Where's the Buzz? Why No One is Talking About lululemon athletica's Sustainability Initiatives

By

Mary Rebecca Horan

A thesis submitted to the Faculty of Graduate Studies at the University of Manitoba In Partial Fulfillment of the Requirements For the Degree of

Master of Environment

Department of Environment and Geography
Faculty of Graduate Studies
University of Manitoba
Winnipeg, Manitoba
Canada R3T 2N2

Rebecca Horan © 2011

UNIVERSITY OF MANITOBA FACULTY OF GRADUATE STUDIES *****

COPYRIGHT PERMISSION

Where's the Buzz: Why No One is Talking About lululemon athletica's Sustainability Initiatives

By

Mary Rebecca Horan

A Thesis submitted to the Faculty of Graduate Studies of the University of Manitoba in partial fulfillment of the requirement of the degree of

Master of Environment (M. Env)

© 2011

Permission has been granted to the Library of the University of Manitoba to lend or sell copies of this thesis/practicum, to the National Library of Canada to microfilm this thesis and to lend or sell copies of the film, and to University Microfilms Inc. to publish an abstract of this thesis/practicum.

This reproduction or copy of this thesis has been made available by authority of the copyright owner solely for the purpose of private study and research, and may only be reproduced and copied as permitted by copyright laws or with express written authorization from the copyright owner.

Abstract

Apparel brands from around the world are voluntarily adopting corporate environmental and social sustainability plans. This widespread sustainability plan adoption is attributed to stakeholder concerns, improving production efficiencies and prevention of environmental risks. Some of the world's most recognizable brands are adopting environmental management plans, creating Corporate Responsibility Departments, and doing so with very little fanfare.

This thesis evaluates the sustainability initiatives of lululemon athletica Inc. before looking at operations of one of its retail stores, lululemon athletica Polo Park using multiple methods. lululemon athletica Inc. was compared with industry leaders Nike, Timberland and Mountain Equipment Co-op, by several methods. Using a climate change scorecard from Climate Counts, an environmental nongovernmental organization as a comparison tool, it was found that Nike, Timberland and Mountain Equipment Co-op have extensive sustainability best practices, where lululemon has none. As well, a comparative analysis of Nike, Timberland, Mountain Equipment Co-op and lululemon athletica's websites' sustainability information was conducted and found that Nike, Timberland and Mountain Equipment Co-op have extensive sustainability information, where lululemon has little, and that which it does have is two years out of date.

A strategic analysis of lululemon athletica identified the strengths as: innovative design processes; community-based marketing; extensive training for new staff unrelated to sustainability; experienced, fast acting management teams; extensive resources and network;

and, frequent communication between senior and middle management. These strengths are general and not sustainability-specific. The weaknesses in sustainability were: no focus on sustainable operations; no corporate mandate on sustainability; little sustainability training for staff; no senior or middle management support; negligible sustainability plans; no store-level sustainability budgets; and, no sustainability communication. These weaknesses are sustainability-specific, which is why some of the strengths are in direct contrast to the weaknesses.

At the store level, two surveys were conducted, one for customers and another for employees at Polo Park regarding sustainability initiatives at lululemon athletica. The educator survey found that educators of lululemon athletica Polo Park need more training on environmental initiatives, and that there needs to be a stronger senior and middle management presence for store-level initiatives to be a success. However, educators consider it important for the store and the corporation to address their environmental impacts.

Customers reported that very few are aware of store-level or corporate sustainability initiatives; the knowledge of those impacts does not affect the decision to shop at lululemon for those customers who do know about initiatives. As well, an analysis of energy and waste management systems were conducted. The waste system analysis found that lululemon athletica Polo Park has an excellent waste collection and removal process. The energy audit conducted for lululemon athletica Polo Park found that 87% of the electricity used by the store is its light-load and that this could be reduced with more efficient lighting systems.

lululemon athletica was found to have neither sufficient senior nor middle management support to have an effective sustainability plan at either the corporate or the store level.

Also, lululemon athletica does not communicate sufficiently with their employees or customers regarding their sustainability initiatives or plans to create any kind of buzz about their sustainability. Without the support of senior management, and transparent communication, lululemon athletica will never be a sustainable brand.

Table of Contents

Abstract Table of Contents List of Charts List of Figures List of Tables List of Acronyms		i iv vi vi: ix
Chap	oter 1: Introduction	1
	1.1 Purpose Statement	4
	1.2 Objectives	4
	1.3 Significance	4
	1.4 Thesis layout	6
Chap	oter 2: Background	7
	2.1 lululemon athletica: History, Community Legacies, Core Values and Culture	7
	2.2 Fitness and Yoga Apparel	9
	2.3 Green Retail	11
	2.4 Eco Chic	15
	2.5 Corporate Social Responsibility	17
	2.6 Environmental Management Systems	20
	2.7 Literature Review Conclusions	22
Chap	oter 3: Methodology	24
	3.1 Introduction	24
	3.2 Data Collection	25
	3.2.1 Scorecards	25
	3.2.2 Website Analysis	25
	3.2.3 Educator Survey	26
	3.2.4 Guest Survey	26
	3.2.5 Waste System Analysis	27
	3.2.6 Energy Audit	27
	3.2.7 Journaling and Observations	28
	5.2.7 Journaing and Observations	20
_	oter 4: Best Practices and Comparisons: where does lululemon athletica ranking industry leaders in green retail?	29
	4.1 Introduction	29
	4.2 Background	31
	4.2.1Climate Counts	31
	4.2.2 Nike	31
	4.2.3 Timberland	33
	4.2.4 Mountain Equipment Co-op	34
	4.3 Methods	35
	4.3.1 Climate Counts Scorecards	35
	4.3.2 Website analysis	35
	4.4 Scorecard Analysis	36
	4.4.1 Climate Counts Scorecards	36
	4.4.2: Nike and Timberland Scorecards	39
	4.4.3: MEC and lululemon Scorecards Results	40
	4.5 Websites	41
	4.5.1 Nike.com, NikeBiz.com:	41
	4.5.2 Timberland.com	43

4.5.3 MEC.ca	44
4.5.4 lululemon.com	45
4.5.5 Website Comparisons	46
4.6 Strategic Analysis	48
4.6.1 Corporate Strengths	50
4.6.2 Corporate Weaknesses	54
4.6.3 Best practices	58
4.7 Conclusions	61
Chapter 5: lululemon athletica Polo Park	64
5.1 Introduction	64
5.2 Methods	67
5.2.1 Surveys	67
5.2.1.1 Educator survey	67
5.2.1.2 Guest surveys	68
5.2.1.3 Waste and Light Audits	68
5.3 Findings	70
5.3.1 Educator Survey Results	70
5.3.2 Guest Survey Results	84
5.3.3 Waste Audit Findings	87
5.3.4 Energy Audit: Lights, "Essentials" and Kitchen Appliances	89
5.4 People Analysis: Educators and Guests	93
5.5 Store initiatives	103
5.6 Conclusions	107
Chapter 6: Conclusion	110
6.1 Lack of high or medium level leadership	110
6.2 Communications	112
6.3 Final Thoughts	114
References	115
Appendix 1: Mountain Equipment Coop Scorecard results	121
Appendix 2: Lululemon athletica Scorecard results	125
Appendix 3 Educator Survey	130
Appendix 4: Guest Survey	136
Appendix 5: Energy Audit Calculations	139

List of Charts

Chart 5.1:	Educator level of interest in the environment
Chart 5.2:	Importance of lululemon athletica addressing its impact on the environment,
	according to the educators.
Chart 5.3:	Importance for lululemon athletica Polo Park addressing its impact on the
	environment, according to the educators.
Chart 5.4:	Improvements that can be made to the comfort level of educators at
	lululemon athletica Polo Park.
Chart 5.5:	Barriers preventing lululemon athletica Polo Park educators from spending
	time outdoors during work hours.
Chart 5.6.1:	Educator temperature and air exchange comfort in lululemon athletica Polo
	Park.
Chart 5.6.2:	Temperature and/or air quality concerns of lululemon athletica Polo Park
	educators.
Chart 5.7:	Noise concerns of lululemon athletica Polo Park educators.
Chart 5.8:	Water waste reduction solution suggestions of lululemon athletica Polo Park
	educators.
Chart 5.9.1:	Educator transportation to lululemon athletica Polo Park.
Chart 5.9.2:	Barriers preventing educators from bussing to lululemon athletica Polo Park.
Chart 5.9.3:	Barriers preventing educators from carpooling to lululemon athletica Polo
	Park.
Chart 5.9.4:	Barriers preventing educators from cycling to lululemon athletica Polo Park.
Chart 5.10:	Why educators have not set goals to improve sustainability at lululemon
	athletica Polo Park.

List of figures

Figure 2.1	Varieties of Corporate Social Responsibility (van Dijken, 2007)	
Figure 4.1	Corporate logos for lululemon athletica, Nike, Timberland and Mountain	
	Equipment Co-op (lululemon c, n.d.; Nike a, n.d.; Timberland a, n.d.; MEC	
	d, n.d.)	
Figure 4.2.1	Screen captures of Nike.com (Nike a, n.d.)	
Figure 4.2.2	Magnification of the drop-down menu leading to Nike CSR (Nike a, n.d.)	
Figure 4.2.3	Screen capture of sidebar menu on the NikeBiz homepage leading to CSR	
E' 404	reporting (Nike b, n.d.)	
Figure 4.2.4	Screen capture of the dropdown menu from the Nike Responsibility option	
	on the NikeBiz homepage sidebar menu (Nike b, n.d.)	
Figure 4.3.1	Screen capture of Timberland.com (Timberland a, n.d.)	
Figure 4.3.2	Magnification of link to Corporate Responsibility webpage found on	
	Timberland.com (Timberland a, n.d.)	
Figure 4.4.1	Screen capture of MEC.ca (MEC d, n.d.)	
Figure 4.4.2	Dropdown menu under "Sustainability" on MEC.ca (MEC d, n.d.)	
Figure 4.5.1	Screen capture of lululemon.com (lululemon a, n.d.)	
Figure 4.5.2	Magnification of dropdown menu leading to the Community Legacies	
	webpage on lululemon's homepage (lululemon a, n.d.)	
Figure 5.1	OMing in on a sustainable future: lululemon athletica Polo Park Front	
0	Window Display, December 2007	
Figure 5.2	Three lululemon athletica Polo Park educators jumping during their first day	
O	of training, September 2009	
Figure 5.3	Recycling bins for guests under Community Board at lululemon athletica	
8	Polo Park	
Figure 5.4	Recycling bin for guests by water fountain at lululemon athletica Polo Park	
Figure 5.5	Garbage cans and recycling bins in the backroom of lululemon athletica Polo	
0	Park	
Figure 5.6.1	Fluorescent and halogen bulbs in lululemon athletica Polo Park	
Figure 5.6.2	Fluorescent and halogen bulbs in lululemon athletica Polo Park	
5010 0.0.2		

List of tables

Table 1.1	How the Methods Meet the Objectives
Table 4.1	ClimateCount.org Scorecard Results
Table 4.2	Website metrics

List of Acronyms

SEC Securities and Exchange Commission
CSR Corporate Social Responsibility
MEC Mountain Equipment Co-op

GHG Greenhouse Gases

VOC Volatile Organic Compounds

CO₂ Carbon Dioxide CO Carbon Monoxide

CH₄ Methane

N₂O Nitrous OxideCFC ChlorofluorocarbonHFC TetrafluoroethanePFC Perfluorochemicals

EMS Environmental Management System EMP Environmental Management Plan

LED Light-Emitting Diode
GEC Guest Education Center
SSC Store Support Center
DC Distribution Center

POS Point of Sale

Chapter 1: Introduction

lululemon athletica is a Canadian clothing company that specializes in yoga inspired athletic apparel. In 2007, the year lululemon athletica became a publicly traded company, they made a commitment to reduce their environmental footprint, primarily focusing on reducing waste. Their ultimate goal is to have a closed production system, such as the Interface Carpets model, with absolutely no waste whatsoever. The department created to carry out that goal, as well as oversee sustainability throughout the company was named the Community Legacies Department. The Community Legacies Department challenged the employees of the company to think about what legacy they would be leaving behind for their community, and left the responsibility of initiating change at the store level with the employees in those stores.

The lululemon athletica head office, the Store Support Center (SSC), has taken on reducing the environmental footprint of production, manufacture, design and store development. They left the implementation of sustainable actions in the hands of the employees (called educators) of each individual location. As part of the Community Legacies plan to reduce lululemon's environmental footprint, an educator in each store, typically the most passionate about sustainability and the environment, was given the position of Community Legacies Advocate. These advocates were given the job of enrolling the employees at their store in any changes made in the store, to educate and train other employees on the Community Legacies Department and to communicate with other stores to learn and pass along best practices.

Location is one of the most important considerations for a retail store. Depending upon the city, the store development department of lululemon athletica will find the best location for maximum walk-by traffic. In certain cities, that location is a street-front property, where there is significant foot-traffic, such as the Robson Street location in Vancouver, the Westboro location in Ottawa and the Spring Garden Road location in Halifax. In other cities, the majority of foot traffic is found in the ultimate expression of consumerism, a place where many stores can be found under one roof: the shopping center (Wakefield & Baker, 1998). This is the case in a city like Winnipeg, where the temperatures can range from -40°C to 37°C depending upon the season. The majority of Winnipeg shoppers head to the climate controlled shopping malls, such as the Cadillac Fairview Polo Park Shopping Center, in central Winnipeg, Manitoba. This is where Winnipeg's lululemon athletica is located.

lululemon athletica has been gaining popularity throughout North America, Australia and in Hong Kong since the first store was opened in Vancouver in 1998. The company, using a unique grassroots method of marketing, has insinuated themselves into the athletic apparel industry and proven themselves to be leaders in technical athletic garments that are designed to fit and flatter a woman's body. As a result, the lululemon athletica brand has become one of Canada's most popular clothing lines, both for fitness and day-to-day wear (McKnight, 2007; The Economist, 2007).

Some brands, such as Mountain Equipment Coop, Timberland and Nike, have made commitments to creating environmentally "friendly" products, significantly decreasing their environmental impacts and/or protecting or improving the environment in which their

stores and factories are located. lululemon athletica has never made an overt advertising campaign or specific commitment about their efforts to improve the sustainability of the brand or reducing the negative environmental impacts of the company. Rather, the Community Legacies Department has left educating the lululemon athletica customers (or guests) about their environmental initiatives to the educators of each store. Leaving the "marketing" of lululemon's Community Legacies to the educators is in keeping with their unique word-of-mouth marketing that has formed the company. By comparing the environmental best practices of Mountain Equipment Coop, Timberland and Nike with lululemon athletica, I will determine where lululemon athletica ranks among industry leaders in the greening apparel operations from manufacturing to the retail store.

From the moment the first lululemon athletica store opened in the neighborhood of Kitsilano, they have claimed that their style of selling clothing, to educate on garments rather than to sell them, is unique and one of the main reasons for their success (lululemon b, 2010). They believe that educating on the technical features a guest cannot see adds value to the garment, making it more valuable in the eyes of their customers. This is how educators are coached to share the information about any environmental initiatives the company has made. Using lululemon athletica Polo Park as a case study, I will evaluate if lululemon athletica's environmental management plan, of giving the responsibility of initiating change at the store level with the educators, is an effective one.

1.1 Purpose Statement

Explore lululemon athletica's sustainability initiatives at the corporate and retail level.

1.2 Objectives

- 1. Compare lululemon athletica's actions and information on sustainability to other sustainability leaders in the apparel industry; and,
- 2. Does the level of action on sustainability at lululemon athletica Inc. and lululemon athletica Polo Park match the Community Legacies' claims for sustainability?

Table 1.1: How the Methods Meet the Objectives

Objectives	Methods
#1: Compare lululemon athletica's actions	1. Scorecards;
and information on sustainability to other	2. Website Analysis;
sustainability leaders in the apparel industry.	3. Journaling and Observations.
#2: Determine if the level of action on	1. Scorecards;
sustainability at lululemon athletica Inc. and	2. Website Analysis;
lululemon athletica Polo Park match the	3. Educator Survey;
Community Legacies' claims for	4. Guest Survey;
sustainability.	5. Waste System Analysis;
	6. Energy Audit;
	7. Journaling and Observations.

1.3 Significance

Improving the sustainability initiatives of a company is beneficial for their image (Bansal & Roth, 2000). These changes, when created with the collaboration of the employees of the company, or in this case, the educators of lululemon athletica Polo Park, should create a feeling of pride and ownership among the educators of the change (Darnall, Gallagher, Andrews & Amanal, 2000). When the stakeholders have that feeling of pride and ownership, they are inspired to share those changes with others (Tracy, 2004; Burnham & Holmes,

2006). If the company making the change advertises those changes, the customers of that company will be less inclined to believe it. However, if the advertising of environmental improvements comes from the word of mouth of the employees, those employees who are genuinely excited about the changes, the customers will trust that these changes are significant (lululemon a, n.d.). Green marketing has proven to be successful in other situations, such as with the Timberland and Mountain Equipment Co-op models, however lululemon athletica has built a reputation for non-traditional marketing, and has remained extremely loyal to word of mouth marketing. This is the model that lululemon athletica has opted to take for their environmental initiatives, and whether or not this model has been successful is significant.

A word-of-mouth green marketing campaign costs the company less money to implement. If the campaign is successful, it could easily inspire other apparel and manufacturing companies to follow suit in implementing such changes. While this style of marketing is by no means "new," it is innovative in that this style of marketing is common for small companies, not international corporations, such as lululemon athletica (Hargrave & Kao, 2010).

The relationship between business and society, between the company and the consumer, will exist so long as there are people who sell goods, and people who buy them (van Dijken, 2007). Trade and commerce have existed for thousands of years, and will likely exist for many more, and as such, the relationship between business and society will remain. As in any relationship, the parties of the relationship adopt specific roles. It is no different when it comes to the relationship between business and society. When it comes to sustainability and environmental change, the role of influencer of change, the onus, is on the business to

improve as much as it is on the consumer to make responsible choices. We, as a society, have reached a point where change must happen; we have exceeded the carrying capacity of the planet, and are using our resources at a rate that is too fast for natural replenishment (Hawken, Lovins & Lovins, 1999).

1.4 Thesis layout

This thesis consists of six chapters, plus appendices. Chapter 1 introduces lululemon athletica and this thesis project, providing its problem statement, objectives, and methods. Chapter 2 consists of a literature review. The third chapter explains the objectives, method, and data collection and analysis techniques of this thesis. Chapter 4 presents the findings of the comparison of lululemon athletica, Nike, Timberland and Mountain Equipment Co-op, as well as lululemon athletica's strengths and weaknesses. Chapter 5 examines the findings of the Educator and Guest surveys, the waste system and energy audits, and explores the effectiveness of educator control of sustainability initiatives. Chapter 6 documents the conclusion of the thesis and is followed by the Appendices.

Chapter 2: Background

2.1 lululemon athletica: History, Community Legacies, Core Values and Culture

Part of lululemon athletica Inc's charm is that the company and their stores sell more than just clothing (lululemon b, 2010). lululemon athletica has a rich culture, developed over its brief history, one that the employees are strongly encouraged to adopt into their lives and the company is run by. The lululemon athletica culture is best embodied by its manifesto, a collection of sometimes-controversial statements regarding the way the employees of the company seek to live their lives¹. This manifesto has statements ranging from health to selfdevelopment and environment (lululemon a, n.d.). The other important components of the lululemon athletica culture are yoga, feedback and goal setting.

The history and core of lululemon athletica is yoga. The idea for the company began in a yoga class, and the company has stayed true to its roots. While the designers delve into different athletic apparel lines, such as dance, fitness and running, the bulk to the designs are made with yoga in mind (McKnight, 2007). Educators and staff of lululemon athletica are encouraged to attend yoga classes regularly, and the company pays for two yoga classes a week for full time staff and one class a week for part time staff.

Goal setting is an integral component in the lives of lululemon athletica staff, as well as to the various departments of the Store Support Center. Management staff are trained as goal coaches, and educators have goal coaching sessions with managers at the store and regional

¹ The lululemon athletica manifesto is not a traditional manifesto, as it does not incorporate company

² A vision, or goal board, is a visual representation of the life the creator of the vision board desires 7

levels. Educators are encouraged to update their goals twice a year, and there is a company-wide policy that every store must have vision or goal boards² of all educators on display within the store (lululemon a, n.d.). The purpose of having these goal boards on display is to show that lululemon athletica does not just preach, but practice. On the lululemon athletica website, there is a section on why goal setting is important, as well as a supplementary "Goal Tender" website that anyone can use to learn how to set, track and achieve goals. By showing that the whole company sets goals, lululemon athletica hopes to show that it is a company that practices what it preaches (lululemon a, n.d.).

As part of lululemon's Code of Conduct, "manufacturers and vendors must be working towards environmental improvements [] in their operations" (lululemon c, n.d.). This part of lululemon's Code of Conduct is seen through the day-to-day operations of the company, including manufacturing, construction of new stores and store operations. Developing organic and environmentally friendly fabrics (Vasil, 2007), using recycled wood for flooring, zero-volatile organic compound (VOC) paints, and requiring compact fluorescent lighting within the store are only some of the examples of the steps lululemon athletica Inc. has taken to reduce their ecological footprint (lululemon c, n.d.). The department responsible for the environmental and social change at lululemon athletica is the Community Legacies Department, as briefly mentioned above.

Community Legacies was renamed after the company filed its Initial Public Offering in August, 2007. Once called lululemon athletica's Corporate Social Responsibility department, it was renamed because lululemon athletica is "not your [typical] corporate company"

_

² A vision, or goal board, is a visual representation of the life the creator of the vision board desires to lead. It is a tool used by those who practice the Law of Attraction (Byrne 2006).

(lululemon d, n.d.). The Store Support Center (lululemon athletica's head office located in Vancouver, British Colombia) has been very vigilant about ascertaining that the factories where they manufacture overseas are in excellent condition for the workers long before the company became public (lululemon a, n.d.).

The Community Legacies Department has indicated that their primary goal is to eliminate the waste throughout the company. Community Legacies defines waste as "anything that does not add value to our company, our guests and our communities" (lululemon a, n.d.). The main areas of focus are: supply chain packaging; product manufacturing; product policies; retail environment; and purchasing practices (lululemon a, n.d.). The Community Legacies Department is accountable for spearheading all company-wide changes and initiatives at the Store Support Center, the Distribution Center and the factories used worldwide.

The Community Legacies Department has given the stores the responsibility of developing and implementing store-level initiatives by appointing Community Legacies Advocates in every store. The Community Legacies Advocate is an educator with passion for environment. Community Legacies Department provides feedback for the advocates on their store-level initiatives, and grants them the freedom to make plans and changes in their store depending upon their community.

2.2 Fitness and Yoga Apparel

lululemon's roots are in yoga. While they have expanded their brand to incorporate other styles of fitness, the original exercise lululemon praised was yoga (McKnight, 2007).

Recognizing that there was a need for technical and stylish yoga clothing allowed for lululemon to find a niche in the athletic apparel industry, and have done very well for themselves (The Economist, 2007). Part of the success of the clothing is the technical fabrics lululemon uses for their yoga wear – nylon and polyester based technical fabrics (McKnight, 2007).

Yoga is an ancient philosophy, described by eight limbs, only one of which is physical (the asana). As yoga has long been linked with the natural environment, those who practice regularly are also expected to be concerned with the natural environment (Yogananda, 1946). The modernization, or Westernization of yoga has taken the focus away from the eight limbs of yoga, and the focus has turned to the asana, the physical side, of yoga (Kaminoff, 2007; De Michelis, 2004). When Chip Wilson originally came up with the lululemon athletica concept, he was in a yoga class, surrounded by women wearing baggy men's clothing (McKnight, 2007). It was from that yoga class that yoga-specific athletic apparel was born. Westernized yoga is completely different from traditional yoga (De Michelis, 2004), turning an ancient practice into a cash-cow (Catto, 2005). There are different styles of clothing for different styles of yoga, tight pants for Iyengar, high support tank tops for Ashtanga, highly wicking shorts and bras for Bikram and Moksha. In fact, if you walk into a Bikram Yoga class taught by Bikram Choudury in a pair of baggy pants, he will either make you leave the room or force you to cut the legs off your pants (Choudury, 2000).

-

³ Wicking fabric is described as a fabric that absorbs sweat, and spreads the sweat throughout the fabric, allowing for it to evaporate more quickly (lululemon a, n.d.). All of lululemon's technical fabrics have some level of wicking. Technical fabrics can either be inherently wicking (the property of the fibers wick moisture naturally) or chemically wicking (a chemical wash is added to the fabric to give the fabric wicking properties). lululemon athletica makes both inherently and chemically wicking pieces (lululemon c, n.d.).

The textile industry launched the industrial revolution, making it the oldest industrial industry in the world (Meyer, 1996). More than 32 million people are employed by the international textile industry, most of these textile workers live and work in environmentally hostile conditions. The statistics surrounding the textile industry are grim, being the source of approximately half of the world's wastewater, and uses dangerous chemicals in their production (McDonough, 2002). Further that, textiles for athletic apparel are primarily synthetic polymer-based fabrics, polyester and nylon. Polymer-based fabrics are made from petrochemicals. This is of concern as the creation of polymer fabrics from petrochemicals has negative effects on the natural environment and human health (Matheson, 2008). Polyester uses antimony as a catalyst, and nylon uses adipic acid (McDonough, 2002; Matheson, 2008). Antimony is a carcinogen and is extremely toxic, and adipic acid is one of the largest sources for industrial nitrous oxide emissions, a greenhouse gas (Matheson, 2008).

2.3 Green Retail

While there has been significant academic interest in corporate greening, (Bansal & Roth, 2000; Robinson, 2007; Wiser & Pickle, 1997), little has been done in the area of the retail *store*, and less still in the area of the shopping center (Robinson, 2007). The reasons for a corporation greening itself can be fit into one of the following categories: competitiveness, legitimacy or social responsibility (Bansal & Roth, 2000). Put in other terms, the reasons corporations are encouraged to "green" themselves are financial, legal or ethical. Often corporations believe that making "green" changes will bring them more revenue, in the form of competitive advantage, increased sales or decreased operations. Corporations often implement "green" changes they believe will become law in the future, to encourage future survival of the company, or to ensure compliance. On the other hand, there are some

corporations who claim to believe that making these "green" changes is "the right thing to do." This greening of the corporate jungle is defined by Bansal and Roth (2000) as a "set of corporate ecological initiatives aimed at mitigating a firm's impact on the natural environment" (p.717).

Henriques and Sadorsky (1996) took a different approach to finding the whys behind corporate "greening," by exploring the pressures needed to encourage a policy change. From interviewing several different corporation executives, they discovered that when there are pressures from key groups the corporation will be more likely to change their policy. These key groups are: customers, internal and external stakeholders, government, neighborhood and communities. Of these, government and regulation pressures are the most responded to. Conversely, public interest group pressure tends to have the opposite effect upon corporations. (Henriques & Sadorsky, 1996)

While there has been little research done on the hows and whys of greening a retail store, Hyllegard, Ogle and Dunbar (2006), completed a study on the effects of the "greened" retail store on the habits of the shoppers. They discovered that a store being constructed with significant consideration to the natural environment has little effect upon whether or not a consumer will shop in that store. The store in question, an outdoor athletic apparel store of the United States, first drew in people who were looking for technical outdoor apparel. The environmentally friendliness of a store inspired long-term brand loyalty, but it did not affect why the consumer has come into the store in the first place (Hyllegard et al, 2006). Interestingly, prior to their publication, no scholarly works have linked shopping and consumer response to sustainability efforts on the part of the store.

Schaper's (2002) study of small firms and environmental management did uncover the same reasoning behind why the owner or manager of a small or medium-sized enterprise would green their retail store. He found that there were two significant factors that affect whether or not an owner or manager will implement green changes on his or her store: the time to implement "discretionary" business activities, and the level of information available to the owner or manager. The two variables complement the two main reasons cited for making the change, and they are almost identical to the reasons behind corporate greening, cited in Bansal and Roth's study: regulatory or commercial considerations, and the belief that it is the right thing to do. Interestingly, the efforts of the owner or manager do not appear to affect sales, or the performance of the corporation (Schaper, 2002).

While "greened" retail space has no documented effect upon the shopping habits of a customer, the design of a space in the service industry is extremely important. However, it is known that if people feel comfortable in the space, the customers will chose to spend more time in that space, and return again (Grayson & McNeill, 2009). Atmospherics are extremely important in the service industry. Not only do they have an effect upon the comfort level and behavior of a patron, they also have effects on the employees (Kotler, 1973). These effects will elicit an emotional reaction that can be positive or negative. In the service industry, there are three key emotional responses that are integral to customer retention, not just keeping the customer, but also bringing them back. These three emotional responses are comfort, excitement and relationship (Grayson & McNeill, 2009). Comfort is the most important of the three emotional responses.

This applies to retail stores as well. According to Ogle, Hyllegard and Dunbar (2004), the consumer decision to buy comes from a combination of factors, and how they work together. These factors (atmospherics, merchandise, product assortment, social context of the store and social identity of the shopper) all inform the shopper's decision to buy or not to buy. If the atmospherics, in addition to the right kinds and assortment of merchandise (Hyllegard et al, 2006), give customers a sense of comfort, the shopper will be more positively inclined to make a purchase, and return to shop in that retail store again (Ogle et al 2004).

In Singh, Syal, Grady and Korkmaz's (2010) paper on the effects of green buildings on health and productivity, the authors found that not only are workers in green buildings (specifically LEED certified buildings) more productive and healthier, they are also happier. Most North Americans spend a minimum of two thirds of their time indoors. When people spend that indoor time in buildings with well controlled temperatures and acoustics, excellent air quality and lighting has a positive effect on health and mood (Singh et al, 2010). From this, you can infer that customers, shopping in a green space, will feel the same positive emotions from "green" atmospherics, and thus be more inclined to shop at a store with green atmospherics. According to Holbrook and Hirschman's (1982) theory on customer experience, customers do not make shopping decisions rationally. Instead, customers use their emotions to inform their choice. Designing a retail space to evoke a positive emotion in a customer is a relatively new field. Retail design is currently focused on making the customer experience different from other stores, making their visit memorable and unique. While there is merit to maintaining a unique in store marketing experience,

customers respond more positively if the design of a retail space reflect their values, be it good quality or low cost (Petermans, n.d.)

Robinson (2007) makes some of the most interesting observations regarding efforts to create sustainable shopping malls. Within a mall environment, an effort must be made on the part of both the shopping center administration, and the tenants of the mall, to make an environmentally sustainable shopping center. If a mall wanted to be environmentally sustainable, but none of the tenants do, there is little the mall can do to enforce compliance, however the opposite need not be true, a retail store can be sustainable without the assistance of the mall, although it would be difficult for the store to do so (Robinson, 2007).

In today's world, it is of extreme importance to stay competitive. Consumers can be fickle, and there is less brand loyalty today than there was once in the past. Currently, consumers feel better about themselves when they purchase "green" products (although these green products do not need to be purchased in a "green" retail store). Corporations thus have more incentive to provide green products to compete with other companies also providing the option of green products, and less incentive to improve their stores (Seyfang, 2004).

2.4 Eco Chic

The eco chic movement became popularized in fashion with the "Green Issue" of Vanity Fair in 2006. From that moment, environmentalism became cool and green became glam (Gajda & Kleffer, 2007). Widespread Hollywood involvement and enrollment in environmental issues was the tipping point for this new trend (Gajda & Kleffer, 2007). The

term eco chic was first used in the nineties, used to describe the ecologically conscious shoppers of the decade (Benz, 2000).

There have been several books written about how you can "change the world with style" and how to "save the earth in style." Tamsin Blanchard, a fashion newspaper editor, has written "Green is the New Black: How to Change the World With Style," advertising itself to those who are fashionistas with a conscience. This book is a fun read that recommends the reader make like the "eco A-listers," describing the changes made in Hollywood. She also attributes the eco-chic movement to Hollywood, citing climate change movie *The 11th Hour* as the more hip version of *An Inconvenient Truth* (Blanchard, 2007). The development of fashion lines by famous actors and designers is another aspect to this trend, such as Natalie Portman's vegan footwear line, or Stella McCartney's organic clothing line (Blanchard, 2007).

Matheson (2008) argues in her book "Green Chic: Saving the Earth in Style" that living an eco-chic life can affect the world. While, like Blanchard's book, her book is a guidebook towards living a "green chic" life- to not have to compromise on style to be green- there are interesting points throughout the book beyond merely buying environmentally friendly products. She claims that living an eco chic life does not mean reducing how many things we buy, rather altering the way we look at the world, and creating positive change with the choices we make (Matheson, 2008).

Understandably, many environmentalists have found the eco chic movement to not be an environmental movement in the least. The term "eco chic" indicates a movement away from the environmental roots of the word, towards a "soft" environmentalism, one that looks

good, but does not necessarily *do* good (Benz, 2000). There is, however, a desire among consumers to have more environmentally friendly products available. If the manufacturing of the "eco-chic" product is sound and good quality and the company has a Corporate Social Responsibility department, customers are more likely to purchase, and pay a premium for eco-apparel (Gan, 2010). Unfortunately there is no common or accepted definition for eco-apparel, and it is up to each individual apparel corporation to define what eco-apparel means to them. The onus is on the customer to research the products to determine whether or not the item is "green" enough for them.

2.5 Corporate Social Responsibility

Corporate Social Responsibility is the adoption of social responsibility within a corporation to take accountability for more than just the profits of the company, and focus upon societal betterments (van Dijken, 2007). There are four methods of Corporate Social Responsibility that exist, as demonstrated in this figure:

	Raises Social Welfare	Reduces Social Welfare
Raises	Good	Pernicious
Profits	Management	CSR
Reduces	Borrowed	Delusional
Profits	Virtue	CSR

Figure 2.1: "Varieties of Corporate Social Responsibility." (van Dijken, 2007).

This figure shows that a corporation cannot forget about their profits, and neither can they ignore social welfare. In a Corporate Social Responsibility framework, social well being must come before profits, but not at the expense of those profits (van Dijken, 2007; Hawken, 1993).

Corporate Social Responsibility takes into consideration all stakeholders involved- not just the shareholders. Including the community, the employees, the shareholders, the clients and customers allows for positive change to take place that enrolls those groups in the change (van Dijken, 2007). The company that employs Corporate Social Responsibility does so voluntarily, recognizing that they need to go above and beyond what is legally required of them if they wish to remain competitive. This shift in perception is one that is very much needed. As Hawken (1993) demonstrates in his book "The Ecology of Commerce," we need to rethink the way business is done because the industrial revolution as we know it is long over but the way we do business has stayed fundamentally the same. During the Industrial Revolution, common perception was that we had a never-ending abundance of resources, and while we now know that this is untrue, societies and corporations continue to operate as though it is (McDonough & Braungart, 2002).

Corporate Social Responsibility often includes a corporation's environmental concerns and initiatives, however the focus of Corporate Social Responsibility is a shift from dollars and cents to social well being (van Dijken, 2007). When a corporation employs Corporate Social Responsibility, it is attempting to ensure its long-term survival, as the corporation is taking into consideration the sustainability of the company (surviving with limited resources). This longevity is not available for corporations that do not practice Corporate Social

Responsibility, and the combined concern of profit with well being is a sustainable option for any company, corporation or firm (van Dijken, 2007).

Even though many corporations include environmental concerns and initiatives in their Corporate Social Responsibility department, there are many who believe that environment and social well being should be separate. The theory of Corporate Social Responsibility is people-focused, and this is not considered to be sufficient to deal with the scope of a corporation's environmental impacts. In truly forward thinking corporations, there is both a Corporate Social Responsibility department and a Corporate Environmental Responsibility Department.

With the publication of the Brundtland Report (1987), the public and private sector were exposed to the idea of sustainable development, defined as "providing for the needs of the present without compromising the ability of future generations to meet their own needs." While the report placed environmental concerns in the political sector, in today's global economy, the Internet and various news media are quick to cast blame and vilify a corporation that has not adopted some kind of environmental policy. This is one of the most compelling reasons for a corporation to voluntarily create a department of Corporate Social or Environmental Responsibility, and to self-govern themselves.

As a corporation's Corporate Social Responsibility is self-governed, there are no standards, either in action or in reporting. In fact, there is an extreme range in the depth of reporting of Corporate Social Responsibility among Fortune 500 and 1000 companies (Morhardt, 2010). If the reporting of CSR is significantly varied, the actions of corporations are similarly varied.

From 1998-2001, there was a 70% decrease in "pure science" environmental Corporate Social Responsibility reporting among Fortune 250 companies. These reports changed from being a numbers based report to one that is broad in scope, incorporating environment, social issues and financial issues (Kolk, 2003).

For the purposes of this paper, I consider the social and the environmental to be under the Corporate Social Responsibility umbrella, as social welfare and environmental concerns cannot be cleanly separated. There is no one accepted definition of Corporate Social Responsibility, neither is there consensus as to what exactly Corporate Social Responsibility encompasses. Within this document, I define Corporate Social Responsibility as being the efforts a corporation has made to reduce their negative environmental impacts as well as improve the social well being of all stakeholders.

2.6 Environmental Management Systems

In order to achieve positive, continuous, environmental change, corporations must employ some form of an environmental management plan or system. These plans and systems are tools that allow for corporations to change, monitor and improve their environmental performance (Hillary, 2001). The purpose of an environmental management system is to use the tools it provides to create continuous, ever improving, positive environmental change in an effort to comply with either social pressures or legal requirements and to reduce waste (Sayre, 1996).

ISO 14001 is an international standard for environmental management systems. It is a tool that allows for corporations and organizations of any size to find and manipulate the

environmental performance of all aspects of the corporation, as well as to improve that performance. The improvement is often found through the employment of an environmental management plan that focuses upon the specific objectives of the corporation. Following this, it allows for monitoring of those objectives, reporting once they are achieved and further improvement of the performance (International Organization of Standardization, n.d.).

There are five requirements to ISO 14001 systems that are seeking registration and certification:

- The corporation or organization must have an environmental policy in place, and commitment to an environmental management system;
- 2. On-site review of policy, on-site planning of policy;
- 3. The corporation's environmental objectives must be clearly monitored;
- 4. There must be reviews of the environmental management system, and continual improvement;
- 5. The corporation or organization must have clear and transparent documentation of the environmental management system and the improvement (Lally, n.d.).

As a result of ISO 14001, there has been a lot of focus upon corporate-level environmental management systems. While corporations that have a certified, formal environmental management system see the most dramatic environmental improvement, all formalized environmental management systems have positive impacts outside of those outlined within

the system's objectives (Mehyk, Sroufe & Calatone, 2003). Overall, environmental management systems find that the system's benefits extend beyond the corporation or organization (Lozano & Vallés 2007). The spillover affects suppliers, customers, and clients in positive ways, effectively creating a system that grows effortlessly outside of the corporation.

The benefits most commonly seen and expected by the corporations implementing the environmental management systems are compliance to legislation and a reduction in organizational risks (health, safety, etc) (Zutshi & Sohal, 2004). However, the list of measured and immeasurable benefits of environmental management systems for the corporation is quite a bit longer. There are generally both internal and external benefits to the organization or corporation who has implemented the environmental management system. The internal benefits usually include financial, organizational and human benefits, and the external benefits are generally commercial, environmental and communication (Hillary, 2001). The strongest and most successful environmental management systems are those that are developed with the consultation of the corporation's employees and in-house consultants (Zutshi & Sohal, 2004).

2.7 Literature Review Conclusions

Looking at the following areas: lululemon athletica's history and culture, fitness and yoga apparel, green retail, the concept of eco-chic, corporate social responsibility (CSR) and environmental management systems (EMS), informed my methods and analysis. Having an understanding of lululemon athletica's history and culture, which is very unique in the apparel industry, helped to inform the creation of the educator survey, as well as analyzing

the educator responses. Knowing that the technical textiles required for lululemon's apparel is particularly harmful to the environment and the workers in lululemon's factories informs the need for this research. Green retail informed the creation of the educator and guest surveys, as well as the waste system analysis and energy audit for lululemon athletica Polo Park. The eco-chic concept shows that it is possible for an apparel company to be both financially successful and sustainable. CSR informed my website analysis, and finally, EMS was used to compare for goals.

Chapter 3: Methodology

3.1 Introduction

The following methods of data collection and analysis were used to fulfill the purpose and objectives as stated in the introduction of this thesis. The chief goals of the methods are twofold.

The first goal of the methods is to collect data that is publicly available on the lululemon athletica and Mountain Equipment Coop websites, to fulfill the Climate Counts scorecard, as well as the scorecards already completed by Climate Counts for Nike and Timberland. This is to establish best practices among sustainability leaders in the apparel industry, and determine what the next corporate steps are for lululemon athletica in achieving their environmental goals. A further analysis of sustainability metrics on the websites of Nike, Timberland, Mountain Equipment Co-op and lululemon athletica was conducted to evaluate the transparency of the companies.

Second, to collect the maximum data through consultation of the employees and customers of lululemon athletica Polo Park. The goal of these surveys is to determine the perspective of these stakeholders of the store on the sustainability initiatives of lululemon athletica Polo Park. Further non-collaborative data was collected in the form of waste system and energy audits.

3.2 Data Collection:

3.2.1 Scorecards

I have taken the results of the 2011 Climate Counts Scorecards for Nike and Timberland. As ClimateCounts.org has already completed the scorecards for those two companies, I have used their data in my analysis. With lululemon and MEC, neither of which are represented by Climate Counts, I used scorecard guidelines and the data available to me on the lululemon.com and MEC.ca websites, as well as the data I have compiled through journaling and personal experience with lululemon athletica to discover their final scores. This allowed me to rank the four companies using equal measures, and determine some of lululemon's areas of opportunities and MEC's best practices. The data collected was used to answer the first and second objectives of this thesis.

3.2.2 Website Analysis

I evaluated the websites of Nike, Timberland, Mountain Equipment Co-op and lululemon. The purpose of this evaluation was to determine how well each company uses their corporate websites to provide their sustainability information to the public. The areas I evaluated are the number of web pages needed to click through to find the environmental and sustainability information, how intuitive it is to find the data, the ease of finding the data through a search engine (such as Google), as well as the volume of environmental and sustainability data available. The data collected was used to answer the first and second objectives of this thesis.

3.2.3 Educator Survey

An online Survey Monkey survey (see Appendix 3) was posted and emailed to the employees of lululemon athletica Polo Park. The survey was designed to gather information of the actions taken in lululemon athletica Polo Park to improve their environmental sustainability, as well as what confines the Community Legacies Advocates are working with and any challenges they have faced. Additionally, this survey asked for lululemon athletica Polo Park's environmental goals. This section of the survey was modeled after the goal setting worksheets of lululemon athletica, asking for one, five and ten year environmental goals.

There were 46 total respondents to the survey, 34 of whom identified themselves as educators from lululemon athletica Polo Park. This data set was analyzed using Excel and the Survey Monkey website. The data gathered was used to answer the second objective of this thesis.

3.2.4 Guest Survey

The Guest Survey (see Appendix 4) was developed for the customers of lululemon athletica Polo Park. The objectives of this questionnaire are as follows:

- To discover the guest perception of lululemon athletica the corporation and lululemon athletica Polo Park the store in regards to environmental sustainability;
- 2. Whether or not their perception of environmental sustainability has affected their decision to shop at lululemon athletica.

The link to this survey was distributed in three ways. First, I included the link in the weekly product email sent by lululemon athletica Polo Park to over 5,000 customers, the majority of whom live in Manitoba. Second, I posted a link to the survey on the local lululemon athletica

Polo Park Facebook business site. Third, I posted a link to the survey on the corporate lululemon athletica Facebook business page.

There were 66 lululemon athletica customers who filled out the survey, 65 of the respondents are customers of lululemon athletica Polo Park. This data set was analyzed using Excel and the Survey Monkey website. This method was used to answer the second objective of this thesis.

3.2.5 Waste System Analysis

As there are negligible amounts of waste produced by educators at the store level, I conducted an analysis of the waste removal system implemented by lululemon athletica Polo Park. The data collected was used to answer the second objective of this thesis.

3.2.6 Energy Audit

Neither the company nor the shopping mall was forthcoming about what lululemon athletica Polo Park's energy usage was over a month-long period, I conducted an energy audit based upon observation and averages. Using the wattage information of all lights, electrical equipment and appliances in lululemon athletica Polo Park, an average of how long each light, piece of electrical equipment and appliance was on, and the kilowatt hour equation⁴, I found the kilowatt hours used by lululemon athletica Polo Park over a 28-day cycle. The data collected was used to answer the second objective of this thesis.

_

⁴ Kilowatt Hour = (Watts*hours used)/1000

3.2.7 Observations and Journaling

As an employee of lululemon athletica Polo Park for three years (two of which while I was conducting research for this thesis), I was able to view both the research and the company from a unique vantage point. Through my time with lululemon athletica, I held many roles, and maintained an academic journal during my last year as an educator. This journaling was used as a data source for this thesis, and to answer both objectives through my observations as an employee.

Chapter 4: Best Practices and Comparisons:

Where does lululemon athletica rank among industry leaders in green retail?

4.1 Introduction:

Brands and companies from around the world are adopting environmental and social sustainability plans for their entire product line – from sourcing to sales - voluntarily. Stakeholder concerns, improving production efficiencies and forward thinking to prevent uncontrolled external threats are the primary concerns influencing corporations to adopt a sustainability plan (Makower and GreenBiz Group, 2010). Some of the world's most recognizable brands are adopting environmental management plans, creating Corporate Responsibility Departments, and doing so with very little fanfare (Makower & GreenBiz Group, 2010). No longer is adopting a strong corporate sustainability plan considered a financial detriment, rather a beneficial addition, inspiring trust, lowering cost, and most importantly, lessening the negative impacts on the natural and built environment (Lozano & Vallés, 2007). Has lululemon athletica jumped on this environmental bandwagon?

lululemon athletica's Community Legacies Department is lululemon's Corporate Social Responsibility Department. The sustainability initiatives of the Community Legacies Department are divided into two sections: the grassroots sustainability initiatives, and the corporate sustainability initiatives. Grassroots sustainability initiatives refer to lululemon athletica's store-level initiatives. Corporate sustainability initiatives are those made by the Store Support Center for manufacturing, store development and the head office (lululemon d, n.d.).

In this chapter, I evaluate the corporate Community Legacies Department efforts by ranking lululemon athletica's efforts with three industry leaders in the apparel industry, who are leaders in sustainability, namely: Nike, Timberland and Mountain Equipment Co-op. These companies are ranked using the results from the Climate Counts scorecards for Nike and Timberland, and the results from CimateCounts.org scorecards for Mountain Equipment Co-op and lululemon athletica I completed. By using this scorecard, all four companies can be ranked using the same metrics on greenhouse gas emission reductions. While environmental management plans include more than greenhouse gas emission reduction, the Climate Counts scorecards are a ranking system recognized by media, environmental organizations and non-profit organizations as the best corporate climate change action disclosure available (Deutsch, 2007; Kropp, 2010)). In addition, I rate these four companies on the sustainability information available on their websites. I also determine lululemon athletica's strengths and weaknesses using a combination of lululemon's Securities and Exchange Commission Reports for fiscal 2009, lululemon.com and available literature.

The sustainability best practices of Nike, Timberland and Mountain Equipment Co-op are compared with those of lululemon athletica to recommend further steps for the company to improve their environmental sustainability plans.



Figure 4.1 Corporate logos for lululemon athletica, Nike, Timberland and Mountain Equipment Co-op (lululemon a, n.d.; Nike a, n.d.; Timberland a, n.d.; MEC d, n.d.).

4.2 Background

4.2.1 Climate Counts

The Climate Counts Scorecards are considered to be one of the best tools for making informed choices as to which companies a consumer should support (Deutsch, 2007). The recommendation of which company to support is based upon their efforts to reduce their greenhouse gas emissions rating the largest American companies in seventeen different sectors⁵. What makes this evaluation so effective and significant is that the scorecards focus on what the company is doing to improve and reduce their emissions, rather than penalizing companies for not being as sustainable as others (O'Rourke, 2005). While focusing on the efforts does not mitigate the fact that many of these companies have very large and unsustainable greenhouse gas emissions, it does demonstrate which large corporations are making a genuine effort to reduce their impact, and in what areas these companies excel.

After the Climate Counts Scorecards have been compiled, their scores are translated into three different ratings: Striding (50-100 points), Starting (20-49 points) and Stuck (less than 20 points).

4.2.2 Nike

Nike has a controversial history when it comes to its manufacturing. In December of 1996, Life Magazine published photographs of children making Nike soccer balls for pennies per

⁵ Airlines, Apparel/Accessories, Beverages-Beer, Commercial Banking, Consumer Shipping, Electronics, Food Products, Food Services, Home and Office Furniture, Hotels, Household products, Industry Innovators, Internet/Software, Large Appliances, Media, Pharmaceuticals, Toys and Children's Equipment (Climate Counts a, n.d.).

day. This publication was the tipping point for many Americans and Canadians, who protested Nike's human rights violations and boycotted the company (Klein, 2000). The backlash of the Life article also became the tipping point to Nike's adoption of Corporate Social Responsibility and acceptance of responsibility for the conditions within their factories (O'Rourke, 2005). The company has since become an industry leader in ensuring that working conditions in their factories are healthy for the factory workers abroad⁶, and has also adopted an excellent environmental management system.

There have been bumps along the road, notably in 2001 and 2008, when again, human rights violations were found in their factories. Nike admits that they have been in error, and that they had not done enough to not only improve the situation in Nike's factories, but to ensure that these violations never happen again (Nike b, n.d.). As Nike has made improvements to their company, they have also posted extensive Corporate Social Responsibility information on their business webpage, making Nike one of the most transparent companies in the apparel industry.

I selected Nike as a comparison to lululemon first, due to their environmental excellence; second, because Nike is an athletic apparel company; and third, because lululemon and Nike manufacture out of several of the same factories in China and Israel (lululemon a, N.D.).

-

⁶ As Nike is an athletic apparel company, it should come as no surprise that lululemon athletica shares many factories with Nike. Interestingly, this has led to many rumors that lululemon athletica has been purchased by Nike Inc.

4.2.3 Timberland

Timberland is an outdoor apparel company founded in 1973 in New England. Originally, a shoe company, in the last 37 years Timberland has also started selling technical outdoor athletic apparel. As a company that provides those with a passion for the outdoors functional clothing and footwear, Timberland has made a strong commitment to the environment, and to not only reducing their environmental impacts, but also to improve the environment through their actions (Timberland c, n.d.). If it were not for the natural environment, the company would never have been successful, and senior management of Timberland believes that they should work hard to create a corporate culture of change as a kind of "thank you" (McCormick, 2007).

"Protecting the outdoors is second nature to us. We make and sell gear to help you enjoy the outdoors, so we definitely want to see it thrive. We live by a simple challenge and common commitment—to be environmentally responsible" (Timberland b, N.D.)

In 2008, Timberland established its Corporate Social Responsibility (CSR) program based around four pillars: energy, product, workplace and service. By breaking their CSR efforts into separate sections, they clearly lay out their goals, achievements and struggles in brief on their website.

I chose Timberland for comparison as it is a technical apparel company that is committed to the environment. Other similarities between the companies include the education points you can find on the clothing hangtags, as well as similarities in store design.

4.2.4 Mountain Equipment Co-op

Mountain Equipment Co-op (MEC) is a Canadian, member-owned apparel and gear retail store. Like Timberland, MEC is committed to environmental stewardship. Their garments and gear are components needed to enjoy the outdoors, and as a result, they have made a significant effort in reducing their environmental footprint, Notably, MEC has also made significant effort in assisting their members in reducing their environmental footprints as well.

Through their commitment to the environment, MEC has focused on five key areas of improvement. They publish a biennial sustainability report with comprehensive and transparent data on the five areas of improvement. MEC has set goals to reduce the environmental footprint of production and operations, to improve the conditions for factory workers, to improve water and land conservation and finally, to help the entire marketplace become more sustainable (MEC a, 2006; MEC b, 2008; MEC c, 2009).

I chose MEC for a variety of reasons. Primarily, because MEC is a successful Canadian company that has made the environment a primary focus of their business and have still managed to be profitable. MEC also sells yoga apparel, making it one of lululemon's direct Canadian competitors. Finally, the efforts MEC has made in creating their environmentally friendly retail spaces are, somewhat reflected within the lululemon retail space.

4.3 Methods:

4.3.1 Climate Counts Scorecards

I have taken the results of the 2011 Climate Counts Scorecards for Nike and Timberland. As Climate Counts has already completed the scorecards for those two companies, I have used their data in my analysis. With lululemon and MEC, neither of which are represented by Climate Counts⁷, I used scorecard guidelines and the data available to me on the lululemon.com and MEC.ca websites, as well as the data I have compiled through journaling and personal experience with lululemon athletica to discover their final scores. This allowed me to rank the four companies using equal measures, and determine some of lululemon's areas of opportunities and MEC's best practices.

4.3.2 Website analysis

For this section of the research, I evaluated the websites of Nike, Timberland, MEC and lululemon. The website of a company is one of the sole methods of determining their sustainability initiatives, and as such the data posted by the company can be under intense scrutiny. Customers and investors look to a company's website to determine the transparency and depth of the Corporate Social Responsibility and, specifically, sustainability information that is available (Schwartz et al, 2010). I determined the quality and content of environmental data on each website and the ease of finding the data available to the public. The areas I evaluated are the number of web pages needed to click through to find the environmental and sustainability information, how intuitive it is to find the data, the ease of

⁷ This is because Climate Counts chooses the companies they review based on market saturation internationally, as well as size of that corporation. MEC is not a publicly traded company, and neither is it a large multinational. lululemon athletica is simply not big enough (Climate Counts a, n.d.).

finding the data through a search engine (such as Google), as well as the volume of environmental data available.

4.4 Scorecard Analysis

4.4.1 Climate Counts Scorecards:

The Climate Counts scorecard is a set of 22 questions in four different sections about a company's efforts towards reducing its climate change impacts⁸. After filling out the Scorecards for MEC and lululemon, I ranked the companies based on their total scores. Nike came in first, with a score of 87. According to the Climate Counts website, Nike's score has increased by four points since 2010, indicating that Nike is a company intent on improving themselves. Following Nike is Timberland with 82 points. Notably, this is Timberland's first year being scored by Climate Counts, and they have already been deemed a Climate Counts Industry Innovator. Mountain Equipment Co-op follows Timberland with 69 points, and lululemon athletica trails with 22 points.

The first section of the Climate Counts scorecard is the review. The review includes six generalized questions about Greenhouse Gas (GHG) emissions, the breadth and accuracy of the calculations and GHG inventory. There are a possible total of 22 points available.

Part Two of the Climate Counts scorecard is about reducing GHG emissions. This section is concerned with actions taken, and the goals that have been set for GHG emission

36

⁸ To see full Climate Counts Scorecard, please refer to ClimateCounts.Org (http://climatecounts.org/get_file.php?file=/pdf/Climate_Counts_Scorecard.pdf).

reductions. The bulk of the scorecard's points are found in this section, with a possible 56 available.

Part three of the Climate Counts scorecard is regarding policy. Question 19 and 20 are opposites, each worth a possible 10 points, although for question 19 the points are added and for question 20, they are subtracted. Question 19 awards points based upon what kind of public policy the company supports and Question 20 takes points away for either not supporting or openly opposing public policy.

Part Four of the Climate Counts of the scorecard is about the company's reporting. The depth, breadth, accessibility and transparency of the company's sustainability and GHG reduction reports are considered in this section. This section has a total possible 12 points.

Table 4.1: ClimateCount.org Scorecard Results

Scorecard results					
M - 10	Nike	Timber- land	MEC	lululemon	Total Points
Total Score	87	82	69	22	100
Cimate Counts Questions	Striding	Striding	Striding	Starting	n/a
Greenhouse Gas (GHG) emissions inventory completed?	4	5	5	1	5
Rough calculations or standard					
Protocol/calculator? Are Kyoto gases besides C02 included?	1	2	0	0	2
Are indirect emissions accounted for?	4	3	4	4	4
Is there external, qualified third party verification of emissions data, reductions and					
reporting?	2	0	4	2	4
Is the inventory an ongoing, regular process	4	4	3	0	4

accounting for multiple					
years?					
Part 1: Review					
Subtotal	18	17	19	9	22
Has a clear goal been					
set?	4	4	4	1	4
Strengths of baseline					
year used for the				_	
reduction goal?	2	1	2	1	3
Magnitude of reduction	-	4	-	0	_
goal?	5	4	5	0	5
Have a management					
plan and organizational structure been					
established for climate?	5	5	5	0	_
	3	3	3	0	5
Is there top-level support for climate					
change action?					
change action:	2	2	1	0	2
Has the company taken			1	0	
steps towards achieving					
reduction target?	8	8	6	0	8
Has the company	-				
achieved emissions					
reductions?	5	7	5	0	10
Absolute or intensity-					
based reductions?	3	4	4	1	4
Has the company		<u>:</u>			
achieved verified					
reductions to date?	5	3	2	0	5
Has the company made					
successful efforts to					
reduce GHG impacts					
associated with the use					
of its products/services?	4	3	2	0	4
Does the company					
work to educate its					
employees, trade					
association, and/or					
customers on how they					
can reduce individual	,			,	,
GHG emissions?	4	4	4	4	4
Does the company					
require supplier to take					
climate change action or					
give preference to those that do?	1	1	2	2	2
Part 2: Reduction	1	1			
Subtotal	48	46	42	9	56
Public Policy Support?	10	10	10	3	10
Public Policy	0	0	0	0	-10
Opposition?					
Part 3: Policy Subtotal	10	10	10	3	10
Is the company publicly					
reporting on emissions,	9	7	6	1	10
risks and actions? How	9	/	6	1	10

is information					
disclosed? Company-					
based or through a					
credible third-party					
program?					
Are emissions broken					
out by facility, business					
unit, country of					
operations or other					
meaningful sub					
segments?	2	2	2	0	2
Part 4: Reporting					
Subtotal	11	9	8	1	12
Total Points	87	82	69	22	100

(Climate Counts b, 2006; Climate Counts c, 2011; Climate Counts d, 2011)

4.4.2 Nike and Timberland Scorecards

The Climate Counts scorecards, once compiled and listed on the Climate Counts website, do not hold any additional information in regards to each question, and why the corporation has received the score for that question. In the following section, I will review the scores for each Nike and Timberland in an attempt to determine their Best Practices in regards to sustainability.

Nike is the highest scoring company, not only in comparison to Timberland, MEC and lululemon athletica, but also among all the companies evaluated by Climate Counts^{9,10}. Their score for 2010 is a 4-point improvement over their 2009 score, showing that they are a

⁹ The other apparel companies scores by Climate Counts: Levi Strauss, 61 points (brands: Dockers, Levi's); REI, 55 points (an outdoor apparel company); Gap Inc, 52 points (brands: Gap, Old Navy, Banana Republic, Athleta, Piperlime); Limited Brands, 41 points (brands: Bath & Body Works, C.O. Bigelow Apothecary, Henri Bendal, Victoria's Secret); Jones Apparel Group, 21 points (brands: Anne Klein, Nine West); VF Corporation, 21 points (brands: Eastpak, Jansport, Lee, Nautica, The North Face, Vans, Wrangler, Reef); Liz Claiborne, 7 points (brands: Juicy Couture, Kate Spade, Liz Claiborne, Lucky Brand Jeans).

¹⁰ The company that scores closest to Nike on Climate Counts is Hewlett-Packard with 85 points (Climate Counts a, n.d.).

company that is improving with consistency. The full Nike and Timberland scorecards are found in Appendices 5 and 6 respectively.

Based upon the scores of each section, highlighted in Table 4.1, Nike and Timberland's Best Practices are the following:

- Detailed, easily accessible sustainability reporting;
- Public sustainability policy support;
- Clear, detailed SMART goals;
- Interim reporting on goal achievement;
- Consistent effort towards goal achievement;
- Sustainability initiative plan, implemented by middle management;
- Senior management support;
- Training in sustainability;
- Use of standardized calculations for emissions inventory; and,
- Inventory spanning many years.

4.4.3 MEC and lululemon Scorecards

Certain areas of the scorecards were not as intuitive as I expected when I began completing them for MEC and lululemon. Filling out the card for lululemon, in particular, was very difficult, as there is not nearly as much information on the lululemon website as there is on the MEC website. The full MEC and lululemon scorecards, as well as the justification for the score awarded are found in Appendices 5 and 6 respectively.

Based upon the results of MEC's scorecard, the best practices of MEC are:

- Complete, in-depth and ongoing emission inventories;
- SMART, absolute reduction goals;
- Reporting on goal achievement progress;
- Senior management support;
- Public support of sustainability policies; and,
- Training for staff and co-op members.

4.5 Website Analysis

In this section, I evaluated the ease of finding environmental information on Nike.com, Timberland.com, MEC.ca and lululemon.com. Websites are the easiest and most commonly used medium to provide information about a company (Miniwatts Marketing Group, 2010). As many companies use their websites as a centralized hub for information, this is the most logical place for a company to provide information about their sustainability initiatives (Walker 2008). The ease of finding this information, as well as its depth and breadth, is key to a company's transparency.

Evaluated in this section is how easy it is to find the CSR-specific information from the homepages of the four companies, as well as the breadth and depth of the information available.

4.5.1 Nike.com, NikeBiz.com

It is more challenging to find the CSR information for Nike if you start on Nike's homepage. To find the CSR information for Nike (without using a search engine such as Google), a customer would have to know to look under the Nike swoosh symbol on the left side of the webpage, and select the "NikeBiz" option on the menu



Figure 4.2.1: Screen capture of Nike.com (Nike a, n.d.)

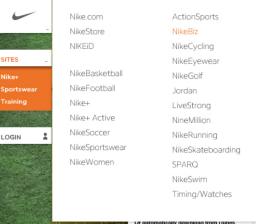


Figure 4.2.2: Magnification of the drop-down menu leading to Nike CSR (Nike a, n.d.)

The NikeBiz website is for potential and current investors, and is where all financial, corporate responsibility and environmental information is found. Once the customer has arrived upon the NikeBiz webpage, they have to determine that the environmental information is under Nike Responsibility.





Figure 4.2.4: Screen capture of dropdown menu from "Nike Responsibility" option on sidebar Figure 4.2.3; Screen capture 1.2.4; Screen capture by the bound on Nike Siz.com (Nike b, n.d.)

However, if the customer does not know that environmental information is typically found under the Corporate Social Responsibility heading (Walker, 2008), they can make use of the Nike Search engine found on the NikeBiz page. Once on the NikeBiz Responsibility page, the environmental information is very easy to find in the sidebar.

4.5.2 Timberland.com

The Timberland CSR information is very easy to find on the Timerland.com website. A link to "Corporate Responsibility" is found on the SiteMap¹¹ at the bottom of Timberland's homepage. This link leads directly to extensive corporate responsibility information

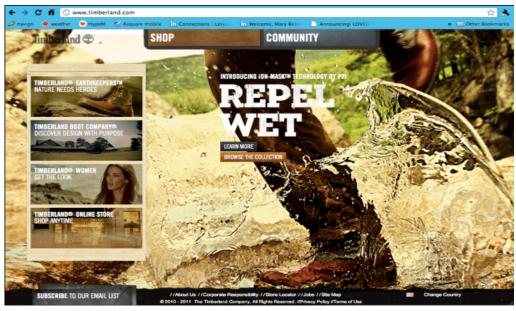


Figure 4.3.1" Screen Capture of Timberland.com (Timberland a, n.d.)



Figure 4.3.2: Magnification of link to Corporate Responsibility webpage found on Timberland.com (Timberland a, n.d.)

¹¹ A SiteMap is the list of the pages available to browse on a website.

4.5.3 MEC.ca

The information on Mountain Equipment Co-op's sustainability information requires little searching, as the link this data is available in a dropdown menu on the MEC's header on the homepage.



Figure 4.4.1: Screen capture of MEC.ca (MEC d, n.d.)

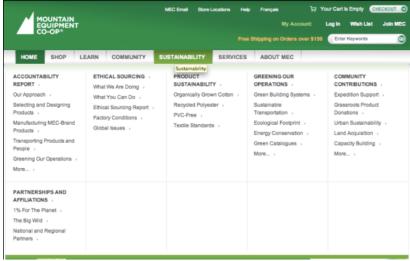


Figure 4.4.2: Dropdown menu under "Sustainability" on MEC.ca (MEC d, n.d.)

The dropdown menu leads to every aspect of MEC's sustainability policies, data, reporting and goals. The customer does not need to click on the dropdown menu to find a comprehensive list of MEC's efforts.

4.5.4 lululemon.com

lululemon athletica, as mentioned previously in this paper, calls its CSR department Community Legacies. They have described their "CSR department in these words because, well, [they]'re not your typically corporate company" (lululemon d, n.d. p.1). In renaming the CSR department Community Legacies, finding the CSR information on the website is difficult. First, one must look to their dropdown menu "Community," and then select "Legacies" from that menu. If a guest or potential investor is not aware that Community Legacies is lululemon's CSR department, finding the information is not intuitive.

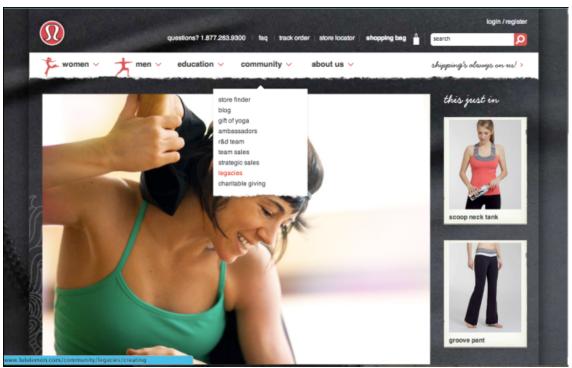


Figure 4.5.1: Screen capture of lululemon.com (lululemon a, n.d.)

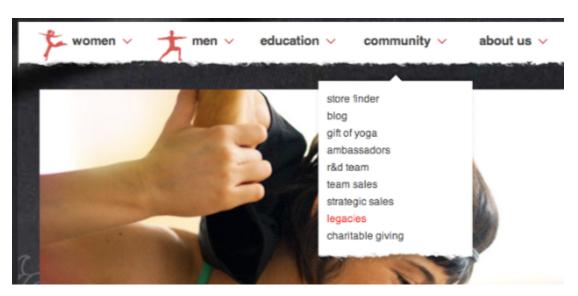


Figure 4.5.2: Magnification of dropdown menu leading to Community Legacies webpage on lululemon.com (lululemon a, n.d.)

However, lululemon.com has a search engine hosted on the main page (unlike Nike). Searching "environment" leads you to the Workplace Code of Conduct, a page hosted under the Legacies heading. "CSR" and "Corporate Social Responsibility" lead you to the "Company Actions" page, also hosted under the Legacies heading.

4.5.5 Website Comparisons: Nike.com, Timberland.com, MEC.ca and lululemon.com

With a 77.4% Internet usage penetration in North America, company websites have become the most important destination for all areas of information (Miniwatts Marketing Group, 2010). Having an easy to find and informative source of sustainability information on one's website is very important in light of those stats.

While the Climate Counts scorecards use breadth and ease of access of information as part of their scoring metrics, a high score on the scorecard does not immediately indicate a strong

website presenting this information. In fact, the highest scoring company of those analyzed, Nike Inc, has a surprisingly ineffective means of delivering this information on their website.

Table 4.3 Website metrics

	Nike.com	Timberland.com	MEC.ca	lululemon.com
How many steps from the main page to CSR page?	4	1	0	3
Link available on main page?	No	Yes	Yes	No
Are the CSR reports available for download?	Yes	Yes	Yes	No
How many CSR headings are there?	7	5	6	6
Sustainability specific CSR headings?	1	2	6	4
How many subsections are there for each CSR heading?	12	16	42	0
Sustainability specific CSR subsections?	7	9	42	0
Store specific sustainability initiatives/actions featured?	No	Yes	Yes	Yes
Sustainably designed product information available?	Yes	Yes	Yes	No
Does Google Search "Company name + sustainability" lead to the CSR pages on the website?	Yes	Yes	Yes	No

These metrics paint a very interesting picture, especially in comparison to the Climate Counts scorecards. In this area, Mountain Equipment Co-op is clearly the best designed website for passing along sustainability information about the company. The section is easy to find, and is featured in the same header as "Shop." MEC also has the most information available, broken into clearly labeled sections, making specifics easy to find from the homepage.

Timberland has the second best designed website. While the link to the CSR information is somewhat more difficult to find that the MEC link, being at the bottom of the page and not

featured as prominently as their "Shop" link, it is still featured on the homepage of the website, and leads to a Corporate Responsibility specific set of pages that is both easy to navigate, and wide in breadth of information.

Once a customer manages to find the information on the NikeBiz website, the breadth of the information available is quite impressive. Of concern is how difficult it is to find this information from the Nike homepage. The location of the sustainability information on the NikeBiz website indicates that the company considers only investors to be interested in Nike's sustainability actions, however considering Nike's tumultuous past in the production of garments, and human rights violations within their partner factories, a presence on their homepage would give Nike the credibility to their goals the need to sustain the popularity and success of their brand (O'Rourke, 2005).

lululemon's website is clearly the least effective of the four websites. While there are fewer steps needed to find the sustainability information that Nike's, finding the information is extremely difficult unless you "speak" the lululemon vernacular, and know that their CSR department is called the Community Legacies Department. Entering "lululemon + sustainability" into Google does not lead a person to their Legacies page. Once a person reaches the Legacies page, the information available is not specific, and not up to date.

4.6 Strategic Analysis

In order to discover the best practices of Nike, Timberland and MEC in comparison to lululemon, I first compiled a strategic analysis of lululemon, focusing upon the strengths and weaknesses of the brand. Once the strengths and weaknesses for lululemon are described,

the best practices of Nike, Timberland and MEC were used to demonstrate how lululemon could improve.

"We believe our culture and community-based business approach provides us with competitive advantages that are responsible for our strong financial performance" (lululemon b 2010 pp 7).

The Security and Exchange Commission (SEC) require quarterly and annual filings for publicly traded companies that report the state of business, the competitive strengths and potential threats to the business. After this SEC report was filed, the United States Securities and Exchange Commission (SEC) issued an interpretive guidance specifically linked to Climate Change initiatives on February 02, 2010 (Schwartz et al, 2010). This guidance was released in an attempt to show that both consumer interests and investor concerns are changing to incorporate environmental issues, and that public companies' risks should reflect this (Schwartz et al, 2010).

In this section, I evaluate the strengths and weaknesses of lululemon athletica as pertains to sustainability. To determine lululemon athletica's sustainability strengths, I will evaluate the strengths listed by the company on their 2010 SEC filing, and by extrapolating the strengths described within lululemon's internal websites and literature. To determine lululemon athletica's sustainability weaknesses, I will evaluate the business risks listed in their SEC filings, and will use the Climate Counts scorecard results, as well as my own personal experiences as an indicator of weaknesses.

4.6.1 Corporate Strengths

The competitive strengths of lululemon athletica are listed in their SEC filings as the following:

- Premium Active Brand.
- Distinctive Retail Experience.
- Innovative Design Process.
- Community-Based Marketing Approach.
- Deep Rooted Culture Centered on Training and Personal Growth.
- Experienced Management Team with Proven Ability to Execute.

While these strengths are geared specifically at reassuring a potential investor as to the security of investing in the brand, several also apply directly to strengths needed in order to implement a strong environmental management plan. In fact, the only strengths that can not be directly applied to sustainability initiatives at lululemon's corporate level are the first two: "Premium Active Brand," and "Distinctive Retail Experience."

The innovative design process describes the use of feedback from athletes and guests based on the functionality of the garment, as well as the company's policy of hiring only active individuals who design not only for the athlete, but also for themselves. Having an innovative design process could be further used to describe the efforts made in attempting to reduce the environmental footprint from production. lululemon athletica already strategically plots the bolts of fabric to ensure maximum use (lululemon a, n.d.). lululemon also saves any leftover fabric scraps to use in future designs¹². lululemon has already proven

¹² Examples of this are using scraps to create "quilted" waistbands in certain styles of pants, using scraps to make braided jewelry, and headbands.

their track record with "outside the box thinking" in their product design, they can expand this to encompass production innovation to include sustainably designed products, as Nike is beginning to do with their Considered Designs¹³ (Nike b, n.d.).

The Community-Based Marketing Approach is specifically geared towards passing along information about events and product. Creating a buzz about lululemon's events and products is the basis of the company's success (McKnight, 2007). As lululemon employees know how to create a buzz about product and events, it can be assumed that they would also be able to do so about sustainability efforts. Outside of the store, sharing sustainability efforts with the stakeholders of a company increases their trust in the brand, knowing that a company is striving for sustainable growth will improve sales (Gan, 2010; Schwartz et al, 2010).

Training has long been one of lululemon's strengths. Each educator undergoes 16 hours of training prior to working on the retail floor. This training encompasses all aspects of lululemon (including the Community Legacies Department), and is interactive and fun.

Training includes a fit session, multiple walk-throughs of the store. The training is designed in such a way so that new hires feel a familiarity with the store, the products and the guests.

Often senior educators and new hires act out guest conversations through role-playing.

Following the training, educators must read training materials on the internal lululemon website, and listen to an audio book on achievement by Brian Tracy, The Psychology of Success. Following this, the new hires have three 8-hour shadow shifts, where they are

¹³ Considered Design is Nike's closed loop manufacturing process. Nike's goal is to have all new product designs and current high volume sporting equipment part of the Considered Design process by 2020 (Nike n.d.).

paired with a senior educator in three different sections of the store (the pant wall, the fitting area and the Director of First Impressions (DOFI), commonly known as a "greeter" in other stores). When the new hires start their first day, they are very well prepared, and are generally able to do their job without much guidance.

The final competitive strength listed in the SEC filings for 2010 is that of the effective management team. The senior level management team at lululemon athletica is comprised of successful business people, many of whom come from a sporting apparel background such as Nike and Reebok. The senior management's success with their former companies is why the SEC filings list this as a strength. Nike has a strong environmental management plan, and the senior management team should first look to those managers for environmental management best practices. If senior management strongly supported an environmental management plan, this support would have significant impact on the employees of the company (Darnall, Gallagher, Andrews & Amanal., 2000).

Within lululemon's 2007 book Elevate to Greatness¹⁴ the company's strengths are implicitly listed throughout the pages. Many of the same are listed explicitly in the SEC filings, including training, the retail experience, and marketing. Other strengths listed implicitly in Elevate to Greatness are resources, network and inter-company communication.

lululemon has an incredibly vast resource base for its employees as well as its customers.

The internal website, called lulunet, accessible to educators has training documents on every

¹⁴ A book published to celebrate the Initial Public Offering of the company, and distributed to the employees of the company as a gift. This book is not available for purchase, and only a limited

number were printed.

policy, department and operation of the company. Every lululemon store has an extensive library of books on personal development, marketing and efficiency. The community board is a resource available to both guests and educators, with public information about the company, the store's local community, the clothing and the store's educators.

lululemon's network is the strongest part of the company. The entire marketing strategy for lululemon is built around the idea of community, of creating a sense of family within the fitness community of educators, yoga instructors, dancers and fitness gurus. The store uses the local fitness community to market their goods, by offering discounts to instructors and creating partnerships with well known members of the community. The internal website is described as the Facebook for lululemon employees. It is a way in which the company passes information to the educators, and how the educators can connect with any other employees from the entire company (I have emailed Chip Wilson on more than one occasion, and he has always returned my emails by the end of the business day). On lulunet an educator can also find chat rooms, discussion boards, product training, videos, and news.

There are frequent conference calls for all levels of the company. Every region has a weekly "alignment call." Store Managers and the Regional Manager of the stores within a region must participate in this conference call. These calls have no formal format, and cover an assortment of topics, including product that is not selling, educator issues, sales, personal development and training. There is also a weekly alignment call for all regional managers, with the same purpose as the regional alignment calls. Finally, once a month, there are company wide calls on product, on earnings, on community events and on company-wide management concerns. At one point, there were also quarterly calls for all Community

Legacies Advocates, however these have disappeared. Other notable communication strengths for lululemon include the weekly internal newsletter (called The Juice), which is required reading for all employees, as well as holiday planning calls that take place once a year in September.

4.6.2 Corporate Weaknesses

From evaluating lululemon athletica's results from the Climate Counts scorecards, several weaknesses become instantly apparent. The first is the weak or utter lack of communication of any sustainability initiatives available to customers and investors. The information available on the lululemon athletica website is generalized, unspecific and out of date.

Another communication weakness of lululemon athletica is that the language used within the company is not one that is easily accessible by all members of the community. Calling a spade a spade by lululemon is more like calling a spade a mushroom. lululemon has invented a company specific vernacular that all employees are indoctrinated to use by management. I found, from personal experience, that it took approximately one month for me to adopt this language in my day-to-day conversations. The traditional meaning of the word is not always reflected in the lululemon meaning of the word. This vernacular was developed by a former marketing executive recruited to lululemon within the first year of opening first store outside of Vancouver. For instance, "educator" describes sales people, and "ambassador" describes spokes models.

lululemon athletica has not issued a sustainability mandate. A strong corporate mandate is essential in ensuring that a company's employees are enrolled in the sustainability vision, in

fact, lack of a strong environmental mandate all but ensures failure in sustainability initiatives (Darnall et al 2000).

I have no access to the corporate financial reports, and as such, have no idea of what kind of budget is available for the Community Legacies Department. However, I am aware that there is no store-level Community Legacies budget. If an educator in a store requests funds to pay for a sustainability initiative within the store, the money has to come out of other areas of the budget. The lack of a budget set aside specifically for sustainability initiatives at the store level, when all store-based initiatives are the responsibility of the educator, dissuades the educator from wanting to make an effort, as they will never be certain if the funding is there. As managers at the store level are responsible for managing their store budgets, if sustainability is not a priority for them, the budget will be used for other areas of the store.

The lululemon athletica head office has very little sustainability programming in place. They have set waste reduction goals, although they have not quantified their waste reduction goals. Their sole public statement is that they will eliminate all waste, by eliminating anything that does not add value to the lululemon brand (lululemon a, n.d.). While waste reduction is a noble and cost effective (Sloan, Legrand, Tooman & Fendt, 2009), it is certainly not the only area of an athletic apparel brand needed sustainability improvements, and "anything that does not add value" is vague and unspecific.

There are many cases where lululemon operations do not consider the environment. For example: lululemon athletica has two Distribution Centers (DC), one in Vancouver, the

other in Renton in Washington State in the United States. Products need to travel vast distances to reach their final destination as approximately 90% of all garments are manufactured abroad, and are shipped to Vancouver and Renton. All products for Canada, Australia and Hong Kong are sent out of the Vancouver DC, and all products for the United States are sent out of the Renton DC.

Australian and Hong Kong stores, as mentioned above, receive their products from the Vancouver DC. As all products manufactured in a partner factory must pass through one of the two Distribution Centers before being shipped out, the distance a product must travel to reach either the Australian or Hong Kong stores is completely unnecessary. Products destined for the Hong Kong store leave a Chinese factory, are delivered to Canada, and are shipped back to China. This works out to over 12,000 miles of redundant travel.

Finally, while lululemon athletica's training of staff is one of their strengths, there is a distinct lack of appropriate training on sustainability. Every store has the same book to guide training, but there is no consistency over what areas of training are covered in the most depth. Community Legacies is taught so that when the new hires start working on the floor, they will be able to respond if a guest asks them about manufacturing abroad. If a guest asks an educator questions about lululemon athletica's environmental initiatives, an educator is coached to lead them to the Community Legacies page on the Community Board, and let the guest learn about the department themselves. There is no requirement for an educator to know specifics about Community Legacies or any initiatives of the department. If lululemon athletica, as they claim, wish to reduce their environmental impact, and want to share this information with their communities, because if there is no buzz there is no point in making

an effort (McKnight, 2007), training the educators of the company in Community Legacies is an important step (Darnall et al, 2000).

During the second part of training, the shadow shifts, if the store is too busy an educator's training is cut short and they are left alone to fend for themselves without the guidance of the senior educator. This can leave holes in the educators training that could take months to be discovered. When new policies or procedures are rolled out, for efficiency's sake, the store manager and assistant managers will train the key leaders, who will in turn train the "Top Tier" educators, and charge them with passing the information along to two other educators, and tell them to tell two people (lululemon a, n.d.). This system, while efficient, often misses educators. Another method of training used by lululemon athletica is through the Communication Binder. This binder is filled with the "Must Know" information for the store and the company, and is mandatory reading for the educators. However, this mandatory reading is not paid for, educators are expected to arrive fifteen minutes prior to their shift and read the Communication Binder and get updates from the floor manager on their own time. The focus of lululemon is efficiency (lululemon a, n.d.), not meticulousness and because of this educators are missed.

While lululemon athletica has a Community Legacies Department, it is concerning that the manager of the Community Legacies Department has been given additional responsibilities in the area of Quality Assurance. A strong management team dedicated solely to improving a company's sustainability is vital if a company wishes to make environmental change (Darnall et al, 2000).

4.6.3 Best practices

lululemon athletica has built much of its company by adopting the best practices of other companies who are best in the world at what they do. After reading through much of lululemon's library when I was an employee, I found it very interesting to discover that there were obvious bits and pieces of other companies and great minds found within the lululemon business model. lululemon has adopted most of its best practices from other companies.

For example, Taylor and LaBarre (2006) featured Anthropologie, an American women's apparel company owned by Urban Outfitters Inc, in their business novel Mavericks at Work. As I read the book for a lululemon Polo Park management team book club, I noted many parallels between the two stores. Both Anthropologie and lululemon hire interesting, intelligent employees, capable of engaging customers in conversation about their interests. At lululemon the topics of conversation is fitness and health, whereas at Anthropologie, travelers and graduate students were hired, those capable of having intellectual conversations with the target demographic of Anthropologie. The store design was likewise similar. Anthropologie store designers will spend time in the community before designing the retail store. The Anthropologie stores become unique to their community, and no other store is quite like it (Taylor & LaBarre, 2006). lululemon also does this with both store development and the fitness community.

_

¹⁵ An excellent example of this is from when lululemon decided to expand into Toronto. Well before the first store ever even opened, the senior manager who went to Toronto to establish the lululemon brand, would bring samples of clothing to sell to yoga classes around the city, creating a buzz among the Torontonian yogis about the excellent yoga apparel, and the grassroots selling strategy. Also, this manager enrolled a friend of hers to set up rolling racks of clothing in the friend's loft. Yogis and

The most notable lululemon best practices are in regards to their staff. lululemon is great at ensuring that they hire people who are the right fit for the company, and for their specific store. It is their greatest strength (McKnight, 2007). The management staff ensures that educators are all coached on how to have authentic, engaging conversation with the guests in the store (lululemon b, 2009). Educators do not *sell* to guests, they *educate* the guest on the product, giving the guest the tools to make an informed decision about the product.

Focusing on the fit and function of a design is an educating best practice, and one that has worked very well, as net profits for lululemon increased 56% in the 2009 fiscal year (lululemon b, 2009).

Based upon my personal experiences, as well as the lululemon book "Elevate to Greatness" (2007) and the Securities and Exchange Commission Filings (2010) the greatest lululemon strength is that of its people. Educators are supposed to be trained to be able to educate guests on all areas of the company, including Community Legacies at the store and corporate levels. However, the Community Legacies Department is very rarely brought up in educator-guest conversations. In my three years with the company, I was asked about sustainability at lululemon athletica twice. This supports the Guest Survey findings of how guests perceive the lululemon athletica brand: lululemon is the clothing, the store, the educators and yoga. Not sustainability.

fitness gurus in Toronto had to be invited to the loft to be able to shop the rack. This created such a buzz that people were jumping at the bit to be able to shop at lululemon before the store location was even selected (McKnight 2007).

As explored in the climate change scorecard, lululemon is only just starting out in reducing its environmental footprint. As lululemon only believes in putting a significant focus on successful aspects of the company, it makes sense that lululemon educators do not share this information with their guests (McKnight, 2007).

A powerful next stop for lululemon would be to adopt some of Nike, Timberland and MEC's best practices when it comes to sustainability. The first best practice I would recommend lululemon adopt would be that of creating a written environmental management plan. lululemon would likely very quickly become an industry leader in sustainability innovation in the apparel industry if such a plan was adopted. Unfortunately, reducing lululemon's environmental impact, be it waste or climate related, no longer appears to be a significant goal for the company. In 2009, the manager of the Community Legacies

Department took on additional responsibilities as the head of the Quality Assurance

Department. When this happened, Community Legacies communication came to an absolute halt. Prior to this promotion, there were monthly "Learnings in the loo¹⁶," quarterly conference calls, frequent blog posts and yearly documented and publicized trips to see third party partners (factories) overseas. Clearly, sustainability is not a core aspect of the business.

While no information has been provided as to why, I suspect it is due to the 2007-2010

North American recession. lululemon was forced to close several of its American stores as a result of poor performance in the American market. It may be coincidence, but the Community Legacies manager took on the new role at the same time as the environmental

٠

¹⁶ Learnings in the loo, a lululemon-specific learning tool, were a tongue-in-cheek monthly publication on environmental facts on how to reduce personal environmental footprints, and the store's environmental footprint, and were posted in the washroom (lululemon c, n.d.).

information ceased to be shared among employees and the effects of the current financial crisis in the United States started to be felt by lululemon. The company appeared to be focusing on the Competitive Strength listed in the 2010 SEC report, ensuring that their premium active brand only sold premium, high quality products.

4.7 Conclusions

lululemon athletica claims they do not just talk the talk, they also walk the walk (McKnight, 2007). While this may very well be true in some aspects of the company, when it comes their corporate sustainability initiatives, there is more talk than action. And even then not much talk with few sustainability initiatives to discuss.

lululemon athletica is a young, growing company and they have blundered as they have grown. False claims of the medical benefits of their seaweed fabric (Vitasea¹⁷) in 2007, and giving away reusable bags with trace amounts of lead in 2009, all blunders made thus far have been a direct result of not doing their due diligence, and ensuring that lululemon, and their products, are doing what they say they will do. While swift company-wide actions¹⁸ were made to improve their standing in the eyes of their community, this has yet to affect lululemon athletica to prevent future problems. lululemon athletica's reactions have reflected positively upon the company and brand, the blunders lululemon has made so far are small in comparison to the ones suffered by other, similar brands, such as Nike.

_

¹⁷ Vitasea is a fabric made from seaweed, wood pulp and cotton (lululemon c, n.d.).

¹⁸ In the case of Seacell, lululemon athletica apologized, citing their youth as a brand, and removed all health-related claims from *all* their clothing tags, not just the seaweed-based fabrics, within days of the publication of the New York Times article. Their actions with the lead in the reusable shopping bags was similarly quick, releasing a press release inviting all people with the affected shopping bags to come in and exchange those bags for new ones that do not have traces of lead (lululemon a, n.d.).

lululemon athletica, claiming Nike as their number one competition within the athletic apparel industry (lululemon b, 2009), should be looking to them for best practices. Ensuring that the company has a strong, visible and well-developed Corporate Social Responsibility department would help to ensure that guests know that lululemon athletica is making an effort to reduce their environmental footprint, and how they intend to do such a thing. The lack of information on the lululemon athletica website is indicative of a company that is not interested in reducing their environmental footprint.

lululemon athletica has many strengths unrelated to sustainability. Financial success, and significant growth over the last 13 years has created a brand that is unique and well liked by lululemon's stakeholders. The weaknesses of the company overshadow those strengths, and have yet to be addressed by the company when it comes to sustainability. Inconsistent training, no budget for stores-level sustainability initiatives, poor communication, inconsistent and ineffectual Community Legacies programming and a lack of senior management support are weaknesses that must be addressed.

lululemon athletica has prided itself on adopting the best practices of other brands in their quest to be the "best in the world" in the athletic apparel industry (McKnight, 2007). The best practices of industry sustainability leaders: Nike, Timberland, Mountain Equipment Coop, have yet to take place. Preventing sustainability blunders does not appear to be a concern for lululemon, even though a large mistake could seriously damage their reputation and sales (as happened with Nike). lululemon is constantly looking to their future growth and the next athletic and fashion trends. Because of their community-based marketing and feedback

model, lululemon predicts trends in fitness and fashion ahead of most other athletic apparel companies. However, they are not foreword thinking in preventative measures. Reaction, rather than prevention, is their risk mitigation tool.

lululemon athletica provides clothing designed for yoga, an activity with direct links to the environment, and running, an activity often pursued outdoors. Making a true commitment to the environment would create a stronger brand than the one that is currently established, as it would be rooted in fitness, community and the environment, instead of just fitness and the community. Including environment in the lululemon brand would help to ensure lululemon's continued growth and success, as environmental awareness and action has become an important factor in deciding between two similar companies (Darnell et al, 2000). It is my recommendation that lululemon athletica Inc. adopt a strong environmental management plan at the corporate level, as the only thing that is certain about the future is that resources are becoming increasingly limited and awareness becoming increasingly apparent (Walker, 2008).

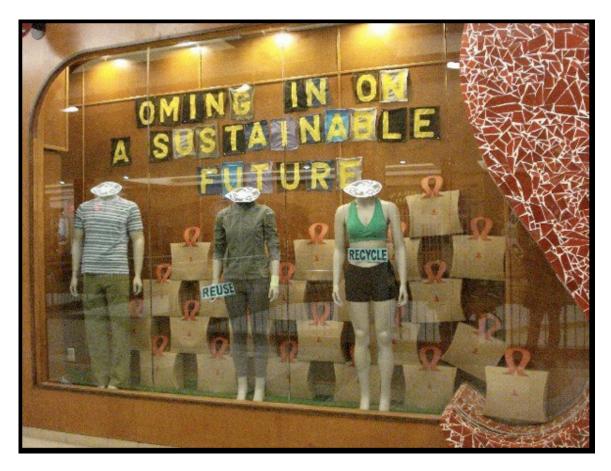


Figure 5.1 OMing in on a Sustainable future - lululemon athletica Polo Park store window, December '07

Chapter 5: lululemon athletica Polo Park

5.1 Introduction:

The Corporate Social and Environmental Responsibility Department of an apparel company generally analyses the production side of the company to determine social and environmental impacts. Ensuring that the factory workers are treated ethically, that the products are created as sustainably as possible, and that the communities surrounding the factories are not negatively affected by their presence are often the chief concerns of the department (Robinson, 2007). Few apparel companies have extended the reach of their

Corporate Social and Environmental Responsibility Departments to the retail store, as Timberland and Mountain Equipment Co-op have done (Hyllegard, 2006).

The retail store's culture and sustainability is also of importance: "green" buildings and



Figure 5.2 Three lululemon athletica Polo Park educators jumping during their first day of training, September '09

workspaces have a positive effect upon the people who work there, which would have a spillover effect on the customers (Singh et al. 2010). If a retail space is "greened," one can infer that the customer will feel some degree of that positive feeling (Singh et al, 2010). Despite this, the atmospherics of a retail space has an

effect upon the customers in that store (Underhill, 1999). As customers do not make shopping decisions based solely upon rational thought, creating a space that evokes a positive emotion in customers will have a positive effect upon the customer's decision to buy (Holbrook & Hirshman, 1982; Grayson & McNeill, 2009). Within the strengths listed in lululemon athletica's Securities and Exchange Commission Filing for the 2009 fiscal year, the distinctive retail experience is the second listed. Currently, the distinctive retail experience is not in reference to the environmental sustainability of the store, rather to the interaction between the guests and educators, the design of the retail space, and the product available (lululemon b, 2010). As an athletic apparel company, it is not surprising that the product is a chief focus, however the distinctive retail experience could easily include sustainability initiatives to the benefit of the guests and educators.

The lululemon retail concept is based on a "community-centric philosophy," that helps the guests feel like they are the stars of the lululemon show (lululemon b 2010). The store is staffed with educators who are enthusiastic about the product. The educator's job it is to make every guest who walks through the door feel like an honored guest and the store's design is unique and beautiful to give each guest the "feel good" experience of their distinct retail model (McKnight, 2007; Underhill, 1999). The purpose of this design is to encourage the guest to spend time in the store, make purchases, and most importantly, come back (Grayson & McNeill, 2009).

Should one assume that educators who are excited about and engaged in the sustainability of a store and its brand also engage and excite guests about the sustainability of the store and brand? If the educators spoke of the sustainability of the brand and store with guests, would guests appreciate the environmental side of lululemon as much as they appreciate (and purchase) the clothing? Knowing that a retail environment is a sustainable one helps to reinforce the "good feelings" of the customers of that retail store (Hyllegard et al, 2006).

This chapter investigates sustainability initiatives at lululemon athletica Polo Park, the role and views on sustainability by the educators of the store, and if guests of the store perceive the brand to be an environmentally friendly one. These areas were researched through a survey filled out by educators and guests of lululemon athletica Polo Park, as well as my own personal journaling and experiences. There was also a quantitative gathering of data that helps to demonstrate where lululemon athletica Polo Park actually is in terms of sustainability, and what improvements can be made.

5.2 Methods:

5.2.1 Surveys

I conducted two surveys specific to lululemon athletica to two different audiences. The first survey was directed at the educators of lululemon athletica Polo Park. The second survey was directed towards guests of lululemon athletica Polo Park. I applied Excel v.12.2.0 to create tables and charts to examine the trends of the collected data. I explored this data with SPSS v.19.0.0 for correlations but found no significant correlations of interest. The data required that I code the long-answer questions, and conduct trend analysis of the data.

5.2.1.1 Educator survey

This was an online survey (see Appendix 3) that was distributed to the educators of lululemon athletica Polo Park via email. Of the 51 educators employed at lululemon at the time the survey link was emailed to the staff, 34 filled out the survey.

The goal of this survey was to gather data about the actions that lululemon athletica Polo Park has taken to improve their sustainability, and if there were any limitations or challenges to those environmental actions within the store. The second goal of the survey was to determine the concerns lululemon Polo Park educators have for environmental issues, and their thoughts on the sustainability of lululemon. The third goal of this survey was to determine how lululemon Polo Park educators feel about their store, and if they note any environmental or sustainability issues within their store environment.

5.2.1.2 Guest surveys

The Guest Survey (see Appendix 4) was designed for the customers of lululemon athletica Polo Park. This survey was distributed among guests in three ways. First, a link to the Survey Monkey website was added to the weekly product email that is distributed weekly to over 5,000 of lululemon athletica Polo Park's guests, the majority of whom live in Manitoba. Second, I posted a link to the local lululemon athletica Polo Park Facebook fan site. Third, I posted a link on the corporate lululemon athletica Facebook Fan Page¹⁹.

A total of 66 lululemon athletica guests filled out the survey, 41 of them completed the survey in its entirety. Of these 66 guests, all but two live in Manitoba, and only one of the respondents does not shop at lululemon Polo Park but another lululemon location²⁰. The goal of this survey is to determine guest knowledge of lululemon athletica's local and corporate sustainability initiatives, and if this knowledge has influenced the guests' decision to shop at lululemon athletica.

5.2.2 Waste System Analysis and Light Audits

I conducted a waste removal and diversion audit at lululemon athletica Polo Park. I did this by evaluating the state of Polo Park's waste disposal, the efforts Polo Park educators have made to ensure waste is properly collected and disposed of.

68

¹⁹ I later discovered that one of the reasons why so few people from the corporate Facebook Fan Page clicked the link and took the survey was because there was a scam going on at the same time as my survey exploiting lululemon athletica online guests by convincing them to take part in an online survey to be entered into a draw to win a \$500.00 gift card. As this was the same incentive I was offering to guests to take my survey, I am not surprised that it was only through local channels that people clicked the link to the Survey Monkey questionnaire.

²⁰ This respondent data was not included in the analysis.

I also conducted a month long energy audit for lululemon Polo Park. This audit was broken into three categories: lights, electrical "essentials" and kitchen appliances. I focused on lights because they are the single biggest source of lululemon athletica Polo Park's energy usage. Many of the lights are left on for 24-hours. I conducted this audit by evaluating the lights in the store, based upon how long they are left on, on average, per day, their wattage and how many of them there are. Using this data, I used the kilowatt-hour formula²¹ to calculate the kilowatt-hour usage of a non-holiday 28-day cycle for the lights in the store. Using those calculations, I found the estimated kilowatt-hour usage for the lights, the electronic "essentials," such as the cash registers, the music system and sewing machine, and the kitchen appliances. Breaking the energy audit into three unique components better aids in understanding how lululemon athletica Polo Park is using their energy and in determining actions to improve the sustainability of the store.

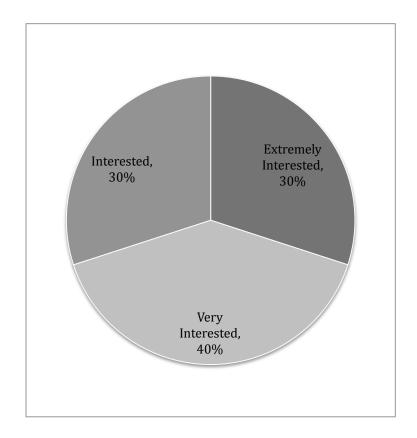
-

²¹ Formula: kilowatt-hour = (watts used * hours used/day * 28 days)/1000

5.3 Findings:

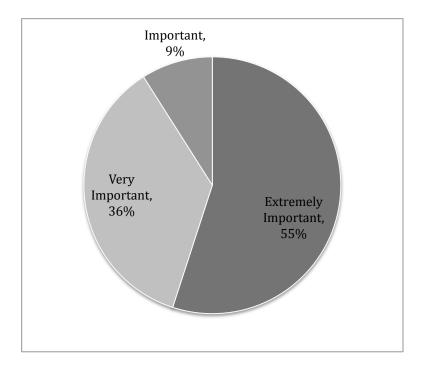
5.3.1 Educator Survey Results

Chart 5.1: Educator's level of interest in the environment



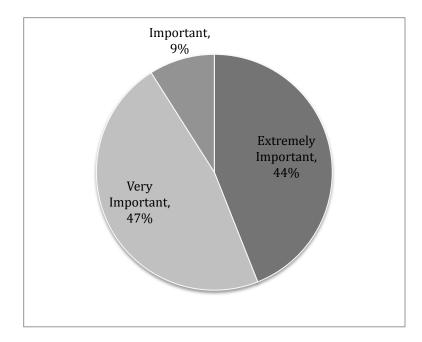
In Chart 5.1, educators described their level of interest in the environment, with 30% being interested, 30% very interested, and 40% extremely interested.

Chart 5.2: Importance of lululemon athletica addressing its impact on the environment, according to the educators.



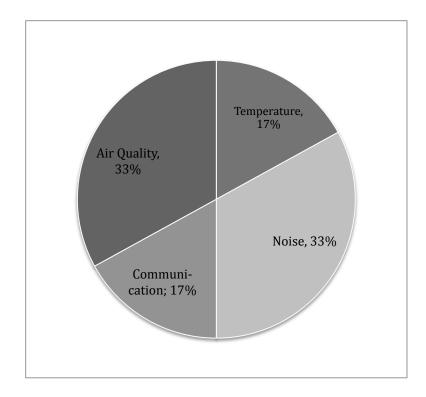
More than half the respondents (55%) believed that it is extremely important for lululemon athletica to address their impact on the environment. 36% believed it is very important, and 9% believed it is important.

Chart 5.3 Importance for lululemon athletica Polo Park addressing its impact on the environment, according to the educators.



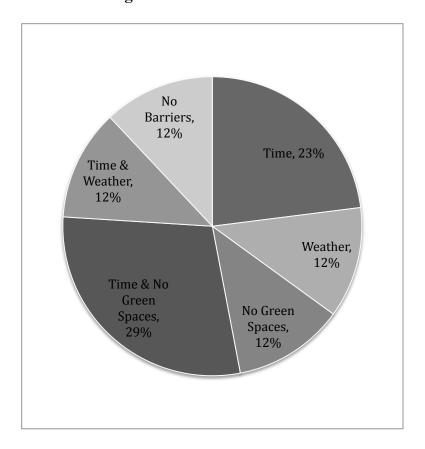
Almost half the respondents believed that it is very important for lululemon athletica Polo Park to address its impact on the environment, 44% believed it is extremely important and 9% believed it is important.

Chart 5.4: Improvements that can be made to the comfort level of educators at lululemon athletica Polo Park.



The majority of respondents (93%) were comfortable in lululemon athletica Polo Park. The areas that can be improved upon to make educators feel more comfortable were to regulate the temperature in the store (17%), lower the noise level of the store (17%), improve communication among management and staff (33%), and to improve upon air quality (33%). All respondents believed that lululemon athletica Polo Park was a healthy and safe place to work. The majority of respondents (93%) were comfortable at lululemon athletica Polo Park.

Chart 5.5: Barriers preventing lululemon athletica Polo Park educators from spending time outdoors during work hours.



Three quarters (77%) of the respondents were prevented from spending time outdoors during their work hours. The barriers preventing educators from spending time outside during their breaks were: not enough time (23%); cold weather in winter and hot and humid weather in summer (12%); no green spaces around the mall (12%); not enough time and no green spaces (29%); and, not enough time and undesirable weather (12%). 12% of respondents did not believe there were any barriers preventing them from spending time outdoors.

Over a quarter (27%) of the respondents believed they were exposed to chemicals at lululemon athletica Polo Park. The chemicals the educators listed as being exposed to were cleaning products and any by-products of chemicals used during textile production.

In-store lighting was not a concern for 83% of the respondents. The lighting concerns listed by the educators who did have concerns about the lighting are: heat from the fixtures, darkness, artificial light and the inability to turn off certain lights in the store. According to 67% of respondents there was no natural light in lululemon athletica Polo Park. The 33% who believed there was natural light in lululemon athletica Polo Park were referring to the skylights outside the store.

Over half (57%) the respondents claimed the lighting in lululemon athletica Polo Park is controllable. I believe this to mean that educators can turn the lights on and off. 43% did not believe the light is controllable. I believe their interpretation of this question was whether or not the intensity of the lights is controllable.

One-fifth (20%) the respondents believed there was a view out the outdoors from inside lululemon athletica Polo Park. 80% of the respondents did not believe there was a view. The view the 20% were referring to is the view into the mall, where the other 80% were referring to a view of nature.

Chart 5.6.1: Educator comfort with temperature and air exchange in lululemon athletica Polo Park.

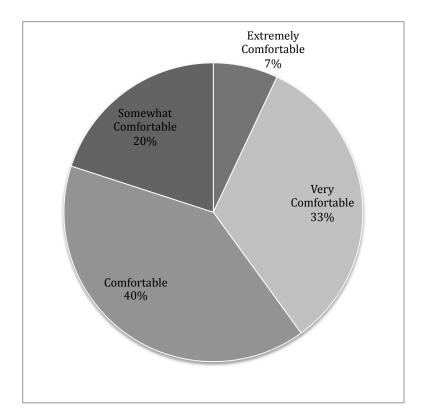


Chart 5.6.1 shows that 7% of respondents were comfortable with the temperature and air exchange in the store, 33% were very comfortable, 40% were comfortable and 20% were somewhat comfortable.

Chart 5.6.2: Temperature and/or air quality concerns of lululemon athletica Polo Park educators.

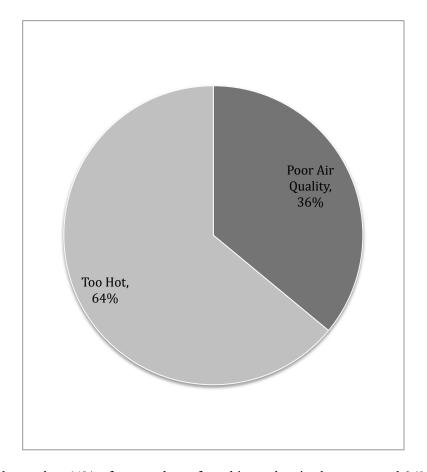
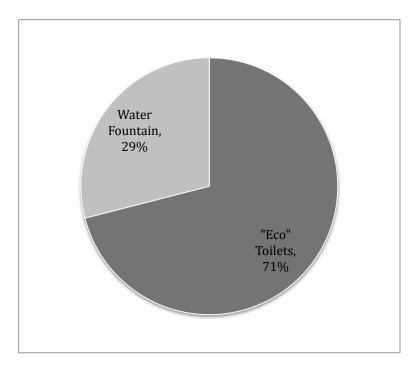


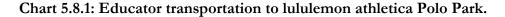
Chart 5.6.2 shows that 64% of respondents found it too hot in the store, and 36% were not comfortable with the air quality in the store.

Just under one fifth (17%) of the respondents had a concern with noise level in lululemon athletica Polo Park. These 17% found that the music levels in the store are too high.

Chart 5.7: Water waste reduction solution suggestions of lululemon athletica Polo Park educators.



One third of educators were concerned with water wastage in lululemon athletica Polo Park, where 67% were not concerned with water wastage. 71% of respondents believed that the best suggestion for reducing water wastage was to install a new "eco" toilet that was either composting or low-flow. 29% of the respondents saw a problem with the water fountain in the store, and would have had it replaced with one that does not require cups to drink from.



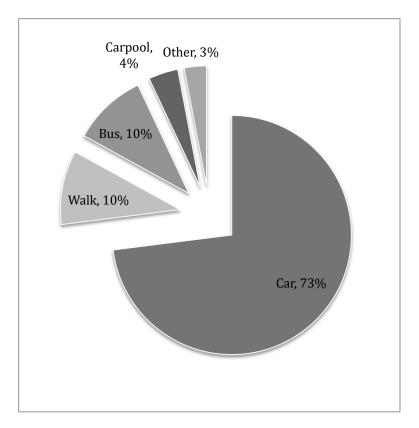
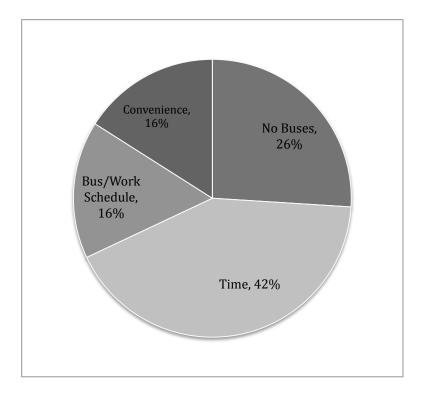


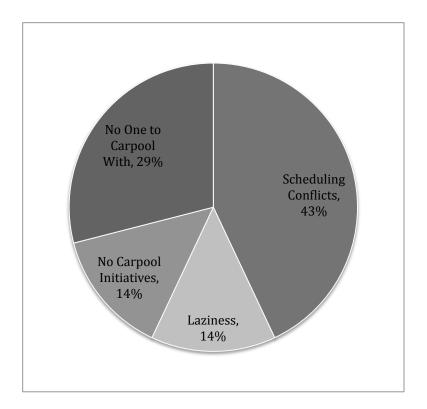
Chart 5.8.1 describes how educators travel to work. Almost three quarters of the respondents traveled to lululemon athletica Polo Park by car (73%). 10% walked, 10% took the bus, 3% carpooled and 3% used other means of transportation, such as rollerblading. No Polo Park educators cycle to work. Half the respondents considered subsidized transit passes to be an incentive to travel to lululemon athletica Polo Park by bus, and the other half did not. Four fifths of the respondents would have considered carpooling with other educators if lululemon athletica Polo Park were to create a carpooling initiative for the store, and one fifth would not. 60% of respondents would have considered cycling to work if the bicycle storage for the store or the mall was improved, and 40% would not.

Chart 5.8.2: Barriers preventing educators from bussing to lululemon athletica Polo Park.



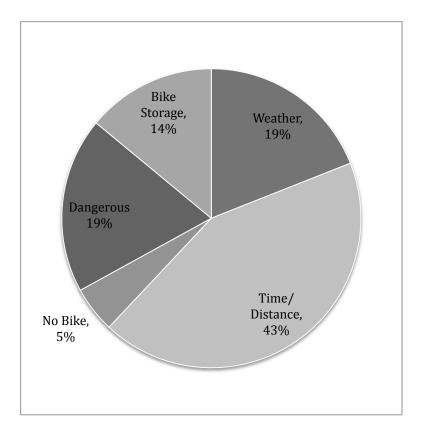
69% of respondents saw barriers preventing them from taking alternative transportation (to cars) to travel to lululemon athletica Polo Park. The barriers that prevented the respondents from taking the bus to lululemon athletica Polo Park were: takes too long (42%), there were no buses (26%), the bus and work schedules did not match up (16%), and it was inconvenient (16%).

Chart 5.8.3: Barriers preventing educators from carpooling to lululemon athletica Polo Park.



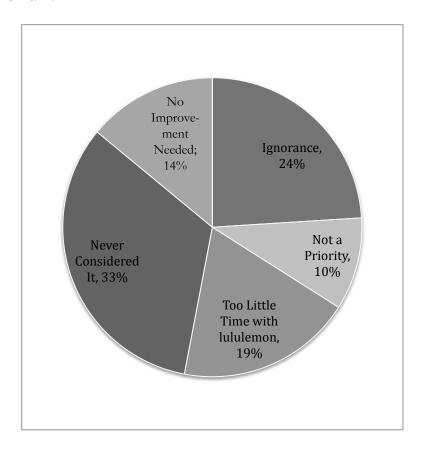
The barriers that prevented respondents from carpooling to lululemon athletica Polo Park were: scheduling conflicts between educators who live in the same neighborhood or along the same route (43%), no one to carpool with (29%), laziness (14%) and no carpool initiatives (14%).

Chart 5.8.4: Barriers preventing educators from cycling to lululemon athletica Polo Park.



The barriers that prevented respondents from cycling to lululemon athletica Polo Park were: it took too long or was too far to cycle (43%), the weather in Winnipeg was too cold in the winter and too hot in the summer (19%), Winnipeg was a dangerous city to cycle in (19%), there was no secure bike storage for mall employees (14%), and the respondents did not own a bike (5%).

Chart 5.9: Why educators have not set goals to improve sustainability at lululemon athletica Polo Park.



While 35% of the respondents believed that there were important environmental issues with lululemon athletica Inc that needed to be addressed or resolved, and 40% of respondents believed there are important environmental issues lululemon athletica Polo Park that needed to be addressed or resolved, only 18% of respondents made a plan to improve the environmental sustainability of lululemon athletica Polo Park.

Chart 5.9 shows the reasons why the respondents did not create environmental goals or plans for lululemon athletica: educators were ignorant to environmental issues at the store (24%); educators did not see sustainability as a priority for lululemon athletica Polo Park (10%); the educators were not employed with lululemon for long enough or worked part

time hours and did not have enough time to have created an action plan or goal (19%); the educators have never considered setting a goal or creating a plan to improve the sustainability at lululemon athletica Polo Park (33%); and, educators did not believe that an improvement is needed (14%).

5.3.2 Guest Survey Results

Almost a quarter (24%) of the guest respondents were aware of environmental sustainability initiatives at lululemon athletica Polo Park. The initiatives the guests were aware of were the former \$0.50 off the total price of purchase if you did not take a bag, offering reusable bags free of cost, the water fountain available in the store, and that the store sold reusable water bottles. However, these initiatives were not store-level initiatives, rather corporate Community Legacies initiatives. Despite this, only 7% of respondents were aware of the Community Legacies Department at the SSC.

Of the 24% aware of sustainability initiatives at lululemon athletica Polo Park, and the 7% of guests aware of the Community Legacies Department at the SSC, 21% have allowed that knowledge to affect their decision to shop at lululemon athletica. The respondents who allowed this knowledge to affect their decision replied that knowing about sustainability initiatives at the store level, and the Community Legacies Department at the SSC, made them view the company in a more favorable light. They knew that it was a company with better values than just the bottom line, and knowing that lululemon is conscious of the environment when making products made them feel better about buying from lululemon.

When asked what the guests associate lululemon athletica Polo Park with, the responses were varied. The responses were found to be in broad categories: people (35%), the retail experience (29%), product (26%) and yoga (10%). I found it very interesting that the people and retail experience were more common than the product. The respondents associate the store with the following:

- a well organized store
- a positive shopping experience
- cool interior design
- cool window designs
- poor selection of clothing
- the giant red doorway
- community involvement
- rude, scornful and unhappy sales people
- friendly staff
- pompous people

The variety of these comments showed that the guest reaction to lululemon athletica Polo Park varied tremendously. It also showed that the educators in lululemon Polo Park are the most noteworthy aspect of the store, positive or negative.

If you could change one thing about lululemon athletic Polo Park in regards to environmental initiatives, what would it be?

When asked what the guests would change in lululemon athletica Polo Park in regards to sustainability initiatives, the most common response was in regards to education. The guests wanted to know what lululemon was doing to improve its sustainability, at the store and the

corporate level. Some guests suggested having composting within the store, or making the recycling bins more obvious to shoppers, others expressed a desire for clothing recycling.

One respondent recommended green energy be used. The most poignant response for me personally was "honesty."

The open-ended question "Do you have any further questions" resulted in some very interesting responses. This is where the most entertaining responses were found, as many of them made suggestions on what kinds of things they would like to see in the store (larger sizes), expressed frustration with the "cookie cutter" look of the clothing, and a frustration that lululemon clothing has become so popular and trendy.

5.3.3 Waste Analysis Findings



Figure 5.3 Recycling bins for guests of lululemon athletica Polo Park

As the Community Legacies Department allows each store to manage their own sustainability initiatives, there is no corporate management or policy of waste. While the department has set the goal to eliminate company waste (in theory working towards a closed loop production system), they have no supported the stores within the company in waste reduction. In the surveys, both educators and guests commented upon the need for composting in the Polo Park store. Through my experience with lululemon athletica, there was no educators were willing to take on composting.

Despite the lack of corporate support and composting, lululemon athletica Polo Park makes an effort to ensure that they redirect as much waste as possible, as well as encouraging guests to do so, through reducing waste and recycling. On the retail floor, there are recycling bins



Figure 5.4 Guest recycling bin by water fountain, lululemon athletica Polo Park

available for guests (Figure 5.3 & 5.4), as well as paper recycling bins behind the cash desk and in the fitting area. There are also garbage bins behind cash, at the pant wall, and in the fitting area.

In the backroom, there are three garbage bins, two recycling bins and one Starbucks paper cup bin. The three garbage bins are found in the bathroom, the kitchen/lounge area and the manager's office. Also in the kitchen/lounge area are the Starbuck cup bin and the recycling bin for plastic, paper, metal and glass. There is an additional recycling bin in the back office for paper that needs to be shredded before it can be recycled.



Figure 5.5 Garbage cans and recycling bins in the backroom of lululemon athletica Polo Park

A major source of waste, one that cannot be attributed to the lululemon athletica Polo Park educators or guests, is shipping related waste. This waste is either found in the form of cardboard boxes and plastic used to protect the garments during transit. When lululemon athletica had grown to 30 stores, the Canadian Distribution Center (DC) implemented the

grey bin program in an effort to reduce waste. Approximately half of all boxes leaving the DC are now cardboard, and the other half are large grey bins that are shipped back to the DC to be reused. However, there is still enough annual cardboard waste that if you were to stack the flattened boxes, the tower would be higher than the Seattle Space Needle, or 605 feet (Curry-Staschkey, 2008). In 2008, the Vancouver DC also started requesting that stores return the protective plastic covering the garments in the grey bins being returned to the DC so that they could either reuse or recycle the plastic (Curry-Staschkey, 2008).

5.3.4 Energy Audit: Lights, "Essentials" and Kitchen Appliances

All lululemon athletica stores are brightly lit and lululemon athletica Polo Park is no different. In fact, clothing sells better when it is easier to see and bathed in light (McKnight, 2007; Underhill, 1999). On daily store walk-throughs, the management team is responsible

for being certain that the adjustable lighting in the store, found upon two tracks that span the lengths of the store, is focused on mannequins wearing the clothing. It is especially important to be well lit when such a large number of the clothing sold and on display is made of a matt black



Figure 5.6.1 Fluorescent and halogen bulbs in lululemon athletica Polo Park

In order to have such a brightly lit store, there needs to be many lights used. I started my energy audit by counting the different kinds of lights in the retail store and in the backroom. There are three types of bulbs used in the various fixtures:

- 75 Watt T12 96 inch Fluorescent Phillips bulbs
- 35 Watt Small Halogen Phillips bulbs

fabric.

75 Watt large Halogen Phillips bulbs

There are a total of 85 of the long fluorescent bulbs used throughout the store. 38 are found in the backroom, including the bathroom and back office. Of these 38 fluorescent bulbs, 32 are on 24-hours per day. On the retail floor, there are an additional 20 fluorescent bulbs found in the fitting areas, and 17 bulbs on track lighting throughout the store. These lights are turned off at night.

The small halogen bulbs are used in the most decorative fixtures around the store. There are 12 in a modern chandelier in the fitting area, and two used in wall sconces framing the largest mirror. There are also 4 found in hanging fixtures over the cash desks at the front of the store. The hanging fixtures are left on at all times.



Figure 5.6.2 Fluorescent and halogen bulbs in lululemon athletica Polo Park

The largest number of bulbs is the 75-Watt halogen bulb. There are 57 of these bulbs on the track lighting throughout the store. These lights are used specifically to focus on mannequins sitting on top of the rack fixtures. There are an additional 19 of these bulbs at the entrance

of the store in pot lighting, and 6 in the front windows. Of these lights, the 6 in the front windows are left on at all times.

With the exception of the lights that stay on at all times, all lights in the store are on one main switch that is turned off at the end of the night. While the hours for the store during non-holiday months are Monday-Friday 10:00am – 9:00pm, Saturday 9:30am-6:00pm and Sunday 12:00pm-6:00am, the staff arrive much earlier, and leave much later. On Mondays, the staff arrives at 7:00am, and leave at approximately 11:00pm. Tuesday through Friday, staff arrive at 6:00am, and leave at approximately 11:00pm. On Saturdays, staff arrives at 7:00am and leave at approximately 8:00pm. On Sundays, the store has free yoga that runs from 10:30-11:45 before the store opens, and the staff has to complete all morning operations before the yogis arrive. They arrive at 8:00am and leave at approximately 7:00pm at night. Based on those hours, the store lights are left on for approximately 108²² hours in a week.

I chose a 28-day cycle because every month has a different distribution of days, and Mondays, Saturdays and Sundays have different hours than Tuesday –Friday. Also, Manitoba Hydro's services are billed based on a 28-day cycle.

I wanted to focus upon the lights in the store specifically because the heat produced by the lights is a common educator complaint. This is supported by the educator survey findings in questions 5, 10 and 14 as well. I am not privy to the lighting load of other retail stores. Based

²² I found it interesting that this number is 108, as 108 is also Mala, a sacred number among yogis.

upon observation alone, within Polo Park, there are more lights per square foot in lululemon athletica than in other stores.

In addition to the lights, there are several essential pieces of electrical equipment, and appliances needed to run the business. The essential equipment are for different aspects of the store's operations. A Proctor Silex Iron and the Brother XL-S130 Sewing Machine are essential for the seamstress to be able to complete the complimentary hemming. Four Sony Speakers and a Sony MP3 Player/Satellite Radio Player are essential for creating the right mood in the store. The four cordless VTech D56151 phones, a Lexmark all-in-one printer/photocopier/fax machine, four Dell towers and LCD monitors (three used for the Point of Sale (POS) systems, one used by the management team in the back office) are essential tools to running a retail operation.

Not all appliances found in the kitchen are used frequently. The Hamilton Beach Brew Station Deluxe Coffee Maker, Panasonic Microwave, Proctor Silex Electric Kettle and Salton Coffee Bean Grinder are used frequently, however the time works out to being less than an hour each. The coffee maker and microwave are left plugged in at all times, causing phantom power draw. On the other hand, the Proctor Silex Toaster is very rarely used. There is also a 22-cubic foot GE Fridge from 2002.

The hours used in the calculations for the "essentials" and the kitchen appliances (for full calculations, please see Appendix 5) are specific to how often each is in use. The total for the "essentials" is 866.36 kilowatt-hours, and the total for the kitchen appliances is 86.48 kilowatt-hours.

The total energy used by lululemon athletica Polo Park is 7473.84 kilowatt-hours, or \$476.83, per month. The cost of energy in Manitoba is \$0.06380 per kilowatt-watt hour. Based on the light-load for lululemon athletica, the cost of lights alone is \$415.89 (6521 kilowatt-hours per 28-day cycle). If the lights that were left on for 24 hours were included in the main switch for the lights, and were turned off at night, lululemon would save 717.12 kilowatt-hours, or \$45.75 per month. The total for lululemon's "essential" electronic equipment and kitchen appliances is 952.84 kilowatt-hours, or \$60.79. lululemon athletica Polo Park's lights account for 87% of their monthly kilowatt-hours. This is significantly more than the average in American stores. According to an estimate by the American Department of Energy, the retail light-load average is 37% (Freyssinier et al, 2006), and BC Hydro estimates that the light-load for Canadian retail operations is 18% (BC Hydro, 2010). While this number is not completely accurate, as the audit is for a retail store within a mall, and does not include heating costs, as that is included in the rent charged by Cadillac Fairview²³.

5.4. People: Educators and Guests

"lululemon educators work on the frontlines of our organization and are in the enviable position of being in intimate contact with our customers on a daily basis. They are an integral part of our company and we value and listen to them. Our goal is to provide customers with the ability to make educated choices and decisions about our products so that when they go out into the world, they educate others for us" (McKnight, 2007 p.99).

-

²³ Cadillac Fairview is the management company that runs Polo Park Shopping Center, as well as many other shopping malls in Canada.

Over and over, through literature and mouths of senior management, the people who work for lululemon are touted as being the one of the most important parts of the company. Bree Stanlake, the former Canadian General Manager for lululemon athletica (currently the General Manager of lululemon's youth brand Iviva Athletica), was quoted as saying:

"One of the most important components in lululemon's expansion is hiring great people. The company makes a strong commitment to employees, so it is essential that we be picky in our hiring process." (McKnight, 2007 p.116)

The success of the company is in large part to the kinds of people that work for the company. Educators are relied upon to give the guests in the store a special experience that walks the line between "self-service" and personal shopping (McKnight, 2007). They do so by being excited about the product a guest is looking at, and giving the guest education points about the technical features of the product that is difficult to see at first glance. Examples of this include describing how a fixture is arranged²⁴, bringing the guests' attention to hidden pockets in the waistband, or telling a guest about free in store yoga. Those are examples of the three levels of education, first, second and third level respectively. The most beneficial aspect of this form of marketing is that it adds value to the product. Often, guests do not understand the pricing of a garment because they cannot see all the features of that garment.

_

²⁴ For instance, the "Pant Wall" in every store is arranged according to the fit of the leg of the pants, from widest leg to tightest leg. This allows the guest to choose the kind of fit they want or need without the educator needing to hold their hand through finding the right style.

This style of "selling" works extremely well for lululemon, and allows the educators to easily drop in information about non-product related aspects of the company. The so-called third-level of education is suited for educating the guests on lululemon's sustainability goals and actions.

Educators find it easy to pass along education about exciting community events the store puts on or supports²⁵ because educators have been trained to educate guests on these events, and the management staff constantly remind them of these events through morning meetings, and while touching base with each educator in the store throughout the day.

Often, management staff will even turn educating about a community event into a game or challenge. The educator who educates the most guests about an upcoming event will be given a gift card to a mall store as a reward for their excellent third-level education.

As the Community Legacies department has left store-based environmental initiatives up to the staff of each store, it should be easy for each educator to share the exciting initiatives that lululemon athletica stores are encouraged to implement. It is also easy to ignore this aspect completely as it is not a core business aspect. The survey results show that educators are not particularly excited or in the know about store-level environmental initiatives, although, educators are open to being a part of sustainability initiatives. This is especially illustrated in the educator survey questions regarding transportation. While 73.3% of Polo Park educators drive themselves to work, educators in the store would be open to taking public transit, biking or carpooling if they had some assistance from senior or local management to do so. 50% of educators would take transit if lululemon offered subsidized

_

²⁵ Examples of these for lululemon athletica Polo Park are the Run with Porter race, The Try a Trail race series, Yoga in the Park and free in-store yoga on Sunday mornings.

transit passes (where only 3% took public transit to get to work at the time of the survey). If lululemon athletica Polo Park had secure bike storage, 60% of educators would cycle to work in the summer months (no educators cycled to work at the time of the survey). And finally, an impressive 80% of all educators would participate in carpooling if lululemon were to set up a carpooling system (3.3% of educators carpooled at the time of the survey). These results suggest that the educators need the Community Legacies Department and store-level management teams to step in to make it easier for them to do so²⁶. This presents a bit of a challenge, as lululemon values an entrepreneurial spirit in their employees, believing that the management staff should not be the ones to facilitate change²⁷ (lululemon c, n.d.),

Of particular interest to the transportation section are the barriers the educators listed preventing them from taking alternate transportation to work. Most of the responses are barriers that lululemon cannot do anything about²⁸. However, in every category, there are barriers that lululemon can assist with.

Bicycle storage is a major concern. According to the Winnipeg Police Services, over 3,000 bikes are stolen annually in the Winnipeg region, with less than half recovered (Winnipeg Police Services, 2005). Few bikes would fit in the back room of lululemon Polo Park, even if bikes were allowed to enter the mall. Polo Park Shopping Center does have empty indoor spaces that are accessible by outdoor entrances that could easily be used for bike storage. Mall management is not willing to assume the responsibility if those bikes were stolen. The management team at lululemon Polo Park could work with the mall to convert the space if

-

²⁶ Implementing a Top Down Management Model for sustainability.

²⁷ lululemon currently employs a Bottom Up model for sustainability.

²⁸ For example, the weather, where people live in the city, danger on the road, laziness and convenience.

they made the effort. As lululemon Polo Park has already worked with the mall to implement Starbucks cup composting, and initiative that mall management was initially opposed to, this could be possible.

Another bike related initiative that could possibly encourage lululemon athletica Polo Park educators to cycle to work is to sponsor bike registration with the city. Few bicycles in Winnipeg are registered, and when the Winnipeg Police recover an unregistered stolen bike, they put it up for auction in the annual April Bike Auction. Over 1,000 unclaimed bikes are put up for auction, as less than 15% of recovered bicycles are returned to their owners (Winnipeg Police Services, 2005).

In 2008, Erin Palmer, an educator from lululemon Polo Park²⁹, learned that Starbucks cups were sent for composting at every other Starbucks location in the Province of Manitoba with the exception of the Polo Park location. Erin is an avid Starbucks beverage drinker, and she believes that there is something about the paper cups that makes the beverage taste better. She does not enjoy her drinks as much when they are in a reusable mug. The \$0.30 discount offered for bringing using a reusable cup is not enough of an incentive to convince her to do it. Discovering that Wriggler's Ranch exists in Manitoba, and that they use Starbucks cups in their vermiculture inspired her to work with Polo Park management to make this happen. Originally Polo Park management was resistant to having a bin for the cups in the garbage area because they were concerned about rat infestation. As the bin for the paper cups is

_

²⁹ The most entertaining response on the guest survey for me was among the responses for question #9 "When you think of lululemon athletica Polo Park (the store), what do you associate the store with? One respondent replied that they associate lululemon Polo Park with Erin Palmer. This could be because she is a personal trainer, and the former Community Leader for the store, but I would like to believe it is because she spearheaded the campaign to recycle Starbucks paper cups.

locked and air tight, it was not a concern. Until Erin's initiative, no one had educated mall management that the bins were not a healthy risk. Erin worked as a facilitator between Starbucks, Polo Park management and Wrigglers Ranch to make cup composting from the Polo Park Starbucks happen (Green, 2008). This example shows that even when mall management is not originally interested in a sustainability initiative, creating powerful partnerships with sufficient effort and education can change their minds.

Another barrier to alternative transportation at lululemon, Polo Park is that of scheduling conflicts among people who live in the same area. The lululemon Polo Park management team could schedule the store so that people who live in similar areas started and ended their shifts together, thus allowing them to plan to carpool. However, educators can make this work themselves quite easily. When I was working for lululemon, I lived with another educator for six months. When one of our shifts started an hour earlier than the other, one of us would come to work early, and the other would stay late. Similarly, an engaged couple who lived together and both worked at lululemon Polo Park would work to switch their shifts with other educators, or call the store to find out if one could come to work early or late (if there shifts started an hour or two apart), so that they could drive together and only use one car.

Mountain Equipment Co-op found in their 2007 Accountability Report that employee commuting accounted for 16% of their total GHG emissions (MEC b, 2007). They found that 82% of their employees used alternative transportation to cars, with only 16% commuting by single-occupancy car. As both MEC and lululemon stores are centrally located, they are easily accessible by public transportation, and both companies provide

showers to encourage self-powered transportation³⁰ (McKnight, 2007). Reducing the number of single-occupancy cars used by employees would have an enormous effect on the company's total environmental impact. When you take into consideration that 73% of lululemon athletica Polo Park employees drive single-occupancy cars to commute to work, in comparison to MEC's 16%, it can be inferred that the percentage of lululemon's total GHG emissions attributed to employee commuting would be much higher than MEC's 16%.

Yet another barrier lululemon could control is to make an effort to have shifts coincide with bus schedules for educators who are willing to take the bus if their shifts line up with transit. This would require quite a bit more effort on the part of the lululemon Polo Park scheduler, but one of lululemon's founding principles is that of investing in the educator so that the educator will invest in the company (McKnight, 2007). Facilitating this would definitely inspire educators to both take the bus and to talk about it.

Communication is highly valued by senior management at lululemon. It is, in fact, the basis of the "educate instead of sell" model (McKnight, 2007). When the data from the Guest survey was compiled and analyzed, every response shows quite clearly that the people who shop at lululemon athletica do not know what the store, or even the corporation has done to reduce its environmental footprint. Educators simply are not communicating this information. At first, this surprised me. I expected the guests to know more about lululemon Polo Park's initiatives. There are two possible explanations for this. Either educators do not know very much about any initiatives, and are not very excited about them, or educators have nothing to educate upon, as there are so few initiatives.

_

³⁰ This is not, however, in an effort to reduce the company's GHG footprint, rather to encourage the educators to live the healthy, active lifestyle the company espouses.

There are three main reasons why the education model works so well to sell clothing. First, educators are excited about the clothing. Every time a new garment comes into the store, educators are all over it, trying to find out all the education points, what makes it so special, and find all the hidden details before the rest of the educators. When a regular guest comes in, educators know that they are not interested in what the store always has. Rather, regular guests, who visit the store on a daily, biweekly, or weekly basis, are generally only interested in the new products. They also expect that educators know what will appeal to them, particularly if this regular guest is known for a specific fitness activity.

Second, educators wear and workout in lululemon clothing, giving them personal stories with which to back up their education. When a garment works well for their work out, educators like to share the reasons why the garments they wear are the best ones for a that style of fitness. For example, when I ran the New York City Marathon, I did so wearing a pair of non-running specific crops. These crops were the most comfortable for me to run in, and had a flared leg. Whenever a guest would come in looking for a pair of running crops that were not tight, I would point them to the Boogie Crops, and share my story with them. The excitement I felt (and still feel) about having run a marathon came through in my education. This anecdotal information shared was often the tipping point for the guest, and most guests tried on the crops because of the story, not the technical features.

Third, every sale contributes to additional potential earnings with the shared commission pool. Money is a powerful motivator, and the educators become even more excited about guests looking for garments know that every pair of pants can increase the earnings of every

employee of the store. As there is no individual commission however, guests do not feel the pressure of an educator trying to sell them clothing to pad their own check. Trust is earned little by little, especially because consumers today do not trust sales people, so when an educator does not act like a salesperson, the trust in them grows more quickly (McKnight, 2007).

Sustainability initiatives do not fit into the "educate instead of sell" marketing model, and because of this, there is no reason for educators to talk about what is going on (especially if they do not know). It is very rare during a conversation about running, yoga, or the clothing that is most appropriate for those activities, for Community Legacies to come up naturally in the conversation³¹. Aside from that, educators just are not interested in or excited about Community Legacies, because it has no direct impact upon them. Even though all educators responded to the question about how important environmental issues are to them with Important (30.3%), Very Important (30.3%) or Extremely Important (39.4%), it is not reflected in the educators' actions on the floor at lululemon Polo Park. And while it is possible to believe, according to Polo Park's educators, that it is important for lululemon athletica Inc. and lululemon Polo Park to address their environmental impacts, that does not mean that they feel they have to do anything about that interest. 55% of educators replied that it is extremely important for lululemon athletica Inc. to address its environmental impacts, and 44% responded that it was extremely important for lululemon Polo Park to do so, but the survey responses as to the store's environmental issues were infrequent and rare.

-

³¹ Usually, Community Legacies comes up when the guest asks questions about manufacturing, and working conditions in factories overseas, as well as why lululemon no longer manufactures all their products in Canada.

A good example of this is that only 17% Polo Park educators had suggestions on how to improve water wastage in the store, 26.5% of educators gave suggestions on how the corporation could reduce its environmental footprint, and 32.4% of educators gave suggestions on how to improve the store itself. Even fewer have made any goals towards improving the store's sustainability, with four educators responding to that question. When asked "why educators have not set any environmental goals," 62% of educators gave reasons why they have not. This data indicates that educators are not educated in the company and store level initiatives, and also do not value it as an important aspect of the company and store. If they are not educated in these initiatives, they cannot transfer the knowledge to guests and in turn, start a buzz in the community about lululemon athletica's sustainability initiatives (McKnight, 2007). In a twisted loop, lululemon's original marketing director Darryl Kopke, who came up with the lululemon vernacular and the marketing concept for the company (before sale people were called educators and educating was still selling), came up with marketing mantras for the company. These mantras are still used for garment and community event education (McKnight, 2007). The second mantra is: "If no one is going to talk about it, do not do it." Guests are not talking about sustainability initiatives at lululemon Polo Park, even when an initiative is being educated about because the education is not exciting. This makes the management team less likely to make those initiatives.

The data for guests reflects the lack of knowledge transfer. Approximately one quarter (24%) of guest respondents were aware of any store level initiatives. When asked to expand upon which initiatives they were aware of, the only one that was cited was not actually a store level initiative at all. Three guests brought up the reusable bags offered at purchase, and that there used to be a \$0.50 incentive to not take a bag. Two guests brought up the water bottles that

are for sale at lululemon Polo Park, but again, this is not a store-level initiative. Similarly, only 7% of guests were aware of the corporate Community Legacies department.

The biggest detriment to any environmental initiative of lululemon athletica Polo Park is that there is little educating about these initiatives and there is little going on at the corporate level. Without the education factor, the community members will not get excited about store level environmental initiatives, and without that excitement, the managers of the store will not implement or strongly encourage educators to come up with sustainability actions for the store. This laissez faire style of management does not work for environmental initiatives because there is no incentive to undertake these at the store level.

5.5 Store initiatives

Within the lululemon athletica Polo Park store, very little has been done to improve the store's sustainability and reduce its environmental impact. Over the three years that I was employed at lululemon Polo Park, there were five environmental initiatives that took place.

This section of the thesis is drawn from my journaling and observations from March 2007 to February 2010.

In my first month with lululemon, the Polo Park educators were given reusable plastic mugs to use on the floor. The educators were encouraged to decorate our mugs to compliment the goal boards we had posted in the fitting area of the store. This was done so that guests would ask about the decoration on the mugs, and a conversation about goal setting would follow. Interestingly, most educators used the mugs for approximately a month, and after

that returned to using the Starbucks paper cups. I also stopped using my cup – as the plastic lining was not durable enough to be sustainable.

Over the summer months of 2007, I was given the responsibility of revamping the recycling system in the store. This was a necessity because educators were taking too long to sort through the recycling at the end of the night. The system had to be made easier to improve efficiency at the end of the night. Within Polo Park, stores are accountable for separating their recyclables into large individual containers for paper, plastic, metal and glass. This is often disgusting and dirty work. To improve the recycling system in the store, I purchased four small white garbage pails that fit into a blue recycling bin. Inside these white garbage pails, I wrote what to put into each bin, (one for metal, one for plastic, one for glass and one for paper), and if anything needed to be done to the recycling prior to throwing them away. This made the worst part disposing the recycling easier, and was educational, as many educators never even thought about washing out the inside of a plastic food container.

In 2008, lululemon athletica Polo Park stopped ordering expensive plastic window decals, and started using a local artist to come in and paint any decorations or lettering we wanted on the windows. This also allowed us to use the money saved on improving the decorations in the window. Before we gave up the plastic decals, we also had several sustainably designed window displays. The first is Image 5.1, "OMing in on a sustainable future," featured at the beginning of this chapter. We painted the letters onto scrap pieces of fabric left over from hemming pants. The focus of that window was to bring attention to the sustainable packaging the company was using for the holiday season. The second was a window focused on heart health for the month of February. The theme of the window was "Heart Broken,"

and we used gift cards to create the effect of a red brick wall in the window that was broken in the middle³². The gift cards, manufactured by Givex, are not recyclable because of the magnetic strip along the back of the card. For the entire month of January, stores in the prairies region shipped empty, used gift cards from the holiday season to our store with clothing consolidations³³. The effect was very eye catching and well received by the Community Legacies department³⁴.

The most recent, and last environmental initiative undertaken by lululemon Polo Park was Erin Palmer's Starbucks' cups initiative in 2009, discussed earlier. It was successful, and is still in place today. This was the initiative that brought lululemon Polo Park the most attention, largely because the mall included the initiative in their monthly internal newsletter. This initiative was also featured in lululemon's internal newsletter, The Juice.

There have been so few improvements to the sustainability of the store partly because few people believe that improvements are necessary. The store design includes several environmentally friendly features. The paint has low volatile organic compounds (VOCs), improving air quality. The hardwood flooring is reclaimed wood from an old structure in Brandon, Manitoba. The lighting used is as low a wattage as possible, considering how

_

³² The mannequins were dressed and styled to represent some of the main causes of heart disease, such as obesity, smoking and eating disorders. The "smoking" mannequin caused quite a bit of controversy, including several letters (with accompanying pictures) to head office.

³³ Polo Park is a markdown store. We receive all the markdowns from the various stores in the prairies because they sell in Winnipeg, where they do not usually sell as well in other cities. On average, Polo Park receives at least 10 boxes of consolidated markdowns from the prairies region (and sometimes other regions) per week.

³⁴ I was very amused to find that this window design was included in one of the guest responses. This guest expressed anger over the "anorexic" mannequin, and accused lululemon of espousing unhealthy lifestyles. While the guest missed the point of the window display, it does prove that guests will talk about controversial marketing.

brightly the store must be lit according to corporate specification. However, halogen light bulbs are inefficient in comparison to other lighting options. In a study conducted by Freyssinier et al (2006), they found that using colored light-emitting diode (LED) lighting in a retail window display had no significant impact on sales, but offered a significant reduction in display lighting (a 50% reduction). Although lululemon athletica would not use a colored set of lights in their window display, considering alternative lighting, such as metal halide fixtures and LED bulbs, would be financially beneficial to the company (Freyssinier et al, 2006). The store also uses largely environmentally friendly cleaning products, with the exception of Pledge dusting spray. The toilet paper is 90 to 100% Post-consumer recycled fiber (a no name brand purchased from Corporate Express, a bulk office supplies company), and the printer paper is 75% post-consumer recycled product (also no-name from Corporate Express).

However, as can be seen from the light audit above, lululemon requires a significant amount of electricity to run the store. If the cost of the electricity bills somehow impacted the store's budget, I believe the store management would take reducing their bills more seriously. However, the Manitoba Hydro bills are paid for by the mall, and subsequently Cadillac Fairview, the mall management company, bills lululemon athletica Inc. head office for the cost of the electricity used, which cost skips lululemon Polo Park's management team entirely. Without a feedback loop or an incentive to reduce them, these bills are considered to be standard operating costs for the company. If the Polo Park managers had to balance the electricity bills to positively affect their income they would be more excited about making a change. In other words, the way in which a lululemon store's budget is managed can have significant influence on that manager's pay. If the budget is well managed, and the

store comes in under budget, the manager receives a bonus. If it is not, the manager does not receive a bonus. This financial incentive has an incredible effect on how the store is run, and inspires the manager to be very involved in those areas. This would be a simple fix for many of the store's issues. If the pay structure for managers was changed to incorporate this, the managers would definitely take a serious interest in improving the sustainability of their store.

5.6 Conclusions

While there are a number of things that lululemon is doing for the environment, there are always areas of improvement. These improvements are needed at all levels. A stronger mandate and reward system offered by corporate head office would have a positive impact on managers and educators. Managers and educators would thus be more willing and interested in participating in implementing environmental initiatives in the store, including education. Clearly, when the only environmental initiative that guests knew about was a corporate program incentive to not take a shopping bag, more work has to be done and it has to start at head office. Even though this incentive was eliminated in 2009, guests still remember it because the "bag discount" was offered across Canada. All educators, on every transaction, would ask guests to take advantage of the bag discount. Because every educator was in the know, and were educating on the discount, it shows that guests can get excited about sustainability initiatives at lululemon athletica. This discount was stopped because the Community Legacies Department did not feel that guests should need an incentive to be environmentally sustainable, and they wanted each store to encourage the guests within their

community to be environmentally sustainable in a way that was unique to their store (lululemon c, n.d.).

Store management currently does not need to be involved in sustainability issues to fulfill their responsibilities. An easy way to encourage their involvement is to include various environmental indicators or costs of natural resource use in the manager's pay structure. Some bonus for keeping the cost of water and of electricity low would provide incentive for the manager to show an interest that the lights are off at night or fixtures are replaced with more efficient bulbs, for example. Managers, being responsible for hiring, can also have an extremely positive impact on the store by ensuring that the newest hires have a high level of interest in sustainability improvement, as well as the desire to take action to improve sustainability at the store level.

While Grassroots Community Legacies initiative are "bottom up" models, that is, the educators in the store are responsible for making decisions as a group, what the company needs is a combination of a bottom up and top down model. The educators would know best what sustainability initiatives are both needed and would work best for their stores, but they need a top down decision making system in order to see these changes being made (Figge, Hahn, Schaltegger & Wagner, 2002). Using this dual-system approach would give educators the power to determine which changes need to be made, however would ensure that those changes would be actioned instead of just talked about (Figge et al, 2002).

While managers are responsible for hiring local staff, corporate office suggests the questions and protocol for hiring and so both are responsible for the hiring process. In the past few

years the focus has been to hire people who have goals to join the management team, and who value yoga or fitness. To start attracting people with environmental values, interviews should include questions on environmental behaviors and values.

Lastly, outreach on sustainability to educators is needed to create some movement. If educators are engaged and paid to participate in environmental initiatives, they will educate about them, as has been seen with Timberland and MEC in Chapter 4. A lot has to be done to move this from a bore to a buzz that inspires lululemon athletica Inc. and lululemon athletica Polo Park in making sustainability an important part of the operation of the store (McKnight, 2007).

Chapter 6: Conclusion

lululemon athletica is a very young company, and has enjoyed significant success and growth in a fairly short period of time. The original location, in the Kitsilano neighborhood of Vancouver opened in 1998. Their first Toronto store opened on Queen Street in 2002, followed months later by the first store in Calgary. In 2003, the first lululemon store was opened in the United States, in Santa Monica, California. As of January 31, 2010, there were 124 stores in operation in Canada, the United States, Australia and Hong Kong.

Nike, Timberland and Mountain Equipment Co-op are apparel companies that are considered to be among the industry leaders in sustainability practices among apparel companies. This was shown through the Climate Counts Scorecards and an analysis of their company websites in Chapter 4. In all areas analyzed, they excel over lululemon athletica. The key weaknesses of lululemon athletica in regards to sustainability are a lack of corporate influence on store level sustainability initiatives and poor communication at the local and corporate levels.

6.1 Lack of high or medium level leadership

Corporate headquarters through the Community Legacies Department has given the responsibility of implementing sustainability initiatives entirely to the educators of the company, who have the least managerial control and no budget. It is not realistic to expect employees, or educators, to take on the sustainability initiatives for an entire store without the support of the management team and the Store Support Center, especially when the position of Community Legacies Advocate is not a paid position, and the educator who

takes on the position is not given any additional paid time or budget to be able to work on any of these initiatives, as explored in Chapter 5. While the educators of lululemon athletica are one of their key strengths, the Community Legacies Department has put too much pressure on those educators to spearhead all their store-level initiatives. This expectation has, in many cases, resulted in the burnout of educators in the company, as they attempt to do the job of the head office without their resources. To prevent this added pressure upon the educators of the company, a top down model needs to be implemented to counter the currently ineffective bottom up approach (Figge et al, 2002). A strong corporate environmental management plan attracts great people to a workplace (Greening & Turban, 2000), and lululemon athletica's claims that they are a sustainable brand could be attracting people who do not realize how weak the sustainability plan is.

My initial attraction to lululemon athletica was the sustainability initiatives the Community Leader described to me with excitement in February, 2007. Her energy was infectious, and I wanted to be a part of a company that inspired such enthusiasm about sustainability initiatives. I started working for lululemon athletica Polo Park shortly thereafter. I took on the sustainability initiatives at the store, eventually become the Community Legacies Advocate. As time passed, I alone could not achieve significant or meaningful change at the store level. There was no middle management support, and when I reached out to the manager of the Community Legacies Department, the manager continued repeating throughout the conversation that I was responsible for store-level change, the vision of the company was for the educators to change the world. While lululemon athletica values personal responsibility and entrepreneurship highly, working in a store with educators who were not interested in sustainability initiatives, with a management team that did not see

sustainability as a priority, caused me to give up. This was a contributing factor to why I tendered my resignation to lululemon in February, 2010.

lululemon athletica would do well to adopt some of Nike, Timberland and MEC's best practices in these areas. Nike and Timberland have high level management boards set up to focus upon the company's initiatives, and these managers and employees are the driving force behind them. Their jobs are also exclusively to work with sustainability initiatives within the company. These environment-specific employees have facilitated the implementation and action of all sustainability efforts within their companies.

6.2 Communications

The communication weakness comes across primarily on lululemon athletica's website.

There is very little information about lululemon athletica's efforts in sustainability, and the information that is available is very brief and not at all in depth. All three of the industry leaders examined in Chapter 4 have incredible sustainability presences on their websites.

With the exception of Nike, where finding the information is challenging if you attempt to find it from their homepage, the information is not only easy to find, but also has a wide breadth and depth. All three websites' information includes production-level initiatives within factories, sustainable product development and the goals of each company in various areas (such as reducing Greenhouse Gas emissions, reducing waste, improving energy efficiency, and being carbon neutral). In the case of MEC and Timberland, their websites also includes the sustainability initiatives of their retail locations, and the store development sustainability initiatives.

Using word-of-mouth, or grassroots marketing to engage the customer in the various aspects of lululemon athletica has been an effective way to get their target market buzzing in nearly every area of the company (Hargrave & Kao, 2010). Throughout their growth, lululemon athletica has undertaken several guerilla-marketing schemes that have, for better or worse, gotten the communities buzzing. Examples of these marketing schemes include the Shop Nude initiative when they launched eCommerce on the lululemon athletica website; giving the first 30 naked guests to arrive at a store opening (the Robson Street location in Vancouver in 2002 and Kingston in 2007) a brand new lululemon outfit; and practicing guerilla yoga at the intersection of Queen and University in Toronto.

The described examples of creating buzz were exceptionally successful (the Robson Street "nudiefest" was even featured on CNN). These examples are a small sampling of the buzz-creating events spearheaded by lululemon, and show that lululemon excels in getting their message across without the use of traditional marketing and media. This begs the question, why have they not been able to transfer this ability to their sustainability initiatives?

The answer is two-fold. First, lululemon athletica has not created a buzz about their sustainability initiatives because there is nothing to start a buzz about. For all the excited conversation by the SSC about the Community Legacies Department and their initiatives across the company, there has not been any action to reflect the conversation. Second, one of the strengths of the company, as mentioned, are the educators and their ability to enroll and engage guests in all sorts of events, initiatives and items of clothing. However, educators are not excited about the sustainability initiatives, corporate or store level because little is

being done. If they are not excited about these initiatives, the guests will never be, as the educator is the first level of contact between the company and the guest.

6.3 Final Thoughts

To be a leader in sustainability, human resources, a budget, training for educators, programming and senior level management support is needed to create a stronger Community Legacies Department presence, under this or another name. Until the employees and managers have a mandate, programming, training and budget from the Community Legacies Department, sustainability at the corporate level as well as the store level, will never be a priority or even a consideration in decision making. lululemon athletica is, as mentioned, a very young company and is still learning. Any mistakes made by the company are largely made because lululemon athletica makes changes so quickly that they often miss the smaller details (McKnight, 2007). lululemon athletica needs to step up, and learn from their contemporaries, instead of waiting for a Community Legacies related mistake to take place. In a company who promotes its responsibility and accountability, their sustainability initiatives do not reflect this marketing.

References

- Bansal, P. & Roth, K. (2000). Why Companies Go Green: A Model of Ecological Responsiveness. The Academy of Management Journal. Vol 43(4): 717-736.
- BC Hydro. (2010). Retail Technology Tips. Retrieved January 11, 2011 from http://www.bchydro.com/powersmart/technology_tips/managing_energy_costs/retail.html
- Blanchard, T. (2007). Green is the New Black: How to Change the World in Style. Hodder & Stoughton: London.
- Benz, B. (2000). Let it green: the ecoization of the lexicon. American Speech. Vol 75(2): 215-221.
- Byrne, R. (2006). The Secret. Simon & Schuster: London.
- Catto, S. (December 19, 2005). Building a Yoga OM-pire. Time Magazine, p. 86.
- Choudury, B. (2000). Bikram's Beginning Yoga Class. Penguin: New York, NY.
- Climate Counts a. (n.d.). Climate Counts. Retrieved December 10, 2010, from http://climatecounts.org/
- Climate Counts b. (2006). Climate Counts Scorecard. Retrieved December 10, 2010, from http://climatecounts.org/get_file.php?file=/pdf/Climate_Counts_Scorecard.pdf
- Climate Counts c. (2011). Company Scorecard: Nike. Retrieved February 05, 2011, from http://climatecounts.org/get_file.php?file=/pdf/NikeScorecard.pdf
- Climate Counts d. (2011). Company Scorecard: Timberland. Retrieved February 05, 2011, from http://climatecounts.org/get_file.php?file=/pdf/TimberlandScorecard.pdf
- Curry-Staschkey, A [producer, interviewer]. (2008). Making Choices: Personal Choices for Global Change, Interview with G. Tsosas (video). Retrieved August 21, 2008, from http://www.lululemon.com/community/legacies/creating
- Darnall, N., Gallagher, D.R., Andrews, R.N.I. & Amanal, D.. (2000). Environmental Management Systems: Opportunities for Improved Environmental & Business Strategy? Environmental Quality Management. Vol 9(3): 1-9.
- Deutsch, C.H. (June 19, 2007). Climate Change Scorecard Aims to Influence Consumers. Retrieved: http://www.nytimes.com/2007/06/19/business/19green.html

- Figge, F., T. Hahn, S. Schaltegger & M. Wagner. (2002). The Sustainability Balanced Scorecard Linking Sustainability Management to Business Strategy. Business Strategy and the Environment. Vol 11(5): 269-284.
- Freyssinier, J.P., Frering, D, Taylor, J., Narendran, N. & Rizzo, P. (2006). Reducing lighting energy use in retail display windows. Retrieved: http://www.lrc.rpi.edu/programs/solidstate/pdf/Freyssinier-SPIE6337-51.pdf
- Gajda, A. & Kleffer, S.W.. (2007). Celebrity Meets Science: Hollywood's
 Environmentalism and its effect. Geological Society of America Today, 17 (10): 4445.
- Gallard, A. (2010). Best Current Practices in Purchasing: The Apparel Industry. As You Sow. Retrieved: http://www.asyousow.org/publications/apparel_report.pdf
- Gan, H.J., Cao, H., Farr, C. & Kang, M. (2010). Quest for the Eco-Apparel Market: Study of Mother's Willingness to Purchase Organic Cotton Clothing for their Children. International Journal of Consumer Studies. Vol 34: 648-656.
- Grayson, R.A.S. and McNeill, L.S. (2009). Using Atmospheric Elements in Service Retailing: Understanding the Bar Environment. Journal of Services Marketing. Vol 23(7): 517-527.
- Green, D. 2008. December's Polo Park Retail Monthly Newsletter. Cadillac Fairview.
- Greening, D.W. & Turban, D.B. (2000). Corporate Social Performance as a Competitive Advantage in Attracting a Quality Workforce. Business & Society. Vol 39(3): 254-280.
- Hargrave, T. & Kao, G. (September 15, 2010). Marketing for Hippies: Hippie Blogging and Social Media Secrets Webinar. Retrieved September 15, 2010, from http://www.theknowliketrustfactor.com
- Hawken, P. (1993). The Ecology of Commerce: A Declaration of Sustainability. Collins Business: New York, NY.
- Hawken, P, Lovins, A. & Lovins, L.H. (1999). Natural Capitalism: Creating the Next Industrial Revolution. Little, Brown and Company: New York, NY.
- Henriques, I. & Sadorsky, P. (1996). The Determinants of an Environmentally Responsive Firm: An Empirical Approach. Journal of Environmental Economics & Management. Vol 30(3): 381-395.
- Holbrook, M.B. & Hirschman, E.C. (1982). The Experiential Aspects of Consumption: Consumer Fantasies, Feelings and Fun. Journal of Consumer Research. Vol 9(2), 132-140.

- Hyllegard, K.H., Ogle, J.P. & Dunbar, B.H. (2006). The Influence of Consumer Identity on Perceptions of Store Atmospherics and Store Patronage at Spectacular and Sustainable Retail Site. Clothing and Textiles Research Journal. Vol 24: 316-334.
- International Organization for Standardization. (n.d.). ISO. Online source, available: http://www.iso.org. Accessed August 21, 2008.
- Kaminoff, L. (2007). Yoga Anatomy. Human Kinetics: Campaign, IL.
- Kolk, A. (2003). Trends in Sustainability Reporting by the Fortune Global 250. Business, Strategy and the Environment. Vol 12: 279-291.
- Kropp, R. (December 24, 2010). Companies Ranked by Climate Counts Improve Scores by 14% in 2010. Retrieved January 12, 2011, from http://www.socialfunds.com/news/article.cgi?SF Article=3110
- Lally, A. P. (n.d). ISO 14001 and environmental cost accounting: The gateway to the global market. Retrieved August 20, 2008, from: http://findarticles.com/p/articles/mi_qa379l/is_199807/ain8800964 /pg_4
- Lozano, M. & Vallés, J. (2007). An Analysis of the Implementation of an Environmental Management System in Local Public Administration. Journal of Environmental Management, 82(4): 495-511.
- lululemon a. (n.d.). lululemon athletica. Retrieved August 21, 2008, from http://www.lululemon.com
- lululemon b. (2010). lululemon athletica Inc. Securities and Exchanges Commission Report.
- lululemon c. (n.d.). lulunet. Retrieved February 20, 2010, from http://www.lulunet.info
- lululemon d. (n.d.). Creating Community Legacies. Retrieved August 21, 2008, from http://www.lululemon.com/community/legacies/creating
- Matheson, C. (2008). Eco Chic: Saving the Earth in Style. Sourcebooks Inc: Naperville, Illinois.
- McCormick, H. (2007). Sustainability: sprucing up corporate social responsibility with Timberland. Personnel Today. Online source, available: http://www.personneltoday.com
- McDonough, W & Braungart, M. (2002). Cradle to Cradle: Remaking the Way We Make Things. North Point Press: San Francisco.
- McKnight, L. (2007). lululemon athletica: Elevate to Greatness. Echo Memoirs: Vancouver.

- MEC a. (2006). Sustainability Report. Retrieved December 18, 2010, from http://images.mec.ca/media/Images/pdf/accountability/MEC_2006_Accountability_ Report_v1_m56577569830970401.pdf
- MEC b. (2007). Sustainability Report. Retrieved December 18, 2010, from http://images.mec.ca/media/Images/pdf/accountability/MEC_2007_Accountability_Report_v1_m56577569830738027.pdf
- MEC c. (2009). Interim Accountability Report. Retrieved December 18, 2010, from http://images.mec.ca/media/Images/pdf/accountability/MEC_2009_Accountability_ Report_v1_m56577569830970401.pdf
- MEC d. (n.d.). Mountain Equipment Co-op. Retrieved December 10, 2010, from http://mec.ca.
- Mehyk, S.A, Sroufe R.P. & Calatone, R. (2003). Assessing the Impact of Environmental Management Systems on Corporate Environmental Performance. Journal of Operations Management. Vol 21(3): 329-2351.
- Meyer, W.B. (1996). Human Impact on the Earth. Cambridge University Press: New York, NY
- Miniwatts Marketing Group. (2010). Internet World Stats Usage and Population Statistics. Retrieved December 18, 2010, from http://www.internetworldstats.com
- Morhardt, J.E. (2010). Corporate Social Responsibility and Sustainability Reporting on the Internet. Business, Strategy and the Environment. Vol 19: 436-452.
- Morrow, D. & Rondinelli, D. 2002. Adopting Corporate Environmental Management Systems: Motivations and Results of ISO 14001 and EMAS Certification. European Management Journal. Vol 20(2): 159-171.
- Nike a. (n.d.). Nike Home. Retrieved December 18, 2010, from http://www.nike.com
- Nike b. (n.d.). NikeBiz Nike Inc. Official Site, the world's largest, leading athletic brand. Retrieved December 18, 2010 from http://www.nikebiz.com/
- Ogle, J.P., K.H. Hyllegard & B.H. Dunbar. (2004). Predicting Patronage Behaviors in a Sustainable Retail Environment: Adding Retail Characteristics and Consumer Lifestyle Orientation to the Belief-Attitude-Behavior Intention Model. Environment and Behavior. Vol 36(5): 717-741.
- O'Rourke, D. (2005). Nongovernmental Organization Strategies to Influence Global Production & Consumption. Journal of Industrial Ecology. Vol 9(1-2): 115-128
- Petermans, A, Van Clempoel, K., Nuytz E. & Vanrie, J. (n.d.). Measuring Emotions in Customer Experiences in Retail Store Environments. Journal of Retail & Distribution Management. 2257-2265.

- Robinson, S. (2007). Greening Retail. Journal of Retail and Leisure Property. Vol 6: 287-290.
- Sayre, D. (1996). Inside ISO 14001: The Competitive Advantage of Environmental Management. St. Lucie Press, Delray Beach, FL.
- Schaper, M. (2002). Small Firms and Environmental Management. International Small Business Journal. Vol 20(3): 235-251.
- Schwartz, R.M., Leland, R.G., Gelfond, S.H., Mussio, D, Zilbaerg, D.A. & Kennedy, C. (2010). SEC Issues Interpretive Guidance Concerning Climate Change Disclosure. Retrieved May 01, 2010, from http://www.ffhs.com/sitefiles/Publications/2065B3C0527460B033A369DCIE229732.pdf
- Seyfang, G. (2004). Shopping to save the planet? A Critical Analysis of Sustainable Consumption Policy and Practice. Paper presentation at ECPR Joint Sessions, Uppsala: "Citizenship and the environment."
- Singh, A, Syal, M., Grady, S.C. & Korkmaz, S. (2010). Effects of Green Buildings on Employee Health and Productivity. American Journal of Public Health. Vol 100(9): 1665-1668.
- Sloan, P., Legrand, W., Tooman, H. & Fendt, J. (2009). Best Practices in Sustainability: German and Estonian Hotels. Advances in Hospitality and Leisure. Vol 5: 89-107.
- Story, L. (2007). "Seaweed" clothing has none, tests show. New York Times. Retrieved March 15, 2008, from http://www.nytimes.com/2007/11/14/business/14seaweed.html
- Taylor, B. & LaBarre, J. (2007). Mavericks at Work: Why the Most Original Minds in Business Win. Harper Paperbacks: New York, NY.
- The Economist. (December 20, 2007). Well Positioned: lululemon, a Canadian clothing firm, rides the yoga boom. The Economist, p. 75.
- Timberland a. (n.d.). Timberland Home. Retrieved February 13, 2011, from http://www.timberland.com
- Timberland b. (n.d.). Timberland Earthkeepers Collection. Retrieved February 13, 2011, from http://earthkeepers.timberland.com/
- Timberland c. (n.d.). Timberland Corporate Responsibility. Retrieved February 13, 2011, from http://www.timberland.com/category/index.jsp?categoryId=4039620
- Underhill, P. (1999). Why We Buy: The Science of Shopping. Simon & Schuster: New York, NY.

- van Dijken, F. (2007). Corporate Social Responsibility: Market Regulation and Evidence. Managerial Law. Vol 49(4): 141-184.
- Waage, S.A. et al. (2005). Fitting Together the Building Blocks for Sustainability:

 A Revised Model for Integrating Ecological, Social and Financial Factors into Business. *Journal of Cleaner Production*. Vol 13:1145-1163.
- Wakefield, KL & Baker, J. (1998). Excitement at the Mall: Determinants and Effects on Shopping Response. Journal of Retailing. Vol 74(4): 515-539.
- Walker, D. (2008). Sustainability: Environmental Management, transparence and competitive advantage. Journal of Retail & Leisure Property. Vol 7(2): 119-130.
- Watson, M. & Emery, A.R.T. (2004). Environmental Management & Auditing Systems: The Reality of Environmental Self-Regulations. Managerial Auditing Journal. Vol 19(7): 916-928.
- Winnipeg Police Service. (2005). Crime Prevention Handbook. Retrieved January 05, 2011, from http://winnipeg.ca/police/PDFs/Crime_Prevention_Book_2005.pdf
- Wiser, R. & Pickle, S. (1997). Green Marketing, Renewables and Free Riders: Increasing Customer Demand for a Public Good. Environmental Energy Technologies Division, University of California. Accessed April 10, 2008, available: http://eetd.lbl.gov/ea/EMS/reports/40631.pdf
- Wolf, KL. (2002). Retail and Urban Nature: Creating a Consumer Habitat. Presented at the 2002 People/Plant Symposium, Amsterdam, NE.
- Vasil, A. (2007). Ecoholic: When You're Addicted to the Planet. Random House Canada: Toronto.
- Yogananda, P. (1946). Autobiography of a yogi. Philosophical Library Inc.: New York, NY.
- Zutshi, A. & Sohal, A. (2004). Environmental Management System Adoption by Australian Organizations: Part 1: Reasons, Benefits and Impediments. Technovation, 24(4): 335-357.

Appendix 1: Mountain Equipment Co-op Scorecard results³⁵:

REVIEW: 22 points possible Total points for MEC: 15/22

1: GHG emissions inventory completed? 5 points possible (Climate Counts b, 2006).

Points for MEC: 5

2: Rough calculations or standard protocol/calculator? 3 points possible (Climate Counts b, 2006).

Points for MEC: 3

3: Has the company reported on GHGs other than CO₂? 2 points possible (Climate Counts b, 2006).

Points for MEC: 0

4: Has the company taken different areas into consideration for GHG emissions, such as transportation?

4 points possible (Climate Counts b, 2006).

Points for MEC: 4

5: Does the company verify their GHG emission data by a qualified firm? 4 points possible (Climate Counts b, 2006).

Points for MEC: 0

6: Has the company reported on GHG emissions over several years? 4 points possible (Climate Counts b, 2006).

Points for MEC: 3

REDUCE: 56 possible points TOTAL points for MEC: 42/56

³⁵ To see full Climate Counts Scorecard, please refer to ClimateCounts.Org (http://climatecounts.org/get_file.php?file=/pdf/Climate_Counts_Scorecard.pdf).

7: Has a clear goal for GHG emissions reductions been set? 4 points possible (Climate Counts b, 2006).

Points for MEC: 4

Mountain Equipment Co-op has a defined baseline, outlined in their accountability reports (the first report covered 2005-2006, a second covering 2007-2008 and a comprehensive interim report released in 2009), with a specific reduction percentage on their six areas of improvement. For example, MEC has set a goal of a 5% reduction of their transportation GHG emissions from their 2007 levels by 2012.

8: How long has the company been recording and reporting on GHG emissions? 3 points possible (Climate Counts b, 2006).

Points for MEC: 2

The MEC Accountability Reports has their baseline set from the 2005 levels.

9: How large is the emission reduction goal? The larger the goal, the higher the point value. 5 points possible (Climate Counts b, 2006).

Points for MEC: 5

The MEC goal for their building emissions is to reduce the GHG emission levels down 20% from their 2007 levels by 2012 (they have already achieved an 8% reduction by purchasing green power from Bullfrog Power). As this is a significant number, and the goal is for 2012, I gave MEC the discretionary point.

10: Has the company created a plan to achieve emission reduction goals? 5 points possible (Climate Counts b, 2006).

Points for MEC: 5

This information is all available in the MEC Accountability Reports.

11: Does senior management support emission reduction goals? 2 points possible (Climate Counts b, 2006).

Points for MEC: 1

12: Is the company making progress on emission reduction goals? 8 points possible (Climate Counts b, 2006).

Points for MEC: 2 points for the emission reduction of buildings from 2007 levels, 2 points for an 8% increase in employee engagement levels from 2007, 0 points for increasing emissions from transportation from 2007 levels, 2 points for 21% of directly sourced textile mills being Bluesign partners (an organization that focuses on environmentally friendly textile manufacturing).

Total points for MEC: 6

13: Has there been successful emission reductions thus far? 10 possible points (Climate Counts b, 2006).

Points for MEC: 5

These 5 points are awarded because of the 8% reduction in building GHG emissions from 2007, leaving 12% reduction until 2012.

14: Absolute or intensity-based reductions?
4 possible points (Climate Counts b, 2006).

Points for MEC: 4

All GHG emission reduction goals set are absolute.

15: Has there been success in emission reduction before setting reduction goals? 5 possible points (Climate Counts b, 2006).

Points for MEC: 2

There have been 2 sets of verified reductions from the initial Accountability Report.

16: Has there been success in impact reductions of products? 4 possible points (Climate Counts b, 2006).

Points for MEC: 2

The focus of MEC is broad, and spans across the company, from transportation to production to construction.

17: How well does the company train its employees on climate change/sustainability? 4 possible points (Climate Counts b, 2006).

Points for MEC: 4

These 4 points have been awarded for the following reasons. There is internal employee education and a vested interest on the part of MEC in engaging the employees in the company's environmental vision (encouraging cycling to work, conducting reviews of employee engagement, etc). Also, Co-op members are offered free tours of MEC's green buildings, links to determining their own personal environmental footprint, and an array of information on what the Co-op is doing to reduce its environmental impact, both in the store and on their website.

18: What are the company's supplier and manufacturing requirements? 2 possible points (Climate Counts b, 2006).

Points for MEC: 2

In 2008, MEC evaluated 53 out of their 71 factories, and found 229 violations. 12 of those factories had zero tolerance violations. By 2012, MEC will no longer be working with factories that have black violations, although they have no specified if that means that the factories must take action, or if MEC will find new factories.

POLICY STANCE: 10 possible points TOTAL points for MEC: 10/10

19: Is there public policy support?
10 possible points (Climate Counts b, 2006).

Points for MEC: 10

In 2009, MEC voluntarily advocated on behalf of three different public policies (The Navigable Waters Protection Act, The Copenhagen Communiqué and the Big Wild, national and international policy).

20: Is there public policy opposition?
10 possible points (Climate Counts b, 2006).

Points for MEC: 0

REPORT: 12 possible points TOTAL points for MEC: 8/12

21: Is public reporting available? Where is this data hosted? 10 possible points (Climate Counts b, 2006).

Points for MEC: 6

22: Are GHG emissions categorized according to different aspects of the corporation? 2 possible points (Climate Counts b, 2006).

Points for MEC: 2

TOTAL: 65 points

Appendix 2: Lululemon athletica Scorecard results³⁶:

REVIEW:

22 points possible

lululemon athletica total: 9/22

1: GHG emissions inventory completed? 5 points possible (Climate Counts b, 2006).

lululemon athletica, on their Legacies website does not specify their GHG emissions, however they do say that they have worked "with a team of environmental specialists to measure lululemon's environmental footprint." Unfortunately, the year this study was conducted is not available online, and neither are any numbers. This is also true of the internal lululemon athletica website. However, despite the information not being available to anyone outside of the Community Legacies Department (it is also unavailable to the Advocates of the Community Legacies Department), an environmental footprint does include carbon emissions as a measure.

Points for lululemon: 1

2: Rough calculations or standard protocol/calculator? 3 points possible (Climate Counts b, 2006).

lululemon athletica does not provide the specifics of their environmental footprint, the only measure the company has made of their emissions in any way, but have not made these numbers available to anyone (when I requested this information, I was informed that it would be made public by 2009, but this never happened). However, as lululemon has claimed that the environmental footprint was determined using environmental specialists, one can assume that the calculations used were not rough or partial calculations. However as we do not know the extent of the effort that went into determining the environmental footprint, I have to assume that lululemon athletica's calculations are generalized but complete.

Points for lululemon: 2

3: Has the company reported on GHGs other than CO₂? 2 points possible (Climate Counts b, 2006).

The environmental footprint model only includes CO2 in its measurement.

Points for lululemon: 0

³⁶ To see full Climate Counts Scorecard, please refer to ClimateCounts.Org (http://climatecounts.org/get_file.php?file=/pdf/Climate_Counts_Scorecard.pdf).

4: Has the company taken different areas into consideration for GHG emissions, such as transportation?

4 points possible (Climate Counts b, 2006).

lululemon athletica has included emissions from multiple indirect sources, including travel, supply, distribution, store level, third-party factories, etc.

Points for lululemon: 4

5: Does the company verify their GHG emission data by a qualified firm? 4 points possible (Climate Counts b, 2006).

lululemon uses third party verification of their partner factories, and have made the claim that they have worked with environmental specialists (however they have not listed who those environmental specialists are).

Points for lululemon: 2

6: Has the company reported on GHG emissions over several years? 4 points possible (Climate Counts b, 2006).

Their environmental footprint study was a one-time project.

Points for lululemon: 0

REDUCE:

56 possible points

TOTAL points for lululemon: 9/56

7: Has a clear goal for GHG emissions reductions been set? 4 points possible (Climate Counts b, 2006).

While lululemon has made many goals, they are not clear in any way, neither are there any baselines incorporated into these goals.

Points for lululemon: 1

8: How long has the company been recording and reporting on GHG emissions? 3 points possible (Climate Counts b, 2006).

The only baseline number available on the external or internal websites is the amount of waste created by lululemon athletica retail stores in 2007 (available through internal Community Legacies training documents): 9,200 kg. As the first goal for lululemon is to eliminate waste entirely, this number is important.

Points for lululemon: 1

9: How large is the emission reduction goal? The larger the goal, the higher the point value.

5 points possible (Climate Counts b, 2006).

lululemon has no reduction goal for GHG emissions, however they have set a goal to eliminate waste by 2010. As of 2011, this goal has not been realized.

Points for lululemon: 0

10: Has the company created a plan to achieve emission reduction goals? 5 points possible (Climate Counts b, 2006).

There is no management plan or organizational structure that has been established for climate.

Points for lululemon: 0

11: Does senior management support emission reduction goals? 2 points possible (Climate Counts b, 2006).

Top-level executives have not addressed climate change action in a verifiable or public way. However, I have personally heard Christine Day (CEO) say that it is very important and that lululemon will make significant efforts on a company-wide conference call. Unfortunately, this only indicates intent, not action.

Points for lululemon: 0

12: Is the company making progress on emission reduction goals? 8 points possible (Climate Counts b, 2006).

Points for lululemon: 0

13: Have there been successful emission reductions thus far? 10 possible points (Climate Counts b, 2006).

While the company may have achieved emissions reductions, they have not made this information public.

Points for lululemon: 0

14: Absolute or intensity-based reductions?
4 possible points (Climate Counts b, 2006).

There are absolute reductions for waste within the company.

Points for lululemon: 1

15: Has there been success in emission reduction before setting reduction goals? 5 possible points (Climate Counts b, 2006).

Points for lululemon: 0

16: Has there been success in impact reductions of products? 4 possible points (Climate Counts b, 2006).

Points for lululemon: 0

17: How well does the company train its employees on climate change/sustainability? 4 possible points (Climate Counts b, 2006).

lululemon prides itself on educating. In fact, education is so important to lululemon, the sales people are called "educators," and the founder of the company, Chip Wilson, is called the "Chief Educator." There is internal employee education, and educators are trained to educate the public and customers on lululemon's environmental actions.

Points for lululemon: 4

18: What are the company's supplier and manufacturing requirements? 2 possible points (Climate Counts b, 2006).

Found within internal lululemon training documents on Community Legacies, lululemon chooses their suppliers/factories based upon their environmental responsibility. The suppliers are required to sign a legal document, committing to being environmentally responsible (among other requirements), and if the supplier is found to be noncompliant, lululemon will work with them to improve.

Points for lululemon: 2

POLICY STANCE: 10 possible points

TOTAL points for lululemon: 3/10

19: Is there public policy support?
10 possible points (Climate Counts b, 2006).

lululemon supports local policy, and adheres to their requirements.

Points for lululemon: 3

20: Is there public policy opposition?
-10 possible points (Climate Counts b, 2006).

lululemon does not oppose any public policy on climate change.

Points for lululemon: 0

REPORT:

12 possible points

TOTAL points for lululemon: 1/12

21: Is public reporting available? Where is this data hosted? 10 possible points (Climate Counts b, 2006).

Very minimal information is available on the website, and there is no third party that has lululemon information available. Within the SEC filings, there is mention of environmental responsibility, but no specific information regarding climate change or any environmental actions made by lululemon.

Points for lululemon: 1

22: Are GHG emissions categorized according to different aspects of the corporation? 2 possible points (Climate Counts b, 2006).

As there is no emission sum available, the points value for this question must be 0.

Points for lululemon: 0

TOTAL points for lululemon: 22 out of 100 points

Appendix 3: Guest Survey

These surveys will gather information of actions those stores have taken to improve their environmental sustainability, as well as what confines they must work with and challenges they have faced. Additionally, these surveys will ask stores their environmental goals. This section of the survey will be modeled after the goal setting worksheets of lululemon athletica, asking for one, three, five, seven and ten year environmental goals (http://goals.lululemon.com.). Participation in this questionnaire is voluntary. You may refuse to participate or may choose to leave any question unanswered. However, your views are important and the greater the participation, the better the results will be.

If you have any questions about this study, contact Rebecca Horan, at 1-(204) xxx-xxxx or xxxxxx@xxxxxxxx.com or if you have any questions as to your rights as a research subject, please contact the Human Ethics Secretariat at (204) 474-7122 at the University of Manitoba.

Name:	(Optional)
Location:	(Optional)
Position:	(Optional)

- 1. How long have you been an employee of lululemon athletica?
 - a) Less than 3 months
 - b) 3-6 months
 - c) 6 months- 1 year
 - d) 1-3 years
 - e) 3-5 years
 - f) 5-10 years
 - g) more than 10 years

Environmental Awareness

- 2. How would you rate your level of interest in environmental issues on a scale of 1-5, 1 being not interested and 1 being extremely interested?
- 3. How important is it for lululemon athletica (the company) to address its impact on the environment on a scale of 1-5, 1 being not important, 5 being very important?
- 4. How important is it for your lululemon athletica store to address its impact on the environment on a scale of 1-5, 1 being not important, 5 being very important?

Work Environment

5. Are you comfortable in your work environment? Yes/No				
What would make your work environment more comfortable?				
Health and Safety 6. Is lululemon athletica a healthy workplace? Yes/no				
If you answered no, please identify your health concerns.				
7. Do you feel safe in your lululemon athletica store? Yes/no				
If you answered no, please identify your safety concerns.				
8. Do you spend time outdoors during work hours, including your break? Yes/no				
If you answered no, are there any barriers that prevent you from spending time outdoors?				
9. Are you exposed to chemicals at work? Yes/no				
If you answered yes, please list chemicals.				

Lighting

10. Is lighting a concern in your workspace? Yes/no

If you answered yes, please identify your lighting concerns.			
11. Does your workspace have daylight? Yes/no			
12. Does your workspace have controllable lighting? Yes/no			
13. Does your workspace have a view? Yes/no			
Thermal Comfort14. How comfortable are you with the temperature and air exchange in your workspace on a scale of 1-5, 1 being uncomfortable, 5 being very comfortable?			
If you answered less comfortable or uncomfortable, please explain why.			
Noise			
15. Is noise an issue in your workspace? Yes/No			
If you answered yes, please identify your noise concerns.			
Water Usage 16. Are there any ways to reduce water wastage in your lululemon athletica store? Yes/No			
If you answered no, what would improve the washroom and kitchen facilities.			

17. What is your daily mode of transportation to your lululemon athletica store?				
	a.	Walk		
	a.	Car		
	b.	Bus		
	c.	Cycle		
	d.	Carpool		
	e.	Other		
18.		ululemon athletica offered subsidized transit passes, would you be willing to take the s to work?		
	a.	No		
	b.	Yes		
19.	•	your lululemon athletica store organized carpooling, would you be interested in pooling to work?		
	a.	No		
	b.	Yes		
20.	•	your lululemon athletica improved their bicycle storage facilities, would you be willing ride your bicycle to work?		
	a.	No		
	b.	Yes		
21.	Are	e there any barriers that prevent you from taking the bus, carpooling or bicycling to rk?		
	a.	Yes		
	b.	No		

If you answered yes, please identify the barriers.

Environmental Aspects22. Are there any significant environmental aspects that you would like to see improved at the company?
a. Yes
b. No
If you answered yes, what are those aspects?
23. If you answered yes to #21, have you passed feedback to the Community Legacies Department about your concerns?
a. Yes
b. No
24. Are there any significant environmental aspects that you would like to see improved at your lululemon athletica store?
a. Yes
b. No
If you answered yes, what are those aspects?
25. Have you as Store Manager or Community Legacies Advocate set an intention or crea an action plan to address those aspects?
a. Yes
b. No

If you answered yes, what are those intentions and/or action plans?		
26. Have you as Store Manager or Community Legacies Advocate, in conjunction with your lululemon athletica store employees, set environmental or Community Legacies goals?		
a. Yes		
b. No		
If you answered yes, what are those goals?		
1 year:		
5 year:		
10 year:		
If you answered no, why not?		
27. Do you have any further comments?		

Appendix 4: Survey of Sustainability Awareness at lululemon athletica Polo Park

Please take some time (approximately 20 to 30 minutes) to complete this survey. We want to know what is most environmentally important to the guests of lululemon athletica Polo Park.

Purpose of the Questionnaire

This questionnaire provides you with an opportunity to voice your opinions on environmental initiatives in retail environments, particularly in lululemon athletica Polo Park. Participation in this survey is voluntary. You may refuse to participate or may choose to leave any question unanswered. However, your views are important and the greater the participation, the better the results will be.

We would like to know what is most environmentally important to the guests of lululemon athletica Polo Park.

If you have any questions about this study, contact Rebecca Horan, at 1-(204) xxx-xxxx or xxxxxx@xxxxxxxx.ca or if you have any questions as to your rights as a research subject, please contact the Human Ethics Secretariat at (204) 474-7122 at the University of Manitoba.

Name:	(Optional)
Location:	(City, Province/State, Country)

- 1. How would you rate your level of interest in environmental issues on a scale of 1-5, 1 being not interested, and 5 being extremely interested?
- 2. How important is it for the lululemon athletica Polo Park to address its impact on the environment on a scale of 1-5, 1 being not important, and 5 being extremely important?
- 3. How long have you been shopping at a lululemon athletica store?
 - a) Less than 6 months
 - b) 6 months-1 year
 - c) 1-5 years
 - d) 5-10 years
 - e) More than 10 years
 - f) I do not shop at a lululemon athletica store
- 4. How long have you been shopping at lululemon athletica Polo Park?
 - a) Less than 6 months
 - b) 6 months-1 year
 - c) 1-2 years
 - d) 3-4 years
 - e) I do not shop at lululemon athletica Polo Park

Yes No If yes, which initiatives? 6. Are you aware of the Community Legacies Department of lululemon athletica? Yes No If yes, how long have you been aware of the Community Legacies Department? 7. If you answered yes to either # 5 or 6, has this knowledge affected your decision to shop at lululemon athletica? Yes No If yes, how has this knowledge affected your decision to shop at lululemon athletica?	5.	Are you aware of any environmental initiatives at lululemon athletica Polo Park?
If yes, which initiatives? 6. Are you aware of the Community Legacies Department of lululemon athletica? Yes No If yes, how long have you been aware of the Community Legacies Department? 7. If you answered yes to either # 5 or 6, has this knowledge affected your decision to shop at lululemon athletica? Yes No		Yes
6. Are you aware of the Community Legacies Department of lululemon athletica? Yes No If yes, how long have you been aware of the Community Legacies Department? 7. If you answered yes to either # 5 or 6, has this knowledge affected your decision to shop at lululemon athletica? Yes No		No
Yes No If yes, how long have you been aware of the Community Legacies Department? 7. If you answered yes to either # 5 or 6, has this knowledge affected your decision to shop at lululemon athletica? Yes No	If y	ves, which initiatives?
Yes No If yes, how long have you been aware of the Community Legacies Department? 7. If you answered yes to either # 5 or 6, has this knowledge affected your decision to shop at lululemon athletica? Yes No		
No If yes, how long have you been aware of the Community Legacies Department? 7. If you answered yes to either # 5 or 6, has this knowledge affected your decision to shop at lululemon athletica? Yes No	6.	Are you aware of the Community Legacies Department of lululemon athletica?
If yes, how long have you been aware of the Community Legacies Department? 7. If you answered yes to either # 5 or 6, has this knowledge affected your decision to shop at lululemon athletica? Yes No		Yes
 7. If you answered yes to either # 5 or 6, has this knowledge affected your decision to shop at lululemon athletica? Yes No 		No
at lululemon athletica? Yes No	If y	ves, how long have you been aware of the Community Legacies Department?
No	7.	If you answered yes to either # 5 or 6, has this knowledge affected your decision to shop at lululemon athletica?
		Yes
If yes, how has this knowledge affected your decision to shop at lululemon athletica?		No
	If y	yes, how has this knowledge affected your decision to shop at lululemon athletica?
8. When you think of lululemon athletica (the company), what do you associate the brand with?	8.	
9. When you think of lululemon athletica Polo Park (the store), what do you associate the store with?	9.	· · · · · · · · · · · · · · · · · · ·

	could change one nmental initiatives		o Park in regards	to
11. Do you	ı have any further	comments?		

Appendix 5: Energy Audit Calculations

Light kWH calculations

Fluorescent lights:

Small halogen bulbs:

Large halogen bulbs:

Essentials kWH calculations:

Dell Towers:

- 4 Dell Towers in use (250 Watts * 108 hours * 4 weeks)/1000 = 432 kilowatt-hours
- 4 Dell Towers standby (21.13 Watts * 60 hours * 4 weeks)/1000 = 20.28 kilowatt-hours

Dell LCD Monitors:

- 4 Monitors in use (75 Watts * 108 hours * 4 weeks)/1000 = 32.4 kilowatt-hours
- 4 Monitors standby (2 Watts * 60 hours * 4 weeks)/1000 = 0.48 kilowatt-hours

Lexmark all-in-one printer/photocopier/fax machine:

Lexmark all-in-one in use (800 Watts * 1 hour * 28 days)/1000 = 22.4 kilowatt-hours Lexmark all-in-one standby (46 Watts * 23 hours * 28 days)/1000 = 29.6 kilowatt-hours

Cordless VTech D56151 phones:

4 VTech phones (2.1 Watts * 24 hours * 28 days)/1000 = 5.6 kilowatt-hours

Sony MP3 Player:

MP3 Player (15.95 Watts * 108 hours * 4 weeks)/1000 = 6.8 kilowatt-hours

Sony Speakers:

4 Speakers (100 Watts * 108 hours * 4 weeks)/1000 = 172.8 kilowatt-hours

Brother XL-S130 Sewing Machine:

Sewing Machine (800 Watts * 6 hours * 5 days * 4 weeks)/1000 = 96 kilowatt-hours

Proctor Silex Iron:

Iron (1200 Watts * 2 hours * 5 days * 4 weeks)/1000 = 48 kilowatt-hours

Kitchen appliances kWH calculations:

Hamilton Beach Brew Station Deluxe Coffee Maker:

Coffee maker in use (1200 Watts * .25 hours * 28 days)/1000 = 8.4 kilowatt-hours

Coffee maker phantom power (1.14 Watts * 23.75 hours * 28 days)/1000 = .76 kilowatt-

hours

Panasonic 1200W Microwave:

Microwave in use (1200 Watts * .5 hours * 28 days)/1000 = 16.8 kilowatt-hours

Microwave phantom power (3.08 Watts * 23.5 hours * 28 days)/1000 = 2.02 kilowatt-hours

Proctor Silex Toaster:

Negligible phantom power or daily usage, rarely used, never plugged in

Proctor Silex Electric Kettle:

Kettle (1000 Watts * .5 hours * 28 days)/1000 = 14 kilowatt-hours (unplugged when not in use)

Salton Coffee Bean Grinder:

Grinder (120 Watts * .15 hours *28 days)/1000 = 0.5 kilowatt-hours (unplugged when not in use)

22-cubic foot GE Fridge from 2002:

Fridge (72 Watts * 24 hours * 28 days)/1000 = 48 kilowatt-hours