program, preferable purchasing program- where you give preference to your vendors, if all other things are equal on price, quality, and delivery- that you choose the vendor who has a more robust program or a more environmentally friendly processing. Those two things could be rather significant (Ceres Interview 2).

Carbon footprint education for consumers is a next step suggested by a Ceres member company representative.

I think its education. There is a lot more of that needed. I think consumers now generally understand what a footprint is. We are working with schools to educate more on that. I think that is still a bit of challenge... I think it is at the cusp, but there is a long way to go (Ceres Interview 2).

In an effort to provide companies with clear direction on how to reduce the carbon footprint, Ceres recently released a report entitled "The 21st Century Corporation: The Ceres Roadmap for Sustainability". This report offers companies with

a realistic and clear roadmap to accelerate their efforts. It is intended to challenge, as well as inform and assist, those who aim to integrate

sustainability into their business. It explores the rationale and key considerations involved in making the shift to sustainability, details strategies and tools being used by some companies, and provides suggestions for the next generation of best practice (Moffat, 2010, p. 5).

This report includes best practice examples in the areas of governance, stakeholder engagement, disclosure, and performance. Gap Inc and Nike are two apparel companies featured in this report for supply chain management practices and executive level commitment to implementing innovative sourcing ideas. This report may assist companies as they make progress on the sustainability continuum.

Is Ceres an Effective Change Agent?

One of the measures used to judge organizational effectiveness for this work included the extent to which the group is meeting its mission statement. As noted at beginning of the case study, Ceres mission statement is to "integrate sustainability into capital markets for the health of the planet and its people" (Ceres, 2010). Taking into account the various reporting guides, metrics, and global standards Ceres has developed it appears that they are an effective change agent within the apparel industry.

Through the development and growth of the Ceres' coalition as well as the growth in number of Ceres companies, it is possible to note industry partnerships as a strong measure of effectiveness for this group. From archival records searches, it is evident that the Ceres is regarded as an industry expert for their coalition role.

Academic databases such as LexisNexis Academic provide representation of Ceres'

impact in the industries they are working in. A general keyword search using just the word "Ceres" did not supply any relevant articles. Drilling down a bit further, a keyword search using "Ceres + Investor" turned up 8 articles. However, a third search using the keywords "Ceres + Coalition" turned up 64 relevant articles. On the World Wide Web and in the blogosphere, many sources suggested that Ceres is an effective change agent. Various blogs such as 2Sustain, GreenBiz, Conscience & Commerce, Earth News, and About.com regularly refer to Ceres, as well as its projects BICEP and INCR.

Ceres has had a notable impact on simply advancing the conservations and getting stakeholder engagement through the GRI. As Sarbutts notes an organization's ability and willingness to "flex with its stakeholders, learns from them, and demonstrate resulting changes" (2003, p. 346) is another measure of effectiveness. Through the development and growth of the Ceres Coalition as well its reporting standards and information disclosure guides, Ceres has become an effective change agent.

I think Ceres has influenced by-- creating and co-authoring the Global Reporting initiative, which really created a demand for disclosure and increased the demand for disclosure in a systemized, comparable way that allows people to compare the apparel industry to other industries... It also allows for comparison within the apparel industry, company to company. [So a consumer] can say how's The Gap doing compared to

⁶ Refer to Appendix 6 for a reference list of articles and web pages reviewed for these searches.

Abercrombie?....There is the third level of comparison, which is year to year. So you can look at Nike in 2004 vs. 2010 (Ceres Interview 1).

Effect the Apparel Industry has had on Ceres

Ceres is currently working within a broad range of industries, including the electric power sector, oil and gas, insurance, consumer products, chemicals, homebuilding, and, hotel and travel, to impact climate change. As such working within the apparel industry has had a profound effect on the group, which also speaks to their effectiveness as noted by Sarbutts, 2003. When asked about the influence working with the apparel industry has had on Ceres, a representative stated

it has taught us a tremendous amount. It has helped us appreciate the level of the struggles... the enormity of the tasks given the size and nature of these huge global brands. It has also helped us to realize that they are not all created alike. Individuals within these companies can do great things. If you think of apparel broadly to include textiles, then Interface is a classic example of this. It has also helped us to realize that these things are not going to happen overnight. We have to keep at it to make change happen (Ceres Interview 1).

Chapter 5

SUMMARY, DISCUSSION, AND CONCLUSIONS

The global expansion of the apparel industry has contributed to increasing pollution, water shortages, increased fossil fuel consumption, raw material depletion, and climate change (Textiles Intelligence, 2008). Researchers have identified the major environmental impacts caused during the production and use of textile fibers and apparel to include:

- Energy used in laundry and needed for production of materials.
- Use of toxic chemicals that can harm human and environmental health during growing, production, and processing of textiles and apparel.
- Release of chemicals in wastewater during production, dyeing, finishing, and laundering.
- Solid wastes during production and at disposal (Dickson, Eckman, & Loker, 2009, p. 14).

The environmental impacts of other industries, such as the chemical (Aragón-Correa, 1998; Buysse & Verbeke, 2003; Christmann, 2004; Liu, 2009); oil and gas (Henriques & Sadorsky, 1996); information technology (Aragón-Correa, 1998); pharmacology (Liu, 2009); food and beverage (Buysse & Verbeke, 2003; Henri & Journeault, 2008; Henriques & Sadorsky, 1996); lumber and wood (Henri & Journeault, 2008); and consumer electronics industries (Henriques & Sadorsky, 1996) have been reviewed by

previous researchers. Previous research has also reviewed the environmental impacts of these industries in a range of countries including Spain (Aragón-Correa, 1998; Gallego- Alvarez, 2008); Canada, Germany, Hungary, and the United States (Darnall, Henriques, & Sadorsky, 2008); Belgium (Buysse & Verbeke, 2003); Canada (Henri & Journeault, 2008; Henriques & Sadorsky, 1996); China (Liu, 2009); Europe (López, Garcia, & Rodriguez, 2007; Rueda-Manzanares, Aragón-Correa, & Sharma, 2008); and Hong Kong (Studer, Welford, & Hills, 2006).

Because widely accepted international environmental standards do not currently exist in the apparel and footwear industry (The Timberland Company, 2009; Panayiotou, Aravossis, & Moschou, 2008; Wehrmeyer, 1993), it would be valuable for apparel brands and retailers to understand the expectations of various stakeholders. This work focuses on U.S.-based stakeholder groups' expectations for environmental performance of apparel brands and retailers.

Theoretical Framework

Stakeholder theory serves as the theoretical framework for this work. A stakeholder is defined as "any group or individual who is affected by or can affect the achievement of an organization's objectives" (Freeman, 1984, p. 5). This theory introduced the concept that businesses should consider the interest and concerns of a wide variety of groups when making business decisions (Clarkson, 1995; Dickson, et

al., 2009; Freeman, 1984; Freeman, Wicks, & Parmar, 2004; Preston & Sapienza, 1990).

Clarkson (1995) added to Freeman's theory by dividing stakeholders into primary and secondary classifications, based on the group's relationship with the company. Primary stakeholders are defined as those groups required by a corporation to exist on a daily basis. These groups include investors, suppliers, employees, customers, governments and communities, as well as trade associations (Buysse & Verbeke, 2003; Clarkson, 1995; Dickson, et al., 2009; Savage et al., 1991). Secondary stakeholders are defined as "those who influence or affect, or are influenced or affected by, the corporation" but who are not engaged in formal transactions with the organization (Clarkson, 1995, p. 108). These secondary stakeholder groups include NGOs, competitors, public agencies, and the media (Buysse & Verbeke, 2003; Clarkson, 1995; Dickson, et al., 2009; Savage et al., 1991). Secondary stakeholder groups have the "capacity to mobilize public opinion in favor of, or in opposition to a company's performance" (Clarkson, 1995, p. 108).

The dual purpose of this research was to a) identify current stakeholder groups' expectations for environmental performance on key environmental issues within the apparel industry and b) evaluate stakeholder interactions with apparel companies in attempting to improve environmental performance. Thus this work brings to light the interest and concerns of the various groups that are affected by the business decisions

of the apparel industry or can affect these decisions, the industry's stakeholder groups, as Freeman's theory states. With a better understanding of the environmental issues and concerns that stakeholders believe are important, the apparel industry may be able to focus improvements in these areas and address the issues raised as important.

Review of Literature

The following sections provide brief summaries of key primary and secondary stakeholder groups and their importance to the apparel industry and its environmental performance. The importance of stakeholders is relative, issue-based, and can change over time (Mitchell, Angle, & Wood, 1995).

Investors, Shareholders, and Financial Institutions

There is mounting societal concern over the role of business in contributing to global environmental problems (Aragón-Correa, 1998). Consequently, shareholders and financial institutions, as primary stakeholders, are concerned about liabilities stemming from corporate operations that are damaging to the environment, such as oil drilling and chemical spills (Rueda-Manzanares, et al., 2008). Researchers have shown that firms that have adopted CSR as a core part of the corporate strategy performed better than those that had not (López, et al., 2007).

At the financial level, poor environmental performance can seriously strain a company's relationship with its investors and shareholders. As a result shareholders, private investors, and financial institutions may perceive companies with a poor

environmental record as riskier to invest in (Henriques & Sadorsky, 1996). They may also voice their discontent over poor environmental performance by withdrawing capital or refusing to extend new loans (Buysse & Verbeke, 2003). These initiatives represent an important primary stakeholder group since financial capital is required by apparel brands and retailers to establish a network of suppliers.

Suppliers

From an environmental perspective, the apparel industry's supplier network may include farmers, chemical manufacturers, dye houses, ginning facilities, fabric mills, finishing plants, and sewing factories. Suppliers, as primary stakeholders, are effective in helping companies develop environmental practices (Christmann, 2004; Liu, 2009; Rueda-Manzanares, et al., 2008). The development and implementation of meaningful and consistent environmental policies tend to be closely integrated with other functional areas of a company. This "integration exists because implementing environmental policies requires support from many functional areas" such as research and development, product development, production, human resources, and marketing (Christmann, 2004, p. 751). As suppliers are a primary stakeholder group, their support and participation are critical to a firm' environmental policy development and implementation. Employees also play a critical role in establishing an environmentally focused corporate culture.

Employees

The formal relationships that employees have with their employers have direct relevance to the firm's survival, profitability, and growth (Ansett, 2007; Clarkson, 1995). As a primary stakeholder group that enters into a formal relationship with the firm, employees have the greatest impact on determining the success or failure of a company's environmental strategy (Buchholz, 1991). An educated work force that is committed to upholding and carrying out the company's environmental strategies is likely to have success (Waddock & Bodwell, 2002). This success may then be communicated to the consumers, so they are able to support the company's environmental initiatives with their purchases.

Consumers

"Consumers are clearly more environmentally and socially aware today, but they still do not generally consume with concern" (O'Rourke, 2005, p. 116). As Butner (1995) explains this primary stakeholder group will only purchase "greener" products when they have credible information that allows them to feel confident in evaluating whether their choice is actually making an impact. Even as primary stakeholders, most consumers do not have access to information on the environmental or social impacts of the products they purchase; nor do they trust the information provided to them solely by the company (O'Rourke, 2005). Government labeling regulations may

provide consumers with the confidence and information they seek to make informed purchasing decisions.

Governments and Communities

The government and the resulting communities where companies conduct business can be seen as primary "public stakeholder groups" (Clarkson, 1995, p. 106). These two groups provide the infrastructure and markets that support companies. The government also enacts and monitors the environmental laws and regulations that a company must follow. In recent years, companies have partnered with governments to foster stakeholder relationships. An example of this partnership occurred between the United States government and the apparel industry in 1995, after the "El Monte Sweatshop Raid". The discovery of a sweatshop operating covertly in California, prompted the Clinton Administration to establish the "White House Apparel Industry Partnership", which consisted of representatives from industry, labor, government, and public-interest groups to pursue non-regulatory solutions to sweatshop abuses in the United States (Liebhold & Rubenstein, 1998).

Trade Associations

A trade association as a primary stakeholder is defined as an organization of industry specific business competitors collaborating to promote company products or services (NSF). Trade association activities often include business ethics, management practices, government lobbying, standardization, research, publication, marketing,

promotion, and public relations (NSF). Within the apparel industry there are various trade associations. The Outdoor Industry Association, which represents companies in the active, outdoor, recreation business, have recently collaborated with non-governmental organizations (NGOs) to establish an Eco Working Group to explore the issues of environmental sustainability.

Non-Governmental Organizations

Non-governmental organizations (NGOs) are "non-profit groups that combine resource mobilization, information provision, and activism to advocate for changes in certain issue areas" (Spar & LaMure, 2003, p. 79). As secondary stakeholders in the apparel industry, NGOs run the gamut from small-scale, grassroots groups such as student run campaigns to large professionally managed institutions such as the Environmental Defense Fund. NGOs and other activist groups have successfully brought to light information that companies had previously kept well hidden, thus affecting public opinion, media coverage, and company policy (Freeman, 2006; Spar & LaMure, 2003, O'Rourke, 2005).

Competitors

As secondary stakeholders, competitors play a large role in the apparel industry. "Most large businesses today operate in a fundamentally global competitive environment, in both producing and selling their wares, frequently using long supply chains to actually produce goods" (Waddock & Bodwell, 2002, p. 114). Liu's (2009)

study of manufacturers located in the Yangtze River Delta area of China found that "market pressure played a significantly positive role in improving the environmental behavior of firms" (p. 1485).

Public Agencies

This secondary stakeholder group is defined as a board, commission, or tribunal or other organization established by government, to perform a public function with some degree of autonomy (Government of Alberta). Public universities and colleges fall under this definition. The University of Delaware through its Graduate Certificate in Socially Responsible and Sustainable Apparel Business has developed an online curriculum of graduate level classes that incorporate environmental sustainability and corporate social responsibility (University of Delaware Fashion & Apparel Studies Department, 2010). This certificate program would be very helpful to an industry professional seeking to put into place a sustainability initiative at their company.

The U.S. Environmental Protection Agency (EPA) is another public agency whose mission includes education on environmental issues. In order to accomplish this mission, the EPA works closely with the U.S. Congress so when an environmental law is written, the EPA is able to write regulations and national standards making the law an effective environmental management tool (EPA, 2010).

Media Agencies and Media Coverage

The media, as a secondary stakeholder, can play an important role in the success of an apparel company's environmental strategies. Similar to NGOs, the media has the ability to scrutinize apparel companies that are not meeting bare minimum environmental laws in developing countries (O'Rourke, 2005; Spar & LaMure, 2003). Researchers have noted the link between information reporting, the media, and social responsibility (Hamilton, 1995; Katz et al., 2009). Apparel brands and retailers concerned about competition may delay publishing their environmental performance policies and practices.

Methods

Taking into account the varied stakeholder groups within the apparel industry, this research sought to fully bring to light the interests, concerns, and expectations of three stakeholder groups through case study research. A case study is defined as "an in-depth analysis of …an organization" (Touliatos & Compton, 1988, p. 244). In order to identify important stakeholder groups within the apparel industry, professionals currently working in the area of environmental sustainability were asked to identify stakeholder groups they felt were influential. Taking these suggestions into account, it was decided to develop case studies on the American Apparel & Footwear Association, Organic Exchange, and Ceres. These three organizations represent both primary and secondary stakeholders as identified through the review of literature.

Case study research uses mixed methods for data collection and analysis (Woodside, 2010; Woodside & Wilson, 2003). Each case study was developed using data collected through website analysis, semi-structured interviews, and archival records analysis. After an in-depth analysis of the group's website, a bare bones case study was assembled, using the research questions as a guide. Next, the researcher interviewed a total of five group representatives in an effort to gain a better understanding of how the stakeholder group operates within the apparel industry, the key issues they are working on, and the methods that they use to effect environmental policy change. The researcher sought out archival records through academic database searches and on the World Wide Web that either supported or refuted the information shared through the interview process. These documents also revealed important environmental issues the stakeholder groups were working on and further supplemented the case studies. Data analysis and synthesis occurred as the information was collected and processed during the website analysis and subsequent interview process, allowing the researcher to notice various patterns as the data was analyzed repeatedly.

American Apparel & Footwear Association Case Study

The American Apparel & Footwear Association (AAFA) is the national trade association representing apparel, footwear, and other sewn products companies in front of the United States government on policy matters and trade agreements (AAFA,

2009). The AAFA was formed in August 2000 through the merger of two highly regarded trade associations: the American Apparel Manufacturers Association (AAMA) and Footwear Industries of America (FIA). As of 2010, the AAFA boasted more than 400 member companies. Drawing from a broad, diverse, and technically strong membership base, AAFA member companies produce more than 80% of apparel and footwear sold at wholesale each year in the United States (AAFA, 2009). AAFA staffers are assigned to cover issues such as the Central American Free Trade Act- Dominican Republic (CAFTA -DR), children's wear, supply chain leadership, licensing, and labeling. Many staffers have a portion of their assignment focused on addressing environmental issues, such as the restricted substances involved in the manufacturing of children's sleepwear or the carbon footprint issues that arise out of supply chain management.

Mission Statement

The AAFA's mission "is to promote and enhance its members' competitiveness, productivity and profitability in the global market by minimizing regulatory, legal, commercial, political and trade restraints" (AAFA, 2009). To accomplish this mission, the AAFA has divided its work among 15 committees and councils. The AAFA's Environmental Committee (EC) was of prime interest to this study.

The EC, a committee of 110 member companies that represent every aspect of the supply chain, from textile mills to production facilities, to dye houses, to testing labs, meets quarterly to provide a forum to discuss proper environmental stewardship and share best practices as they relate to environmental concerns (AAFA, 2009).

Environmental Issues of Concern

AAFA representatives noted five environmental concerns their members are currently working on. These issues are water usage, carbon foot printing, product safety and restricted substances, regulatory compliance, and sustainability.

In terms of water usage, the dyeing and finishing of apparel products is an area of critical concern because so much water is consumed and contaminated during this production process. Currently, a best practice for handling this issue is having a water purification facility attached to the factory or by sequencing dye lots, processing lots from light to dark colors. As a next step towards improving water usage, apparel brands and retailers should have a clearly articulated set of guidelines for minimizing water usage and outputs that might be detrimental.

AAFA representatives noted the importance of a company accurately determining its carbon footprint. The term carbon footprint refers to "an estimate of how much carbon dioxide is produced to support" a company's production processes ("Carbon footprint", 2010). As a next step it is critical to "really, really understand"

what the carbon footprint is for each aspect of the supply chain that [is under] your control" (AAFA Interview 2).

In partnership with its member companies, the AAFA first developed a restricted substances list (RSL) in 2007 to address the concern of product safety and restricted substances. This list, which the AAFA suggests all apparel brands and retailers adopt, identifies the most restrictive regulatory requirements for chemical used in apparel and footwear production around the world. As the next steps to improving on this issue, the AAFA offers apparel brands and retailers a two-prong approach. It suggests that apparel brands and retailers have a comprehensive chemical management program. Another next step that applies to product safety and restricted substances involves working with a smaller, carefully selected group of suppliers.

Apparel brands and retailers could also offer incentives for compliance by giving more business to the suppliers that are willing to abide by a company's product safety requirements and RSLs.

As a trade association, one of the AAFA's main concerns is regulatory control that affects the apparel and footwear industries. As apparel brands and retailers currently operate within a global context, they should work with and support local regulatory bodies and government agencies to build enforcement practices free of corruption. As a next step, it is important to review the sourcing department's bonus

structure to ensure that it falls in line with the company's goals of meeting regulatory compliance.

Apparel brands and retailers need to work with their suppliers to ensure that the company's sustainability goals and procedures are well defined and being adhered at all levels in the supply chain. As a next step, it is important for apparel brands and retailers to have sustainability policies in place that allow them to continue producing goods without depleting the earth's natural resources.

Effective Change Agent and Apparel Industry's Effect on AAFA

Through the AAFA's involvement with companies and the work of the EC "a little bit of this [has] been demystified. To some extent it does not look like such a huge issue to tackle. You can bite off smaller bits and pieces to really tackle" these issues and still make a difference (AAFA Interview 2). The EC's strong leadership, large membership, collaborative nature, and educational focus are assisting the AAFA to fulfill its mission statement, another measure of organizational effectiveness. From archival records searches, it is evident that the AAFA is regarded as the apparel and footwear industries' spokesperson on various topics. Through industry partnerships, which can be seen as a measure of organizational effectiveness, AAFA has established itself as a cooperative force that can bring about positive change in the apparel and footwear industries.

Since its inception, the AAFA has focused on working with the apparel and footwear industries. As such it is difficult to say whether these industries have had a direct effect on the group and how it operates. The AAFA has shifted its meeting and conference locations to cover all parts of the globe in an effort to be responsive to their member's educational needs.

Organic Exchange Case Study

Organic Exchange (OE) is a non-profit, non-governmental organization (NGO) committed to expanding the amount of farm land dedicated to organic agriculture, with a specific focus on increasing the farming production and commercial use of organically grown fibers such as cotton (OE, 2010). OE is comprised of 211 organizations that span the entire supply chain from farmers, to spinners, to mills, to production factories, to branded retailers, to sourcing agents, to other non-governmental groups working on almost every continent around the globe.

Mission Statement

OE's mission is to "catalyze market forces to deliver sustained environmental, economic and social benefits through expansion of organic fiber agriculture" (OE, 2010). In order to fulfill its mission, OE has developed various fiber source and labeling standards, as well as logos. The OE 100 Standard "is for tracking and documenting the purchase, handling and use of 100% certified organic cotton fiber in yarns, fabrics and finished goods" (OE, 2010). The OE Blended Standard is used to

track and document "the purchase, handling and use of certified organically farmed cotton fiber in blended yarns, fabrics and finished goods. The standard applies to all goods that contain a minimum of 5% organic cotton" (OE, 2010).

Environmental Issues of Concern

OE representatives identified two issues as being top priority for the organization; they are chemical and water usage. The issue of product integrity, another environmental concern for OE, was identified through archival record searches

The use of chemicals is highly restricted in organic farming. Current practices that apparel brands and retailers could help to reduce or eliminate chemicals use, including buying organic cotton, integrated pest management cotton, or rain fed cotton. These lower impact alternatives could be phased in as part of a company's product offering or used to completely replace conventional cotton. A next step would be to implement a comprehensive chemical management program, which would allow apparel brands and retailers to determine exactly which chemicals are currently being used in their supply chain and for what purpose. Another next step involves a company investing in its supply chain by making commitments to the farmers to improve education, place steady volume orders, and secure a safe supply chain.

The growth of cotton, regardless of chemical use, is a water intensive process (Chapagain, et. al, 2005). Apparel brands and retailers can choose to support existing

supply chains that are already committed to addressing water issues. This requires retailers to have open, honest communication with their supply chain members, from the farm level up, in order to support these water management initiatives. The future of the water usage issue is also closely linked to supply chain management.

Transparent supply chain management supported by a robust certification program is a next step that could lead to fewer product integrity concerns for an apparel brand or retailer.

Organic integrity is essential to the success and growth of the organic fiber industry. "Integrity means that all claims made are valid, and this involves effective standards and certification processes, transparent supply chains, strong cooperation and communication, and all players understanding the requirements for organic textiles" (OE, 2010). Certification to a recognized standard provides excellent backup for apparel brands and retailers looking to label their products "organic". Next steps for addressing to improve product integrity involve the use of enhanced certification and verification processes. OE is in the process of developing a farm program that will assist apparel brands and retailers to verify their supply of cotton.

Effective Change Agent and Apparel Industry's Effect on OE

In order to determine if OE is an effective change agent within the apparel industry, one can look to the fact that "organic non-food sales grew by an astounding

39.4 percent" in 2008 (Organic Trade Association, 2009). One could infer that OE is partially responsible for these positive improvements to the organic apparel industry. Through this growth in sales OE is also accomplishing its mission of catalyzing market forces to expand organic fiber agriculture, another measure of organizational effectiveness. Since its inception, OE has focused on working with the apparel industry. OE has been able to use their group's clout and reputation to influence the development of organic standards in countries around the world. This is another example of the group's effectiveness. This NGO has helped "create solutions, which improve environmental quality, enhance the livelihoods of farmers, increase profitability for innovative brands and their business partners and expand consumer choice" (Week, 2008, p. 1).

Ceres Case Study

Ceres consists of a network of environmental organizations, non-profit groups, and public interest groups working together with companies and investors to address climate change and sustainability issues. Formed in 1989 as a direct result of the Exxon-Valdez oil spill, Ceres is working to bring about positive collaborations and climate change within the business community.

Mission Statement

Ceres' mission statement is to "integrate sustainability into capital markets for the health of the planet and its people" (Ceres, 2010). From its early day's apparel and footwear brands have supported Ceres' efforts, with Timberland coming on board as a Ceres company early on in the group's history. Ceres' companies make commitments to in-depth stakeholder engagement, information disclosure, and continuous improvement. Apparel brands and retailers seeking to establish or improve stakeholder relationships can make a public commitment to become a Ceres company.

The Ceres coalition, a group of investors, environmental organizations, NGOs, and public interest groups, engages directly with companies on environmental and social issues. This coalition, moderated by Ceres employees, brings together differing opinions from both within an industry and external to the industry to ensure that all opinions are heard.

Through strategic partnerships with both stakeholder groups and companies, Ceres has made impressive accomplishments within the apparel industry. This includes the creation of the Global Reporting Initiative (GRI), Business for Innovative Climate and Energy Policy (BICEP), and the Investor Network on Climate Risk (INCR). The GRI was started in 1997 as a Ceres project. The goal of this project was to provide a "trusted and credible framework for sustainability reporting that could be used by organizations of any size, sector, or location" (Global Reporting Initiative, 2010). Today, this international standard is used by thousands of companies for reporting their environmental, social, and economic performance. Business for Innovative Climate and Energy Policy (BICEP) is working with "key allies in the

business community and with members of Congress to pass meaningful energy and climate change legislation that is consistent with our core principles" (BICEP, 2010). Another project of Ceres is the Investor Network on Climate Risk (INCR). This is a network of investors, worth \$8 trillion, promoting better understanding of the financial risks and opportunities posed by climate change (INCR, 2010).

Environmental Issues of Concern

A Ceres representative noted two environmental concerns their group is currently working on. These issues are water usage, which includes water consumption rates as well as wastewater quality, and materials use. A representative from a Ceres member company also shared that measuring and reducing their carbon footprint is a key issue Ceres was able to provide assistance on.

Ceres' 2008 "Water Scarcity and Climate Change: Growing Risks for Businesses and Investors" report included a section on the apparel industry, which states clear action steps apparel brands and retailers may take to evaluate and address water usage. These action steps included measuring the company's water footprint throughout the entire supply chain and integrating water issues into the company's strategic business plan (Morrison, et. al, 2009). As a next step, Ceres suggests that apparel companies closely examine a closed loop model for wastewater. In this model, all the wastewater is recycled and reused throughout the apparel process in some way.

Materials management is one of the largest components of a green supply chain (Sarkis, 1998). Ceres proposes that disclosure and reporting are once again key to establishing a strong materials use and management program. As a next step, Ceres notes that apparel companies could commit to a considered design approach. This concept is similar to the cradle-to-cradle design process and the design for disassembly concept, both proposed by Braungart and McDonough in the early 1990s. These concepts suggest that disposal and end of life treatment be considered as a garment is designed and created. Additional next steps include to reuse waste products and reposition finished second quality goods as a part of a company's product offering.

Apparel brands and retailers must be cognizant of which parts of their supply chain they are including as part of their carbon footprint. As part of a grassroots effort to reduce a company's carbon footprint, employees could start a task force to figure out ways to reduce the company's energy usage. Carbon footprint education for consumers is another next step suggested by a Ceres member company representative.

Effective Change Agent and Apparel Industry's Effect on Ceres

Ceres has had a notable impact on advancing the conversations on sustainability and gathering stakeholder engagement through the establishment of the GRI and the development of the Ceres coalition. These two endeavors have contributed to Ceres accomplishing its stated mission of integrating sustainability into

capital markets. This is a measure of the group's effectiveness. One can also look at the various reporting guides, Ceres has developed, as well as their constant communication with the media, and say that the group is effective. Ceres is currently working within a broad range of industries, including the electric power, oil and gas, insurance, consumer products, chemicals, homebuilding, and, hotel and travel sectors, to impact climate change. The apparel industry has had a profound effect on the group by giving it an appreciation for the level of the struggle, complexity, and enormity associated with environmental issues and global brands, which again speaks to the group's effectiveness.

Discussion of Results

In order to effectively begin a discussion of the results of this research, it is valuable to review the research questions it sought to answer. The first three research questions center around the group's expectations for environmental performance as well as current issues of concern. These questions included:

- What are stakeholder groups' expectations for environmental performance of apparel brands and retailers?
- Does the environmental performance of apparel brands and retailers meet stakeholder groups' expectations?
- What do apparel brands and retailers need to do in the future in order to improve environmental performance?

The last two questions focused on the group's interactions with apparel companies in attempting to influence environmental performance in the apparel industry. These questions included:

- How have stakeholder groups influenced changes in environmental performance within the apparel industry?
- How has the environmentally focused work of stakeholder groups been influenced by the apparel industry?

To assist this discussion a table was created to summarize the three case studies developed through this research project (see Table 5.1). This table highlights the main points presented in each case study as related to the research questions.

Expectations for Environmental Performance and Issues of Concern

As part of the semi-structured interviews, stakeholder group representatives were asked what their group expects from apparel brands and retailers in terms of environmental performance. This direct question allowed the researcher to identify the stakeholder groups' expectations for environmental performance of apparel brands and retailers. The three stakeholder groups investigated for this research shared commonalities in their expectations for environmental performance for the apparel industry. Each group placed importance on being knowledgeable about environmental issues impacting a company's supply chain. The AAFA expects all its members to be "knowledgeable about the issues and how they may affect their business" (AAFA

	AAFA	Ceres	OE
Stakeholder groups' expectations for environmental performance	Companies should be knowledgeable about the issues and how they may affect their business	Develop industry wide best practices. Then work together to promote and maintain best practices	Companies can work to learn their supply chains more deeply
Meeting expectations	Impressed with the progress but more work to be done	Not completely satisfied; Impressed with the progress but more work to be done	Always more room for improvement; important to follow through on commitments made within the supply chain
Environmental issue	Water usage	Water usage and waste water quality	Water usage
Suggested practices	On-site water treatment facility; dye sequencing	Tracking and disclosing water usage rates and wastewater quality information	Support existing supply chains that are already committed to addressing water issues
Future steps	Clear guidelines for minimizing water usage and outputs	Examine a closed loop model for wastewater	Transparent supply chain management supported by a robust certification program
Environmental issue	Product safety and restricted substances	Materials use and management	Chemical Use
Suggested practices	Implement the AAFA's RSL list	Public reporting and disclosure to establish a materials use and management program	Buy organic cotton or integrated pest management cotton.
Future steps	Comprehensive chemical management program. Incentivize RSL compliance among a small network of suppliers	Commit to a considered design approach; Reuse waste products and second quality goods within a company's offering	Comprehensive chemical management program. Invest in supply chain down to the farm level.
Environmental issue	Carbon foot printing	Carbon foot printing	
Suggested practices	Accurate determination of a company's carbon footprint	Accurate determination of a company's carbon footprint. Grassroots efforts include employee task forces.	

Table 5.1 Case study comparisons

	AAFA	Ceres	OE
Environmental issue	Regulatory compliance		Product integrity
Suggested practices	Work with local governments to develop corruption free regulations and practices		Certification to a recognized standard for all products labeled "organic"
Future steps	Sourcing department's bonus structure must fall in line with company's compliance goals, not profit goals.		Enhanced certification and verification processes, with tracking in place down to the farm level
Environmental issue	Sustainability Policies		
Suggested practices	Clearly articulate sustainability goals and procedures to suppliers.		
Future steps	Implement sustainability policies that are mindful of natural resources		
Change agent status	Yes, due to industry partnerships and education focus	Yes, due to various reporting guides, metrics and global standards Ceres has developed	Yes, due to phenomenal growth in organic cotton sales within the last 5 years
Effect apparel industry has had on group	Shifted educational conferences & meeting locations to meet members' needs.	Profound effect. Has taught them to be more patient and persistent on environmental issues in the apparel industry.	Difficult to gauge due to initial focus on apparel industry

Table 5.1 Case study comparisons (continued)

Interview 2). Likewise, OE representatives state with clarity what they expect apparel brands and retailers "to learn their supply chains more deeply" (OE Interview 1). Familiarity with the environmental problems in the apparel industry's supply chain should be valuable given that previous research has found a positive relationship integration strategies and its approaches to the natural environment (Aragón-Correa,

1998; Liu, 2009). However, OE's expectation of deep supply chain knowledge is a new trend that may be a challenge for apparel brands and retailers to meet. This expectation may be difficult for apparel brands and retailers to meet due in part to the complexity and various hidden layers of subcontractors within the supply chain. This expectation also poses a challenge because it requires apparel brands and retailers to hire and train employees to work within their supply chain to ensure honest communication and information delivery.

Ceres thought more broadly when sharing its expectations to include coming together "as an industry [to] come up with the best practices and then really put their competitive instincts to the side so they are able to promote and maintain those best practices" (Ceres Interview 1). Ceres' expectations may be difficult for apparel brands and retailers to meet, since they are accustomed to working within an industry that is highly competitive as noted by Aerts, et. al (2007) as well as Waddock and Bodwell (2002). According to Studer, Welford, and Hills (2006) competitive advantage, enhanced reputation, and improved management may be driving factors for a company as they embark on environmental initiatives. However, by participating in the AAFA's EC or Ceres' coalition, apparel brands and retailers may begin to develop a collaborative spirit about sharing information. Involvement in these groups, may allow brands and retailers to begin seeing the benefits of sharing knowledge and best practices.

The second research question asked if the environmental performance of apparel brands and retailers met stakeholder groups' expectations. Apparel brands and retailers are currently not meeting these stakeholder groups' expectations for environmental performance. Progress has been made on key issues, however, there is room for more improvement. Ceres believes the apparel industry has made progress on various climate change issues. However, in keeping with its commitment to continuous improvement, a Ceres representative shared that they are not completely satisfied. "We are impressed with the progress we have seen thus far and think there is a lot more work to be done" (Ceres Interview 1). This quote echoes the sentiments OE and AAFA representatives shared.

It is possible that apparel brands and retailers are not meeting these group's expectations due to the complex, economically depressed business environment they are currently operating within. The apparel industry is complex due to the various layers involved in the supply chain, some of which are hidden from the brands and retailers. The apparel industry's supplier network includes farmers, dye houses, fabric mills, and sewing factories. This brief list does not include the myriad of contracted and sub-contracted production suppliers; trim vendors, trucking companies, and shipping brokers that are also a part of the entire supply chain. As noted by Rueda-Manzanares, et al. (2008), managers perceiving that the business environment is

complex are less likely to incorporate stakeholders' views when formulating environmental strategy.

Yet, despite concurring with the general view that companies were not doing enough, when asked how satisfied they were with the work apparel brands and retailers are doing on key environmental issues, an OE representative went on to say "It is very dependent on the company. Some companies we are thrilled with and cannot wait to publish their stories" (OE Interview 1). Therefore, one may conclude that there are some apparel brands and retailers out there who are meeting this group's expectations. A suggestion for further research would be to develop an in-depth case study on one of these companies in order to determine which policies and practices they have implemented which are helping them meet OE's expectations. It would also be interesting to compile an in-depth supply chain map for this company. This information could assist other brands and retailers as they work to reduce complexity within their business environment and their supply chain.

The third research question focused on what brands and retailers need to do next in order to improve environmental performance. The common issues indentified by the three stakeholder groups were water usage, chemical use and management, and carbon footprint measurement and reduction. If an apparel brand or retailer was unsure which environmental issue to tackle first, it would be suggested to work on one of these issues. Companies that choose to tackle carbon footprint reduction first may be

able to begin impacting the other two issues of chemical management and water use. By accurately accessing, measuring, and tracking its carbon footprint, the company will also have visibility into its chemical use as well as water consumption rates within their supply chain. Both the AAFA and Ceres noted carbon footprint reduction as a key environmental issue. However, before this can accurately be done it is critical to "really, really understand what the carbon footprint is for each aspect of the supply chain that [is under] your control" (AAFA Interview 2). Note once more the importance that is place on supply chain knowledge.

All three stakeholder groups noted water usage as an environmental issue of concern. According to Ceres, it would be very beneficial if companies moved to a closed loop model for water recapturing and recycling. OE noted how brands and retailers could invest in drip irrigation systems at the farm level to reduce water usage. The future of this issue is also closely linked to supply chain management. Through employee education programs, factory tours, production audits, and honest communication with supply chain members companies begin to note areas of production within their supply and distribution network that require high volumes of water. With this data, apparel brands and retailers could more precisely implement wastewater recollection and recycling programs.

Implementing a comprehensive chemical management program and committing to a considered design approach are two suggestions that could work hand in hand for

companies as they look towards next steps to improve restricted substance use and product safety. Through the use of a chemical management program, brands and retailers could evaluate safer, less toxic, non-chemical options and incorporate these choices from the beginning as part of the design process. As Nike has noted. considered design should be a company wide effort that starts with the initial concept sketch for a garment (Nike, Inc., 2010). As part of a considered design approach, apparel brands and retailers could put an incentivized RSL compliance program into place. This program would lead to them working with a smaller, carefully selected group of suppliers who are willing to abide by a company's product safety requirements and RSLs, which would greatly reduce business environment complexity, which may lead to greater feasibility of meeting stakeholder groups' expectations for environmental performance. This finding is in line with Rueda-Manzanares' 2008 findings, where he noted the importance of reducing complexity within the business environment in order to incorporate stakeholder's views. Other researchers have also noted the positive relationship that exists between a company's integration of the natural environment into its business strategies, organizational manuals, and corporate literature (Aragón-Correa, 1998; Liu, 2009). Transparent external reporting may begin to occur with the incorporation of the natural environment into business literature, which is available to the public and the media. As Dickson and Eckman noted, "publicly reporting the results of companies' performance in the social and environmental components of their work helps build trust with employees and stakeholders" (2008, p. 725).

Once more it appears that in-depth supply chain management and transparent reporting are key practices brands and retailers must implement in order to resolve these issues and begin meeting stakeholders' expectations. As noted above, through the integration of the natural environment into business strategies and literature, companies are able to begin publicly disclosing environmental performance practices they feel confident in. These findings augment Katz, et al.'s (2009) findings, where they noted that external monitoring reduces the level of unknown information about a firm, which allows society to make a more accurate assessment of brand reputation.

As Aerts, et al. (2008) noted, social concerns play a key role in the presence of environmental disclosure on a company's website. Apparel brands and retailers may use these findings as they seek to report more environmental performance data, revamp their marketing literature, or establish a stronger web presence.

The Exchange of Influence between Stakeholders and the Apparel Industry

As noted through the review of literature, apparel brands and retailers are able to influence suppliers to adopt environmental policies (Denend & Plambeck, 2007; O'Rourke, 2005; Spar & LaMure, 2003). Wood and Jones (1995) also indicate the important role various stakeholders play in the formation of corporate social performance models. This research team concluded that stakeholders, since they

experience the effects of corporate behavior, are a source of expectations for how compaies should be behaving. Likewise stakeholders evaluate how well companies have met their expectations (Wood & Jones, 1995).

From the review of literature, one sees that this relationship is a two way streetwhere by some external stakeholder groups impact the apparel industry, at the same
time as the apparel industry is influencing other stakeholder groups. The two-way
street metaphor may be used to describe the exchange of influence occurring within
the apparel industry. The concept of a two-way street or a two-way exchange of
influence allows one to see how the final two research questions are interrelated. The
fourth research question asked about how stakeholder groups have influenced changes
in environmental performance within the apparel industry. This question honed in on
the first direction of influence exchange. While the fifth research question asked how
the environmentally-focused work of the stakeholder groups' has been influenced by
the apparel industry, thus looking at the second direction of influence exchange.

Researchers have long struggled with how to operationally define organizational effectiveness. For this research, organizational effectiveness was defined as the extent to which an organization's mission is being achieved (Cameron, 1986; Georgopoulos & Tannenbaum, 1957; Herman & Renz, 1998) as well as the organization's ability to influence and improve environmental performance in the apparel industry through the use of the group's reputation in the media, communication formats, and industry

partnerships. This definition applied specifically to the forth research question about how stakeholder groups have influenced changes in environemental performance within the apparel industry. With the operational definition of effectiveness in mind, it is possible to say AAFA, OE, and Ceres are effective groups who have influenced changes in environmental performance within the apparel industry.

AAFA's mission is to enhance member company's competitiveness and profitability in the global market by minimizing regulatory and legal restraints. It is possible to say that the AAFA is accomplishing this mission through their positive media reputation and their strong industry partnerships. From archival record searches and internet keyword searches, it is apparent that the AAFA is the industries' spokesperson for issues as diverse as pirated goods, trade policy, and copyright infringement. The lack of negative media reports available on the AAFA also speaks to their effectiveness. Through industry partnerships the AAFA has developed an RSL list that is quickly becoming the industry's standard. The AAFA through their focus on educating apparel brands and retailers about current environmental issues, such as the use of cadmium in products, has also been able to impart change.

OE's mission statement includes a commitment to increasing organic fiber agriculture, which may in term have lead to the phenomenal growth in global sales of organic cotton within the last three to four years. Recently, OE has experienced intense positive as well as negative media coverage with their product integrity issue.

Through this media coverage, OE has steadfastly defended and upheld their organic fiber labeling standards. It has also educated other brands, retailers, and consumers about the importance of fiber source verification and certification. OE has also used their international partnerships in conjunction with their global employee network to influence trade policy developments and certification standards such as the development of Japan's new organic labeling standards.

Ceres mission statement is focused on integrating sustainability into capital markets. Through the formation and publication of the GRI, as well as other metrics, and communication guides, Ceres has made it possible for companies as well as consumers to track and compare within an industry on a yearly basis. Through the formation of the Ceres coalition, they have established themselves as change agents in the apparel industry. As Herman and Renz (1998) concluded in their work entitled "Nonprofit Organizational Effectiveness: Contrasts between Especially Effective and Less Effective Organizations"

It is in the interest of the non-profit organization and its leadership to facilitate a dialogue with key stakeholders to surface and overtly identify the various performance criteria, outcome measures, and other constructions of effectiveness that sooner or later will become the basis for stakeholder judgments of the organization's effectiveness (p. 36).

This is exactly how Ceres' coalition operates and because of it Ceres may be seen as an effective change agent within the apparel industry.

The final research question focused on how the environmentally-focused work of the stakeholder groups' has been influenced by the apparel industry. In order to gauge the impact working with the apparel industry has had on the groups, representatives were directly asked about the influence working with the industry has had on their group. They were also asked about organizational changes (i.e. shifted resources, established new offices, changes in communication styles) the group may have made to have more of an impact on the industry.

After reviewing the three case studies developed for this work, it is difficult to say if the apparel industry has affected the environmentally focused work of AAFA, OE, and Ceres. Both AAFA and OE have focused all of their efforts solely on the apparel industry. As such it is possible to say that they have always been able to operate within the industry. One notes that these groups have been responsive to the industry and the complex challenges faced by offering various educational, certification, and communication platforms.

Ceres, on the other hand, is currently working within various other industries to impact climate change. Ceres' representatives noted the greater awareness and capacity for patience their group has developed as a result of working with the apparel industry. As such Ceres has taken note of the complexity and difficulty of handling environmental issues as a result of its work with the global apparel industry. This willingness to work with and learn from the industry speaks to the effect the apparel

industry has had on Ceres'. Further research covering more diverse stakeholder groups would allow this research question to be answered more fully.

Freeman's (1984) stakeholder theory in addition to Clarkson's (1995) primary and secondary categories received wide support throughout this work. Brands and retailers should be aware of these concepts and seek to engage with their stakeholders. It is in the interest of brands and retailers to facilitate a dialogue with key stakeholder groups around environmental performance in order to identify the group's expectations and the critical environmental issues they are focused on. With this information, brands and retailers could begin to improve their performance on these issues. This work notes how these key stakeholder groups have the ability to impact and influence other groups, both primary and secondary. They also hold companies accountable for their environmental performance practices before various other stakeholder groups.

Conclusions

From this research it is possible to make three conclusions. The first is that key stakeholder groups believe that apparel brands and retailers need to address the issues of water usage, chemical use and management, and carbon footprint measuring and reduction. This work also sets base line expectations for environmental performance, which brands and retailers need to be aware of. In keeping with the concept of continuous improvement, these expectations will only continue to rise as time passes.

Apparel brands and retailers would be wise to be aware of these base line expectations in order to gauge their current stance on these issues and implement policies and practices that will have positive effects on the three above stated issues. Brands and retailers could seek to collaborate within the industry as well as engage with stakeholder groups to develop best practices on these issues.

A second conclusion is that in-depth supply chain management is a key practice stakeholder groups are looking for from brands and retailers in order to tackle these environmental issues. In-depth supply chain management includes company representatives familiarizing themselves with each layer within their supply chain, from the farm to the factory to the store. These representatives may include high-level managers, sourcing employees, designers, technicians, compliance officers, and quality control inspectors. Companies that invest in their supply chain through clear communication, capacity building, education, training, steady order placement, and stakeholder engagement will have plenty of information they are confident reporting on to the public. This in-depth management process will allow companies to begin confidently reporting on their activities to the public. This level of reporting may in turn improve media relations, employee morale, and public opinions of the company. This conclusion is further supported by Rueda-Manzanares, et al.'s 2008 work, which found that it is important within complex supply chains to establish a corporate culture that values the environment.

A third conclusion that may be of interest to apparel brands and retailers is the new trend of collaborations between primary and secondary stakeholders within the apparel industry. The AAFA's EC, which has members at various levels of the supply chain, is able to host education conferences for suppliers that meet the needs of various apparel brands and retailers. This demonstrates that a trade association, which is a primary stakeholder group according to Clarkson (1995), may have an impact and influence suppliers, which are another primary group. As part of OE's membership benefits, brands and retailers may utilize OE's approved suppliers lists and farm management practices. This speaks to the ability of an NGO, which is a secondary stakeholder group according to Clarkson (1995), to impact suppliers, which are a primary group. Ceres' coalition, which consists of a network of public agencies, environmental groups, and investors, engages directly with companies on environmental and social issues. This coalition blends together the impacts primary and secondary groups have on other primary as well as secondary groups. Through these examples it is possible to note a new type of collaboration and partnership developing within the apparel industry. These collaborations have the potential to impact various primary as well as secondary stakeholder groups.

It seems that Clarkson's (1995) division of primary and secondary have extended to include a tertiary dimension of stakeholders, who work through collaboration to impart change. As noted from the review of literature, NGOs as

the use of information campaigns (O'Rourke, 2005; Spar & LaMure, 2003). NGOs also work in unison with the media, another secondary stakeholder group, to impact governments, communities, and consumers, all primary groups (Liu, 2009).

Researchers have also noted an indirect cause and effect relationship between investors, a primary stakeholder group, and the media, a secondary stakeholder group (Dickson & Eckman, 2008; Hamilton, 1995; Katz et al., 2009). Recently, NGOs by purchasing company stocks and shares have been able to have an impact on investors. These tertiary stakeholders, which could be an extension of Freeman's (1984) stakeholder theory, take full advantage of modern day forms of communication, social networking, disclosure, and collaboration. Hence, apparel brands and retailers may seek to be a part of this collaboration by providing transparent reporting and developing partnership with these groups to address environmental issues.

secondary stakeholders may have an impact on consumers, a primary group, thorough

Suggestions for Future Research

Just as there is more work to be done by apparel brands and retailers to meet stakeholder expectations for environmental performance, there is more research needed on this topic. This work focused on a primary stakeholder group, the AAFA- a trade association, and two secondary stakeholder groups, OE and Ceres- both considered NGOs. Future work could be done to research all of the stakeholder groups identified by Clarkson (1995). However, case study research may not be the

appropriate method to research all of these groups, especially when considering the primary groups of employees and consumers. For these two groups, it may be more appropriate to develop survey instruments, which would be administered via the Internet or telephone. Another data collection strategy that may work for these two groups would be to hold focus groups in large metropolitan cities around the United States. By developing a fuller, deeper understanding of exactly what stakeholder groups are expecting in terms of environmental performance apparel brands and retailers can begin to meet these expectations.

Another concept that merits future academic research is that of stakeholder mapping. Through the review of literature and the development of case studies it becomes apparent that numerous stakeholder groups exist within the apparel industry. Many of these groups have overlapping expectations, yet their methods of making these expectations known to companies conflict with each other. Some NGOs, such as Ceres, seek to collaborate with companies in order to develop clear environmental guidelines. While other NGOs use negative media campaigns to draw attention to an issue (O'Rourke, 2005), which then has a negative impact on the brands. Other groups, such as the Outdoor Industry Association and AAFA, work in partnership with apparel brands and retailers to develop helpful policies and guidelines.

Through the development of a stakeholder map for the apparel industry, companies could begin to identify and understand stakeholder groups a bit better in

terms of their key issues and expectations for environmental performance. Henriques in their 2004 paper entitled "CSR, Sustainability, and the Triple Bottom Line" touches on this suggestion for future research when he states

a fully developed approach to stakeholders involves a mapping of the range of issues with which they are concerned in their role as stakeholders. Taking all of the issues identified by all stakeholders together, they can be analyzed as to the content of concern. And it is at this level that stakeholder issues can be grouped as environmental, social or economic (p. 27).

This visual representation could depict which issues are most important to the various stakeholder groups in the apparel industry. It is the hope of the researcher that results from this work would allow for clearer, more efficient, and productive communications between the apparel industry and its stakeholder groups.

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APPENDIX 1

EMAIL COMMUNICATION

Email Interview Invitation

My name is Yaz Waters & I'm currently a Masters student at Univ. of Delaware, writing my thesis on stakeholder expectations for environmental performance within the apparel industry. I'm writing to you today because various industry professionals have suggested your group to me as an influential group when it comes to improving environmental performance within the apparel industry.

During this interview, which will be audio recorded & will last app. 30 minutes, you will be asked to answer questions about environmental issues of importance to your group, and your groups' involvement/ effectiveness with the apparel industry at improving environmental performance. Your identity will be kept confidential throughout this interview process. In writing up my results, I'll name the group you represent, but not your name.

The purpose of this work is to identify current stakeholder groups' expectations for environmental performance as well as key environmental issues these groups are concerned about within the apparel industry. Your interview would be a

great source of information for this work & may lead to influencing apparel brands & retailers to improve environmental performance.

Thanks so much for your time.

Yaz Waters

APPENDIX 2

INTERVIEW QUESTIONS AND HOW THEY RELATE TO THE RESEARCH QUESTIONS

Opening questions to build rapport: How long have you been with this organization? What is your title? What responsibilities does your daily to-do list include?

RQ1	What are stakeholder groups' expectations for environmental performance of		
ryı	apparel brands and retailers		
	What does environmental responsibility mean to you when you think about the		
·	apparel industry?		
	Could you please share with me your group's top three environmental concerns when		
	it comes to the apparel industry and the impacts it makes?		
	Are these issues of wide concern among stakeholder groups working with the apparel		
	industry or are they more specific to your group's concerns?		
	In your opinion, how much agreement is there across stakeholder groups that these		
	are the most critical environmental issues for brands and retailers to focus on?		
	Let me rephrase that question, what policies and practices should brands and retailers		
	implement in order to improve performance or lessen their impact regarding these		
	issues?		
	Ideally, what should apparel brands and retailers be doing to solve these		
	environmental issues?		
	What do your group expect apparel brands and retailers to be doing about these		
	issues?		
	From your group's perspective, what is the minimum apparel brands and retailer		
	should be doing to address these environmental issues?		

Table Appendix 2.1- Research questions to interview questions

	Does the environmental performance of apparel brands and retailers meet			
RQ2	stakeholder groups' expectations?			
	Currently, what are apparel brands and retailers doing to improve their performance			
	on these three environmental issues?			
	Please provide an example of a specific company's work that could be considered a			
	best practice—who is it and what are they doing?			
	What improvements have you seen in these environmental issues as a result of the			
	work of apparel brands and retailers?			
	In your opinion, what progress has been made on these environmental issues?			
	To what extent is your group satisfied with the work apparel brands and retailers are			
	doing on these three environmental issues?			
RQ3	What do apparel brands and retailers need to do in the future in order to			
	improve environmental performance?			
	What do apparel brands and retailers need to do next in order to improve their			
	performance on these environmental issues?			
	What particular next steps could apparel brands and retailers take to help address			
	these environmental concerns?			
RQ4	How have stakeholder groups influenced changes in environmental performance			
<u>TQ7</u>	within the apparel industry?			
	How has your group influenced the work of the apparel industry (apparel brands and			
	retailers) on these three environmental issues?			
	Does your group belong to any industry work groups?			
	Please provide an example of work your group is doing with a particular apparel			
	brand or retailer (or apparel industry initiative) that has the potential to have positive			
	outcomes on these environmental issues.			
	Does your group collaborate with other stakeholder groups to improve environmental			
	performance in the apparel industry?			
	What improvements in environmental performance within the apparel industry have			
	resulted from your group's work?			
	To what extent do you believe your group is making effective changes to the			
	environmental policy in the apparel industry?			
RQ5	How has the environmentally-focused work of stakeholder groups been influenced by the appeared industry?			
	influenced by the apparel industry? What sort of influence has working with the apparel industry had an your group?			
	What sort of influence has working with the apparel industry had on your group?			
	Has your group changed its communication style in order to work more effectively			
	within the apparel industry?			

Table Appendix 2.1- Research questions to interview questions (continued)

RQ5	How has the environmentally-focused work of stakeholder groups been influenced by the apparel industry?		
KQ3	influenced by the apparel industry?		
	Have you shifted resources (moved employees; redirected funds) in order to more		
	effectively address environmental performance in the apparel industry?		
	Have you opened offices in other locations or countries in order to more effectively/		
	efficiently monitor the environmental performance of the apparel industry?		
	How does your group work differently now than it did before as a result of working		
	with apparel brands and retailers on environmental issues?		
	My thesis paper is focused on stakeholder groups in the apparel industry and how		
	they affect environmental change in the industry. Is there anything along these lines		
	that I have missed that you feel is important to the work at hand?		

Table Appendix 2.1- Research questions to interview questions (continued)

APPENDIX 3

UNIVERSITY OF DELAWARE IRB DOCUMENTS

HUMAN SUBJECTS PROTOCOL University of Delaware

Protocol Approval #: 154126-1

Protocol Title: Stakeholder expectations for environmental performance within the apparel industry

Principal Investigator

Name: Yaz Waters

Department/Center: Department of Fashion and Apparel Studies

Contact Phone Number: (410) 620-0873 Email Address: ywaters@udel.edu

Advisor (if student PI):

Name: **Dr. Marsha Dickson**

Contact Phone Number: (302) 831-8714 Email Address: dickson@udel.edu

Co- Advisor (if student PI):

Name: **Dr. Dilia López-Gydosh**

Contact Phone Number: (302) 831-6593 Email Address: dlopezgy@udel.edu

Investigator Assurance:

By submitting this protocol, I acknowledge that this project will be conducted in strict accordance with the procedures described. I will not make any modifications to this protocol without prior approval by the HSRB. Should any unanticipated problems involving risk to subjects, including breaches of guaranteed confidentiality occur

during this project, I will report such events to the Chair, Human Subjects Review Board immediately.

1. Is this project externally funded? No.

2. Project Staff

Please list personnel, including students, who will be working with human subjects on this protocol (insert additional rows as needed):

		/
		HS TRAINING
NAME	ROLE	COMPLETE?
Yaz Waters	PI	Yes
Marsha Dickson	Advisor	Yes
Dilia Lopez-Gydosh	Advisor	Yes

3. Special Populations

Does this project involve any of the following:

Research on Children? No Research with Prisoners? No

Research with any other vulnerable population (please describe)? No

4. **RESEARCH ABSTRACT** Please provide a brief description in LAY language (understandable to an 8th grade student) of the aims of this project.

The dual purpose of this work is to a) identify current stakeholder groups' expectations for environmental performance on key environmental issues within the apparel industry and b) evaluate stakeholder interactions with apparel companies in attempting to improve environmental performance. Specifically this study addresses five research questions:

- What are stakeholder groups' expectations for environmental performance of apparel brands and retailers?
- Does the environmental performance of apparel brands and retailers meet stakeholder groups' expectations?
- What do apparel brands and retailers need to do in the future in order to improve environmental performance?
- How have stakeholder groups influenced changes in environmental performance within the apparel industry?
- How has the environmentally-focused work of stakeholder groups been influenced by the apparel industry?
- 5. **PROCEDURES** Describe all procedures involving human subjects for this protocol. Include copies of all surveys and research measures.

This thesis will entail website content analysis, semi-structured interviews, and archival records analysis. Interviews will be conducted with stakeholder group representatives. About 6 to 12 professionals will be interviewed. Participants will be assured that their comments will not be attributed to their name. Participants' identity will be kept confidential throughout this interview process. The research will name the stakeholder group represented, but not the individual participant nor any identifying characteristics.

We will be conducting qualitative research via these interviews. The participants will read through the informed consent form and sign. This signature and agreement will signal the start of the interview.

With verbal and written permission of the interviewee, we will audio record the session and transcribe the interview verbatim at a later date. Each interview will last for approximately one hour. Should follow-up questions need to be asked post-interview, they may be conducted via e-mail, phone, or Skype. The interview schedule includes questions related only to the research questions above.

6. STUDY POPULATION AND RECRUITMENT

Describe who and how many subjects will be invited to participate. Include age, gender and other pertinent information. Attach all recruitment fliers, letters, or other recruitment materials to be used.

Stakeholder groups to be studied will be identified by industry experts. Six to 12 subjects who belong to or are employed by each stakeholder group will be recruited for the interviews.

Describe what exclusionary criteria, if any will be applied.

Only professionals 18 years and older will be asked to participate in this research.

Describe what (if any) conditions will result in PI termination of subject participation.

We anticipate having no need to terminate subject participations. Subjects are free to terminate the interview at any point without consequence.

7. RISKS AND BENEFITS

Describe the risks to participants (risks listed here should be included in the consent document). If risk is more than minimal, please justify.

This research involves the use of interview procedures, and the information obtained is recorded. Disclosure of the subject's responses outside of the research would not place the subject at risk. There are minimum confidentiality risks to the participants. However, the subjects can only be identified by the researchers.

What steps will be taken to minimize risks?

To maintain confidentiality, only the participant's initials will be recorded or included in any of the manuscripts developed from this project. Example quotes will be attributed to the represented stakeholder group, not the individual participant. A coding system will be used to identify company and management names in research notes and audio tapes; however, the actual identity will be known only to the researchers. All company and management names will be anonymously listed in research documents and the audio tapes will be kept in a locked file cabinet in the principle investigators' office during the duration of the research. After the researchers complete this study, these documents and the audio tapes will be destroyed.

Describe any direct benefits to participants.

There are no known direct benefits from participating in this research. However, we hope that through participation in this work the stakeholder group will be able to influence apparel brands and retailers to improve environmental performance. It is also possible for the stakeholder group to build industry wide credibility thru the publishing of this work.

Describe any future benefits to this class of participants.

We will provide an executive copy of the completed research to all participants.

If there is a Data Monitoring Committee (DMC) in place for this project, please describe when and how often it meets.

N/A

8. COMPENSATION

Will participants be compensated for participation? No

9. DATA

Will subjects be anonymous to the researcher? **No**If subjects are identifiable, will their identities be kept confidential? **Yes**How and how long will data be stored?

Data (both on paper and audio tapes) will be stored in a locked file cabinet in Yaz Waters' office until completion of this study.

How will data be destroyed?

Paper data containing the anonymous coding system of subjects will be shredded and the digital audio tapes' tape will be erased. Transcripts and notes from the interviews will be kept indefinitely.

How will data be analyzed and reported?

Qualitative data will be analyzed to develop a case study on each represented stakeholder group and how they are influencing environmental performance in the apparel industry. Quotes used as examples will be attributed to the represented stakeholder group, not the individual participants.

10. CONFIDENTIALITY

Will participants be audiotape, photographed or videotaped during this study? **Yes, participants will be audio-taped only.**

How will subject identity be protected?

The researchers will use a coding system during and after the interview to protect the subjects. This coding system, along with the audio-tapes, will be destroyed and discarded upon completion of the study. Transcriptions and notes from the interviews containing no identifiers will be kept indefinitely.

Is there a Certificate of Confidentiality in place for this project? (If so, please provide a copy). **No**

11 CONSENT and ASSENT

✓ Consent forms will be used and are attached for review.
Additionally, child assent forms will be used and are attached.
Consent forms will not be used (Justify request for waiver).

12. Other IRB Approval

Has this protocol been submitted to any other IRBs? No

13. Supporting Documentation

Please list all additional documents uploaded to IRBNet in support of this application.

- 1) IRB Consent Form- Waters, Dickson and López-Gydosh.
- 2) IRB Interview Questions List- Waters, Dickson and López-Gydosh.

HUMAN SUBJECTS CONSENT FORM University of Delaware

RESEARCH TITLE:

Stakeholder expectations for environmental performance within the apparel industry

PURPOSE/DESCRIPTION OF THE RESEARCH:

The purpose of this research study is to compare and contrast current stakeholders' expectations for environmental performance in the apparel industry. You, along with 5 to 11 others, have been selected to participate in this research study because you are part of the leadership of a stakeholder group considered by industry professionals to be an influence in improving environmental performance within the apparel industry. This research study will consist of a 20-30 minute interview. During this interview, which will be audio recorded, you will be asked to answer questions about environmental issues of importance to your group, your groups' involvement with the apparel industry in improving environmental performance, as well as effectiveness of your work with the apparel industry.

CONDITIONS OF SUBJECT PARTICIPATION:

The goal of this research study is to identify what environmental issues are of greatest importance to key stakeholder groups and how these groups are working with the apparel industry to effect changes in environmental performance. Your identity will be kept confidential throughout this interview process. The research will name the stakeholder group you represent, but your name or identifying characteristics will not be a part of the report. Interview transcriptions will be maintained indefinitely; however, your name will not be recorded on those.

RISKS AND BENEFITS:

There is no risk involved with this study. By participating in this work, you may be able to influence apparel brands and retailers to improve environmental performance. It is also possible to build industry wide credibility thru the publishing of this work.

FINANCIAL CONSIDERATIONS:

There will not be any financial compensation to subjects who participate in this research study.

CONTACT INFO:

Should you have any questions about details of the research, study procedures, or follow-up concerns, please contact: Yaz Waters at 410-620-0873/ www.ywaters@udel.edu; Dr. Marsha Dickson at 302-831- 8714/ dickson@udel.edu; Dr. Dilia López-Gydosh at

302-831-6593/ <u>dlopezgy@udel.edu</u>. You may also contact Dr. Rob Palkovitz, Human Subjects Review Board, University of Delaware, 302-831-2137 with any questions or concerns regarding the rights of individuals.

SUBJECT'S ASSURANCES:

Participation in this research study is to be considered completely voluntary. I would greatly appreciate your participation in this study as it will assist the apparel industry in determining which stakeholder groups are effecting change in environmental performance in the industry as well as what environmental issues are of high concern to them. This research project may also influence apparel brands and retailers to improve environmental performance.

CONSENT SIGNATURES:

Thank you for taking the time to read thru this consent form. Please sign below acknowledging that you have read thru and understand this form and are willing to participate in the interview.

Signature:	
Date:	

HUMAN SUBJECTS INTERVIEW QUESTIONS University of Delaware

Introductory/ Rapport building questions:

- 1. How long have you been with this organization?
- 2. What is your title?
- 3. What tasks does your daily to-do list include?

Interview questions:

- 1. What does environmental performance mean to you when you think about the apparel industry?
- 2. Could you please share with me your groups top three environmental concerns when it comes to the apparel industry and the impacts it makes?
- 3. Are these issues of wide concern among stakeholder groups working with the apparel industry or are they more specific to your group's concerns? In your opinion, how much agreement is there across stakeholder groups that these are the most critical environmental issues for brands and retailers to focus on?
- 4. What policies and practices should brands and retailers implement in order to improve performance or lessen their impact regarding these issues?
 - (Probe—is this an ideal world suggestion or a pragmatic answer)
 - (Probe—make sure participants respond about what should apparel brands and retailers be doing to solve all three environmental concerns listed in #2)
- 5. What does your group **expect** apparel brands and retailers to be doing about these issues?
- 6. From your group's perspective, what is the **minimum** apparel brands and retailers should be doing to address these environmental issues?
- 7. Currently, what are apparel brands and retailers doing to improve their performance on these three environmental issues?
- 8. Please provide an example of a specific company's work that could be considered a best practice—who is it and what are they doing?

 (Reminder--ask for best practice examples regarding all three issues)

- 9. What improvements have you seen in these environmental issues as a result of the work of apparel brands and retailers? In your opinion, what progress has been made on these environmental issues?
- 10. To what extent are you satisfied with the work apparel brands and retailers are doing on these three environmental issues?
- 11. What do apparel brands and retailers need to do next in order to improve their performance on these environmental issues? What particular next steps could apparel brands and retailers take to help address these environmental concerns? (Reminder--make sure participants address all three issues)
- 12. How has your group influenced the work of the apparel industry (apparel brands and retailers) on these three environmental issues?
- 13. Does your group belong to any apparel industry work groups? Which ones?
- 14. Please provide an example of work your group is doing with a particular apparel brand or retailer (or apparel industry initiative) that has the potential to have positive outcomes on these environmental issues.
- 15. Does your group collaborate with other stakeholder groups to improve environmental performance in the apparel industry?
- 16. What improvements in environmental performance within the apparel industry have resulted from your group's work?
- 17. To what extent do you believe your group is making effective changes to the environmental policy in the apparel industry?
- 18. What sort of influence has working with the apparel industry had on your group?
- 19. Has your group changed its communication style in order to work more effectively within the apparel industry? Please describe those changes.
- 20. Have you shifted resources (moved employees; redirected funds) in order to more effectively address environmental performance in the apparel industry? Please describe those changes.
- 21. Have you opened offices in other locations or countries in order to more effectively/ efficiently monitor the environmental performance of the apparel industry? Please describe those changes.

- 22. How does your group work differently now than it did before as a result of working with apparel brands and retailers on environmental issues?
- 23. My thesis paper is focused on stakeholder groups in the apparel industry and how they affect environmental change in the industry. Is there anything along these lines that I have missed that you feel is important to the work at hand?

APPENDIX 4

Reviewed articles and web-pages for AAFA Case Study

- Alanguilan, E. R. (2009, August 17). Government gets support on US garments bill. *Manila Standard*.
- Avril, T. & Writer, I. S. (2008, October 6). Tracking toxic textiles at Philadelphia University formerly textile, aptly enough a new institute is testing clothing and upholstery for harmful chemicals used in manufacture. *The Philadelphia Inquirer*, p. C01.
- Berwin, L. (2009, July 24). Analysis: Relief for US retailers as lender avoids collapse. *Retail Week.*
- Black, S. (2003, August 1). AAFA salutes firms for social responsibility. *Bobbin*. Retrieved from http://www.allbusiness.com/manufacturing/apparel-other-finished-products-made/4400147-1.html.
- British, US firms refuse to buy Uzbek cotton over child labour. (2008, September 4). BBCMonitoring Central Asia Unit Supplied by BBC Worldwide Monitoring.
- The CIT-small business thread to become bare. (2009, July 17). Daily Deal/The Deal.
- Clark, A. (2009, June 6). Garment trade: Stitch in time may save Obama suits: Workers lobby for London investment firm to take over president's tailor. *The Guardian (London) Final Edition*, p. 37.
- Fritze, J. (2008, December 29). Groups send wish lists for economic bill; Biden-'every dollar will be watched'. *USA Today*, p. 8A.
- Hermosa, J. A. D. (2010, March 2). US garment makers back trade perks for Philippine suppliers. *BusinessWorld*, p. S1/3.
- Intertek joins industry leaders at AAFA's international product safety & restricted substances conference. (2009, November 18). *Business Standard*. Retrieved

- from http://www.business-standard.com/india/news/intertek-joins-industry-leaders-at-aafa%5Cs-international-product-safetyrestricted-substances-conference/376827/.
- Kamalick, J. (2009, September 28). Introduction: ICIS Chemical Business.
- Krantz, M., Petrecca, L., & Waggoner, J. (2009, July 20). Contingency plans take shape as CIT teeters; Small businesses find new funding, markets remain calm, life goes on. *USA Today*, p. 1B.
- Llana, S.M. (2009, November 3). The big loser in the Honduras political crisis? The economy. *Christian Science Monitor*, p. 90.
- Mui, Y. Q., Cho, D., & Writers, W. P. S. (2009, July 17). Retailers fear impact of a CIT bankruptcy; Many could face disruption in flow of merchandise. *The Washington Post*, p. A12.
- Ramos, F. & Grace M. S. (2008, April 24). Piracy said to have worsened in RP. *BusinessWorld*, p. S1/1.
- Reuters, M., Rowe, A., & Friede, R. (2009, July 21). Designers divided on copyright; proposed U.S. law. *The Gazette (Montreal)*, p. D2.
- Rosenbloom, S. (2009, July 17). Retailers say losing CIT would crimp supply chain. *The New York Times*, pp. 6.
- The Nation. (2009, March 10). Alongkorn takes idea to Washington. *The Nation (Thailand)*.
- The Nation. (2009, February 24). Call for downgrade in Thai trade status. *The Nation (Thailand)*.
- Week, R. (2009, October 2). Checkout. Retail Week.
- Week, R. (2009, October 2). US retail battered and bruised, but on its way back. *Retail Week*.
- Wilson, E. (2008, March 13). When imitation's unflattering. *The New York Times*, p. 4.

APPENDIX 5

Reviewed articles and web-pages for OE Case Study

- About Organic Cotton.org. Retrieved March 1, 2010 from http://www.aboutorganiccotton.org/index.html.
- Anvil sponsors the Organic Exchange sustainable textile conference. (2009, October 22). Retrieved March 1, 2010 from http://www.anvilknitwear.com/About-Anvil/News/2009/Anvil-sponsors-the-Organic-Exchange-Sustainable-Textile-Conference.
- Dumain, J. (2006). *Environmentalism: What we do: Organic Exchange*. Retrieved March 1, 2010 from http://www.patagonia.com/web/us/patagonia.go?slc=en_US&sct=US&assetid = 15431.
- Eco Fashion World. *Organic Exchange review*. Retrieved March 1, 2010 from http://www.ecofashionworld.com/Organizations/Organic-Exchange.html.
- Fibre 2 Fashion. *Organic Exchange News and Information*. Retrieved March 1, 2010 from http://www.fibre2fashion.com/news/association-news/organic-exchange/.
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- Kampala), N. V. (2010, February 23). Uganda; bleak future for organic cotton. *Africa News*.
- Krum, S. (2008, April 23). Going green. *The Australian*, p. 5.
- McLaren, W. (2006, August 30). Organic Exchange 2006 New treads. Retrieved March 1, 2010 from http://www.treehugger.com/files/2006/08/organic exchang.php.
- Networks, U. I. R. I. (2009, February 16). West Africa; Can organic cotton save the industry? *Africa News*.
- Scelfo, J. (2009, January 15). The stuffing dreams are made of? *The New York Times*, p. 1.
- Swapna, P. (2008, February 28). How is Rainfall Measured? Scienceray. Retrieved March 1, 2010 from http://scienceray.com/earth-sciences/meteorology/how-is-rainfall-measured/.
- Vision, N. (2008, March 31). Uganda; Production of organic cotton good for country. *Africa News*.
- Webster, S. (2008, July 30). What should I wear? Dilemmas. *Sydney Morning Herald* (Australia), p. 14.
- Why we are as guilty as the labels we support. (2008, June 29). *The Sunday Independent (Ireland)*.

APPENDIX 6

Reviewed articles and webpages for Ceres Case Study

- 2Sustain. (2009, March 5). Ceres report outlines urgent need for water risk management. Message posted to http://2sustain.com/2009/03/ceres-report-outlines-urgent-need-for-water-risk-management.html.
- Barber, J. (2008, May 26). Investment groups say strong GHG bill would bring 'certainty' to US economy. *Inside Energy with Federal Lands*, p. 11.
- Carlsen, P. (2008, May 26). Smaller Ceres-led group than in 2007 again urges Congress to limit GHG. *Electric Utility Week, p.* 8.
- Casale, J. (2009, April 13). Property/casualty insurers lead in adapting to climate change; however, Ceres study calls for improvement in coverage, services. *Business Insurance*.
- Donovan, W. (2008, December 12). Ceres scores companies by sustainability efforts. Message posted to http://socialinvesting.about.com/b/2008/12/12/ceres-scores-companies-by-sustainability-efforts.htm.
- Dypchen, D. (2010, January 14). UN Ceres investor summit. Message posted to http://quuh.wordpress.com/2010/01/14/un-ceres-investor-summit/.
- IBM, Tesco and Dell receive top scores in first-ever ranking of consumer & tech companies on climate change strategies. (2008, December 26). *Drug Week, p.* 1484.
- IBM, Dell among top firms for handling climate risk. (2008, December 22). *Pensions and Investments*, p.48.
- McCarthy, N. (2009, February 19). Tarred by 'dirty oil,' some producers fight back; New alliance of firms that use steam to extract oil argue smaller environmental footprint makes them greener. *The Globe and Mail (Canada)*, p. B3.

- Molson Coors rated #1 brewer on climate change strategies in Ceres report. (2009, February 20). *Drug Week, p.* 2039.
- Strassel, K. (2010, March 5). Carbon caps through the backdoor. *Wall Street Journal Abstracts*, p. 19.