Corporate Sustainability

Bridging the Gap Between Sustainability Reporting and Business Operations

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Foreword

Throughout my Master's program, I set out to gain a deeper understanding of profitable corporate sustainability. My main goal was to combine my background in ecology with social and economic fundamentals in order to study the current unsustainable system and to explore possible strategic solutions. In order to achieve this goal, three components—triple bottom line, non-financial reporting and green culture—along with individual learning objectives were laid out in my Plan of Study. I believe approaching the seemingly unreachable objective of a sustainable world is best approached with a focus on corporate operations.

Much of my interdisciplinary research focused on the application of sustainability theory to business operations. I set out to gain an understanding of the role sustainability plays, especially through corporate responsibility reporting (CSR), in everyday operations and decision-making. I have researched the history of environmentalism in order to come to a general understanding of how corporate sustainability came to be and how this began to influence business conduct. This has helped me to understand green culture in Canada as it pertains to corporate decision-making. In order to perform an analysis of corporate sustainability reports, I first researched the history of reporting, current reporting frameworks and critiques of reporting. This, in combination with a comparative analysis, has added to my knowledge in each subsequent learning objective.

This research has helped me to further understand the environmental and social initiatives currently undertaken in Canadian companies, as well as the role that profit and economics plays as both a triple bottom line component and as a separate, traditional single bottom line, influencing factor. Triple bottom line theory implies an even distribution of value held in each component; however, this does not always hold true in practice. This research helped me to understand the current landscape of triple bottom line in application; that being the roles and emphasis held on profit, environment and social components in today's sustainable businesses.

This research set out to determine which companies, those who have been reactive versus those who have been proactive to corporate sustainability, achieve sustainability goals more often and more successfully, ultimately to establish factors and business strategies that promote the success of corporate social responsibility. Through an understanding of what determines sustainability initiative success and an exploration into business strategies used to achieve this success, I have gained a deeper understanding of profitable corporate sustainability.

Abstract

This research project has set out to determine how best a corporation can bridge the gap between sustainability reporting and operations and establish the overarching characteristics a corporation can implement in order to promote sustainability within their operations. In order to achieve this goal, I looked at two categorically different corporations: companies that have been proactive to sustainability and companies who have been reactive, those being corporations who have developed sustainability strategies in response to market pressures. Through a sustainability comparative analysis, determining which category achieves sustainability goals more often and

more successfully and a deeper analysis through interviews and further research to determine how corporations within each category promote sustainability initiatives within their organization differently, I was able to establish overarching sustainability characteristics. I determined corporations deemed proactive outperformed those deemed reactive when it comes to successfully achieving sustainability goals and that sustainability strategies are promoted differently namely through the integration of the sustainability departments into the corporate structure and implementation of sustainability initiatives into employee mandates. Ultimately I established a set of overarching characteristics that can be employed in order to promote sustainability and bridge the gap between sustainability reporting and operations: those being CEO buy-in, quantifiability, disclosure and integrative reporting.

Introduction

Corporate Social Responsibility and Non-Financial Reporting

Corporate social responsibility (CSR), as a concept, has a long history however the modern definition was developed over the past 60 years. In the 1950s, CSR took the form of businesses' responsibilities to society, primarily in the form of providing jobs and aiding local infrastructures. In the 1970s, managers applied conventional management tools and strategies to CSR. In the 1980s, as social and business interests came closer together, corporate considerations transitioned from the conventional shareholders to include a wider category of stakeholders. In the 2000s, CSR became a separate strategic issue to be considered in every industry (Moura-Leite and Padgett 2011).

As a means to strategically address CSR, corporations began to produce sustainability reports with the intention to provide full disclosure and transparency of sustainability factors: these being general and industry specific environmental, social and economic factors. These factors are generally deemed important for business in a more environmentally aware market. Since its inception, much work has been done in order to produce the highest quality CSR report, including the development of reporting guidelines: GRI (Global Reporting Initiative) G4 being the most widespread (Ernst &Young 2014). However there has been considerable critique of CSR reporting, in its inherent ambiguity, as a green washing tool, lack of a standardized approach and as a means to lower the perceived risk of investment (Aras and Crowther 2009). These critiques are not solely from academics (Haigh and Jones 2006) but are beginning to be seen in the media (Nelson and Peterka 2010) and in the corporate world.

The GRI framework was created in order to assist companies in the preparation of sustainability reports, and in an attempt to solidify common practice. These guidelines act to produce a standardized report while addressing material issues, those that are deemed relevant to the specific corporations industry. GRI frameworks present sustainability indicators under economic, environmental and social categories. These categories are then broken down into subcategories, aspects and indicators accordingly, e.g. Category- Social, Sub-category- Human Rights, Aspect- Investment, Indicator- Report as “the total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening” (GRI 2013). For each category, a corporation is to choose whether the indicators are deemed ‘material’ to its business through a materiality analysis, and, if so, report on the indicator (GRI 2013).

Research Question and Objectives

Do Canadian corporations who have been proactive with their sustainability missions use corporate sustainability strategies differently to promote change in their operations compared to companies that have been reactive, those being corporations who have developed sustainability strategies in response to market pressures?

In order to answer my research question I set out to accomplish three objectives;

1) *Understand business operations, corporate sustainability and the current status of CSR reporting.* The first objective was to establish the current status of corporate sustainability in the Canadian context. This involved research into business operations and strategies, the history of environmentalism and sustainability, sustainability in practice and the current frameworks used for CSR reporting.

2) *Determine which Canadian companies, those who have been reactive versus those who have been proactive to corporate sustainability, achieve sustainability goals more often and more successfully.* In addition to a comparative CSR report analysis, interviews were performed in order to determine how sustainability initiative goals were or were not achieved. I chose this distinction as I predicted further exploration into the business strategies, implementation of said strategies and corporate culture within each category would reveal distinct differences in sustainability operations.

3) *Identify and discuss sustainability best practices capable of bridging the gap between CSR reports and operations.* Sustainability as a corporate endeavour is rather new and as such the tools of best practice have not yet been established. I set out to identify the tools that can be applied to a broad range of industries based on the lessons learnt from objective two and deeper analysis of corporate case studies.

This research is important to add to the established academic landscape on corporate sustainability strategies due to the public critique of CSR reporting (Mahoney et al 2013) as well as the disconnect between reporting and business operations (Van Oosterhout and Heugens 2006). Sustainability reports on their own are merely fact-finding ventures, and while there is value in internal corporate research and transparency, it is what is done with these facts that provides true value: that being operational changes to improve sustainability.

Understanding the potential for real environmental change is the motivation behind my research. I have a strong environmental ethic and I believe that the most efficient way to fix a problem is by addressing the biggest issues with it. In this case, the corporate world, is the leading contributor to pollution, has the GDPs to compete with entire nations and has immense power to shape national and international law, thus having the most potential for positive change.

Disconnect and Introduction to the Role of this Paper

Critique of CSR as a green washing tool among academics and is also evident in the media. CSR was created with good intentions, as means for corporations to provide full disclosure and transparency when it comes to material sustainability factors (these being environmental, social and economic). Substantial work has been done in order to produce the best CSR reports, with the development of reporting frameworks (GRI G4 guidelines being the most established). However regardless of CSR report quality, no positive progress is created by the report alone. A company will receive a good reporting grade (through an external audit via GRI standards) if they merely report the facts, but they are not graded on their progress—real operational changes and accomplishments that achieve actual sustainability. This lack of connection between reporting and operations, in combination with the common practice of green washing present in the reports, is where the majority of academic and public critique is focused.

This paper sets out to explore the step after CSR reporting, where real progress is meant to be made: this being the connection between reporting and its implications on business operations. Similar to financial reporting, I believe CSR reporting should be used as a benchmarking tool from which to make improvements. The world of financial reporting has developed many tools, used to show increased profit margins and decreased costs, of course with wide variations depending on the industry, market conditions, etc. Sustainability, however, is rather new and this is where the literature gap exists, connecting reports with the operations of a business. I have explored various corporations and industries in order to discover and establish the tools required to bridge the gap between reporting and operations.

Scope and Methodology

This study focuses on the connection between sustainability reporting and operations within Canadian corporations. Specifically, it is focused on analyzing the differences between two categorically different types of corporations (those proactive and those reactive to sustainability market pressures in their operations) and ultimately establishing the best practices from each. A limitation that must be addressed, due to the inherent complexity of the topic of sustainability, is that establishing best practices for sustainability in a broad sense may not achieve the ultimate sustainability initiatives but rather the overarching characteristics a corporation can implement in order to promote sustainability within their operations.

The methodologies adopted for this research were: a literature review, a sustainability report based comparative analysis and interviews with sustainability professionals. The literature review had no restrictions on it to ensure a complex history of discussed topics as well as frameworks and case studies. The sustainability comparative analysis relied on the data provided from corporate websites, which may have limited the depth of issues analyzed. Specifically, the reports analyzed dated from the year 2009 to 2013 and statements were taken at their word due to third party assurances. The interviews were conducted both in-person as well as over the phone with professionals at the corporations researched in various roles ranging from sustainability report producers to operations management. While the range of industries considered adds a limitation to the depth of analysis, this research project provides the principles of best practices for corporations to bridge the gap between sustainability reporting and its operations.

Mission Statements, Business Operations and Strategies

Mission Statements

A company's mission statement can be generally defined as a statement of purpose; the reason why the corporation exists (Graham and Havlick 2015) or more precisely,

> " The company mission is a broadly defined but enduring statement of purpose that distinguishes a business from other firms of its type but identifies the scope of its operations in product and market terms. Not only does the company mission embody strategies decision maker's business philosophy, but it also reveals the image the company seeks to project, reflects the firm's self-concept, and indicates the principal product or service areas and the primary customer needs the company will attempt to satisfy. In short, the company mission describes the firm's product, market, and technology in a way that reflects the values and priorities of the strategic decision makers."
>
> John A. Pearce II (1982)

A mission statement, while being a communication statement, can ultimately set the tone for a corporation as the statement is developed to express the company's vision by key decision makers (Graham and Havlick 2015). It is not difficult to see how two corporations, both interviewed for the purposes of this research, with widely different missions statements may differ operationally. Mountain Equipment Co-op's missions statement reads "We help people enjoy the benefits of self-propelled wilderness-orientated recreation" where as TransAlta's reads "Our mission at TransAlta is straightforward: to operate a competitive power generation company committed to serving customers, expanding our business, driving operational excellence and, of course, growing shareholder value".

For the purposes of this research, mission statements, when available, were used to determine categorical differences for the comparative analysis. These categories being corporations with proactive sustainability missions and corporations with reactive sustainability missions as a response to market pressures. For each corporation considered, their missions statement at inception was deemed the determining statement.

Business Operations

Operations will vary drastically dependent on industry and corporation however business operations can be defined as the exercises and activities a corporation performs in over to provide their goods and/or services. For example, Whole Foods business operations may include local organic food procurement where as Bell Canada's may include service requests and resolution. Successful business operations will not directly affect a corporation's revenue, however there is an indirect effect through means of customer satisfaction as well as a strong correlation with reducing costs through efficiency.

I believe sustainability should be directly routed within operations. When it comes to actualizing sustainability, the majority of actions fall under the umbrella of operations, including; cost saving measures, stakeholder engagement, and employee relations. More importantly, an operations department's responsibilities traditionally range drastically in comparison to other departments specific tasks, a trait fit for, matching sustainability's vast initiatives. Operations departments are typically the most adjustable to market trends, changes in profitability and responding to stakeholder feedback. It is these characteristics that make the operations department a perfect fit for sustainability as well as the reason operations is the focus of this research.

Operation Strategies

Strategic operations are routed within a corporations' customer value proposition, that being what a corporation is going to deliver to its customers. As an example, Apple's value proposition is product innovation, and Wal-Mart's is everyday low pricing, and in order for a corporation to achieve their value proposition, an operations strategy must be executed, in other words the value proposition must be operationalized. For Apple, efficiency through outsourced manufacturing is used to achieved product innovation (developed in California, made in China) and for Wal-Mart it is a focus on cost efficiency (Simchi-Levi 2010). Operation strategies can also differentiate between corporations in the same industry. By example Zara and Gap both operate in the retail clothing space; however, each focuses on very different customer value propositions. Zara offers high fashion at a reasonable price whereas Gap focuses on competitive pricing, demanding very different operational strategies. Zara operates a speed-to-market strategy whereas Gap emphasizes reducing operational costs.

Nike's sweatshop controversy is a prime example of a corporate operations image scandal. In 1991, after a rise in labor prices in Korea and Taiwan, Nike's contractors moved to developing countries, including Indonesia, China and Vietnam. This sparked activist Jeff Ballinger to document poor working conditions and low wages in Indonesia (a reported 14 cents an hour, less than Indonesia's minimum wage). Protests followed at the 1992 Barcelona Olympics as well as critical media interviews catching the attention of mainstream media (Nisen 2013). In 1996, a US magazine featured a Pakistani boy sewing a Nike football. In the following year, a report was released showing contracted workers in factories were being exposed to toxic fumes that were 177 times the Vietnamese legal limit (Wazir 2001). Throughout this time, Nike experienced decreased demands for its products: sales fell nearly 8 per cent in 1999 with a 15 per cent drop in stock price, while competitor Reebok's share price rose from $8 to $30 (Wazir 2001).

A corporation's vision and mission are closely related to its customer value proposition and therefore an operational strategy must be enacted to achieve such. Mountain Equipment Co-op's vision is to become " an innovative, thriving co-operative that inspires excellence in products and services, passion for wilderness experiences, leadership for a just world and action for a healthy planet" (MEC 2005). Such a vision denotes an operational strategy, which emphasizes protecting the natural environment, conducting business ethically and with integrity while promoting personal growth (MEC 2005).

In today's customer-driven markets, a corporation's products, services, plans and strategies are motivated by customer demands and expectations and as a result, a customer's perceived value of a company as a whole matters more than the individual products and services. Furthermore a corporation's stand and actions on social and environmental issues is highly documented and publicized. For this reason integration of sustainability principles into a corporation's operational strategy has become a license to operate.

History of Sustainability in Practice and Theory

History of Environmentalism

By definition, environmentalism refers to "a theory that views the environment rather than heredity as the important factor in the development and especially the cultural and intellectual development of an individual or group" or "the advocacy of the preservation, restoration, or improvement of the natural environment". The definition of the environment, prior to the 1960s, regularly referred to the home or work environment, not to the modern definition of nature. However the roots of the modern definition, that being "the natural world, as a whole or in a particular geographical area", dates back to aboriginal texts. Aboriginal people view their relationship as belonging to the land, as only one element of an environment. "[We], as Native people, are part of the Arctic ecosystem. We are not observers, not managers; our role is to participate as part of the ecosystem" (Johnson 1997).

Following European settlement, conservation efforts have transformed categorized by distinct priorities. From the 1670s to the 1860, there was a focus on tree reserves for the purpose of steady lumber supply. From 1860 to 1885, the government reserved land for use by churches, schools and railways, thus land being reserved for the purpose of growing infrastructure. From the 1880s to present, focus has shifted to reserve land for the purpose of recreation (parks and historic sites) and resource reserve (fish and game reserves). From the 1960s to present, Canada started to designate areas of wild country with less emphasis on resource use and more on retaining nature.

The United States conservation movement has influenced much of Canadian conservation. Likely due to a lack of extensive geographic settlement, Canadians' concern for the environment lagged behind Americans, as the land was perceived as endless forests, lakes and wildlife. This difference can been observed in the development of national parks, the first national park in North American was Yellowstone, established in 1872, with the intention to protect the land as an attraction. The first national parks created in Canada were Banff (1885), Yoho (1886) and Glacier (1886); however, these were economic endeavours to produce revenue from tourist travel and were not perceived as wildlife reserves (Hummel 2010). In 1916, Canada established a treaty protecting migratory birds with the US, marking Canada's first contribution to international conservation efforts. In 1930 the *Canadian National Parks Act* adopted language more reflective of contemporary environmentalism stating parks are to be "unimpaired for the enjoyment of future generations", mirroring language of the previously established (1930) US National Park Service Act (Hummel 2010).

In the 1960s, pollution became a major point of national interest, which led to an ideological change in preservation and the establishment of many conservation special interest groups, ultimately leading to the introduction of national legislation in the proceeding years. According to Hummel (2010) and Carson and Darling (1962), the preservation of the natural environment shifted as an effort to maintain recreational areas and scenic beauty to areas essential to human survival. For the corporate world this time period is referred to as industrial environmentalism (1960-1970), according to Hoffman (2001). While national legislation is beginning to be established, prior to the 1970s pollution was viewed in the corporate setting as a problem that could be handled by the corporate world, based upon “technological self-confidence” (Hoffman 2001, p. 12).

Greenpeace was founded in Canada in the late 1960s, the National and Provincial Parks Association of Canada in 1963, the Sierra Club in 1970, the Canadian Nature Federations in 1971 and a coalition between game, fish and biological associations formed the Canadian Wildlife Federation. Setting out to protect rare or endangered species of plants and animals, the Endangered Species Act was passed in 1971, followed by the establishment of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in 1978 to created a national list of species at risk (Hummel 2010). This time period is referred to as regulatory environmentalism (1970-1982), according to Hoffman (2001). The environmental protection act in this time negotiated between industry and environmental activists and set the environmental regulations for corporations must follow. Environmental management was deemed “technical compliance”, however it remained relatively low in organizational structure focusing on fulfilling legal requirements (Hoffman 2001).

In 1972, the United Nations held an the first International Conference on the Human Environment in Stockholm, followed by conferences in 1982 (Nairobi, Kenya), 1992 (Rio de Janeiro, Brazil) and 2002(Johannesburg, South Africa) all of which Canada actively participated in, leading to Canadian participation in international conservation efforts such as the International Union for the Conservation of Nature and Natural Resources and the Convention on International Trade in Endangered Species (Hummel 2010).

The next time period is referred to as environmentalism as social responsibility (1982-1988). In this time environmental activists begin to directly affect corporate strategy and operation, fuelled by growing numbers of activities as well as environmental organizations such as Greenpeace gaining financial power. The corporate world responded to this by developing environmental rules beyond compliance. Internally environmental management moved from technical compliance to managerial compliance, brooding the environmental responsibilities throughout the organization (Hoffman 2001).

In the early 2000s climate change became a matter of international contention sparking major international efforts such as the Kyoto Protocol in 1998 which Canada ratified in 2002 (Hummel 2010). In present times, concerns of greenhouse gas emissions are on the forefront, as is regulation in developing countries such as India and China which represent growing emission sources.

The most current time period is referred to as strategic environmentalism (1988-present). In this time the balance of influence upon environmental issues has shifted away from purely industry or regulatory to a more equal distribution of power between industry, government and activists. This is the moment corporations switched from reacting to government regulations to a proactive approach. This shift internally moved from managerial compliance to proactive management, the organization structure had shifted giving environmental concerns more clout within the corporation creating environmental consideration into operations, process and product decisions (Hoffman 2001).

The Development of Sustainability

What is Sustainability?

By definition, sustainability is the ability to be sustained (Merriam-Webster 2014). Therefore sustainability can be applied to many facets of corporate operations, those being social, environmental and economic as well as a variety of government and societal operations. Sustainability, for the purposes of this paper, deals with corporate operations and is therefore defined as a business strategy in which social and environmental issues are mandated in a corporation's business model in order to promote long-term profitability.

Environmentalism vs. Sustainability

Although connected and often substituted, there is a clear distinction between the terms environmentalism and sustainability. "Environmentalism consists of a social movement regarding environment conservation and preservation that strives to persuade or induce the political acceptance process by lobbying, activism as well as education for protecting natural resources and eco-systems", where as "sustainability… represents the idea that human society should operate by utilizing industrial and biological processes that can be sustained indefinitely; this implies that those processes are cyclically rather than linearly oriented" (Yanarella et al 2009). These terms, however, do relate as one of sustainability's key aspects is the sustainability of natural resources through environmental conservation and preservation, therefore environmentalism.

Table 1. Green vs. Sustainability: A Typology of Differences		
Dimensions	**Green**	**Sustainable**
Relation to sustainability tripod	Only one leg (environmental improvement)	All three legs (environment health, economy vitality, social justice)
Focus	Individual components	Interplay of individual components and whole system
Tactics/strategy	Tactical application of activities that involve "picking low-hanging fruit"; promoting individual changes and reforms to make world less unsustainable	Strategic discovery of the proper scale that will make successive policy steps and actions easier and less costly by designing and implementing a sustainable, self-balancing system
Political orientation	Conventional, "pragmatic realist," reformist	Innovative, visionary, revolutionary ("going to the roots")
Scale	Individual devices, products, indicators, practices, buildings as most tractable level for greening	City region as the level at which human and social disequilibriums and ecological insults can be dynamically rebalanced
Risks or excesses	Greenwashing	Utopian fantasizing or top-down authoritarian policy action
Definition of success	Infinite progress of incremental improvements	Reduction of ecological footprint to a city region's fair Earth-share

Figure 1: Outlines the distinctions between environmentalism (in this case shown as green, a commonly used term representing environmentalism) and sustainability. (Yanarella et al 2009).

Corporate Sustainability

What is Corporate Sustainability/CSR?

Votaw and Sethi (1973) considered corporate sustainability and social reasonability to "mean something, but not always the same thing to everybody". This consideration captures the current ideologies and definitions of 'what is corporate sustainability?' Arguments exist for both all-encompassing and explicit definitions of corporate sustainability. Henderson (2001) states, "there is no solid and well developed consensus which provides a basis for action" and Banerjee (2001) argues that corporate social responsibilities' scope is too broad to be relevant to organizations, while Gobbels (2002) argues the lack of an "all-embracing definition of CSR" hinders the academic debate and research. Furthermore still, Marrewijk (2003) argues an "all-embracing" definition of CSR inherently must be broad and that if CSR is to hold any value in academic debate and corporate implementation a definition must be used which will set out differentiated approaches applicable to the varying contexts of corporate operations.

Common to all definitions and descriptions of CSR is the argument that whether in its own right, or because of long-term economic interest to business, CSR is desirable (Davis 1973, Johnson 1971). This 'justificatory' state of CSR research, frameworks and theory has greatly affected the development of sustainability (Van Oosterhout and Pursey 2006) and contributes to its inherent ambiguity. This state can be explained by the normative origins of CSR; it is seen as what ought to be done, rather than originating in business behavior which has actually been observed (Matten, Crane and Chapple 2003). A well known definition, developed by Archie Carroll (1979) of CSR, "the economic, legal, ethical and discretionary expectations that society has of organizations at any point in time" highlights the normative and justificatory state of CSR and, the expectations will only lead to responsibility if justified. An issue with this normative state arises in CSR definition and operations. It is unclear what CSR is unless the definition both explains what is considered desirable (beyond the justification 'what ought to be') and argues the responsibility of business to contribute to the desirable state (Oosterhout and Pursey 2006).

It cannot be argued that CSR has not provided a strong topic behind which scholars, practitioners and corporations can mobilize. Extensive research has been done under this banner to show the outcomes and effects of managerial decisions on environment, social and economic performance indicators (Carroll 1999). In a similar vein, stakeholders are now able to mobilize behind one topic that represents a broad range of initiatives, these being sustainability management, philanthropy, community involvement, social justice etc.

Regardless of definition, corporate sustainability is a custom-made process, corporations must individually decide which concepts apply and align materially within the company's context. For the purposes of this paper, I will use a definition developed by Wilson (2003). This definition separates common sustainability misnomers, distinguishing sustainability, corporate social responsibility and accountability. He defines corporate sustainability as an alternative corporate operation model "to the traditional growth and profit-maximization models", which borrows from four more established concepts: sustainable development, corporate social responsibility, stakeholder theory and corporate accountability theory, together forming the "pillars" of corporate sustainability (summarized in the figure below) (Wilson 2003). Following from Wilson (2003), I review each of these pillars in turn.

Sustainable Development

In a 1987 book, Our Common Future, published by the World Commission for Environment and Development, sustainable development was coined and defined as:

> "a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations"
>
> WCED- 1987

Industry's role in sustainable development is the balancing of the need for economic growth with environmental protection and social equity. Sustainable development contributes to corporate sustainability as a whole, by outlining the areas companies should focus on and by providing the societal objectives corporations should strive to achieve in ecological, social and economic sustainability. These objectives often target such challenges as: climate change & clean energy, sustainable transport, sustainable consumption & production, global poverty, public health, social inclusion, demography & migration, conservation and the management of natural resources (European Commission 2006). The ultimate goal of corporate sustainability is frequently considered sustainable development and it is because of this, sustainable development and corporate sustainability are mistakenly considered as one in the same. Furthermore, development is often considered to be synonymous with growth and progress, a possible misleading as corporate and societal goals may not always be continuous growth (Victor 2008).

Corporate Social Responsibility (CSR)

CSR is founded on the debate that corporations have an ethical obligation to consider the needs of the community and society; not solely the interests of its shareholders. This debate is deeply rooted in the history of environmentalism, discussed above, and was popularized in the 1960s as the public and investors alike began to demand more than financial performance. By the 1980s, this debate had shifted from not whether corporations have this responsibility but to what extent needs should be considered. According to Wilson (2003), this debate is based upon four philosophical theories: rights, deontological, social contract and social justice theory, arguing a mangers ethical responsibility to society.

CSR in action is a self-regulation tool, which if executed properly, is integrated into a corporation's business model. CSR activities include; voluntary actions performed by the company to be economically, socially and environmentally sustainable, operating transparently and consultations with local communities, stakeholders and government. Such voluntary actions can range from using 100% post consumer paper in corporate offices (Cineplex 2015) to a supply chain makeover. Mountain Equipment Co-op for example worked with its manufacturers to reduce one million plastic bags from its supply chain. Prior to 2007, each garment shipped to a MEC store was individually wrapped in a plastic bag and then placed into a box for shipping. MEC changed this wrapping method to a self-named 'sushi-roll' method, reducing plastic bag use while reducing the carbon footprint and material cost (MEC 2015). CSR contributes to corporate sustainability as a whole by providing the ethical arguments for why companies should work towards the goals set out by sustainability development.

Stakeholder Theory

Originally popularized by Freeman (1984), stakeholder theory is based on the idea that the stronger your relationships are with external stakeholders, the easier it will be to achieve corporate objectives and vise-versa. In this case stakeholders are defined as "any group of individual who can affect or is affected by the achievement of the organization's objectives" (Freeman 1984). Unlike the more philosophically based CSR stakeholder theory is a strategic management concept with an ultimate goal to build greater relationships with stakeholders in order to achieve a competitive advantage. Stakeholder theory contributes to corporate sustainability as a whole by providing the business arguments, arguing the strengthening of stakeholder relations will yield economic benefits, for why companies should work towards the goals set out by sustainability development.

Corporate Accountability Theory

Accountability theory is the ethical responsibility of a corporation to report on the actions for which it is responsible. Corporate accountability theory contributes to corporate sustainability as a whole by providing the ethical arguments for why companies should report on their sustainability performance.

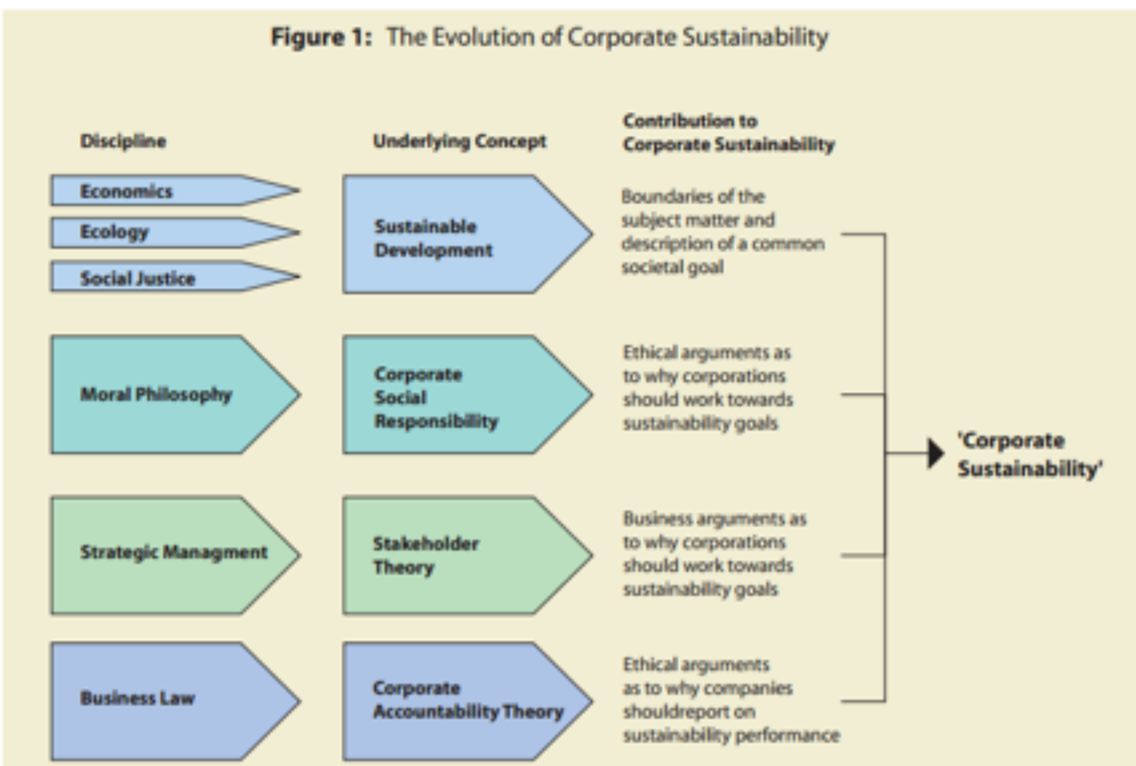

Figure 2: A chart representation of the definition and evolution of corporate sustainability from previous established disciplines developed by Wilson (2003).

Sustainability Reporting

What is Sustainability Reporting?

The most commonly used sustainability reporting framework, the Global Reporting Initiative, defines sustainability reporting as:

"the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development. 'Sustainability reporting' is a broad term considered synonymous with others used to describe reporting on economic, environmental, and social impacts (e.g., triple bottom line, corporate responsibility reporting, etc.). A sustainability report should provide a balanced and reasonable representation of the sustainability performance of a reporting organization – including both positive and negative contributions." GRI - 2011

While sustainability reporting contents range by industry and frameworks used (discussed below in sustainability frameworks) all reports are based on a balance of environmental, social, governance and economic indicators. Reports commonly measure these indicators, using various metrics: identify the current status within the corporation, the goal for that indicators and the means which will be implemented to achieve said goal.

History of Sustainability Reporting

According to Soderstrom (2013), sustainability reporting dates back to the 1960s when investors began to instill an investment strategy that demanded more then financial performance. In response to the 1960s Vietnam War, investors began to boycott companies supplying the war, a trend that expanded into companies producing harmful products or those that provided potentially harmful services, such as alcohol, tobacco and gambling. This marked the beginning of socially responsible investing and common market pressures of sustainability. In the mid 1970s, most social reporting was communicated as part of a corporations' financial statements. In surveys conducted by Ernst & Ernst (now known as Ernst & Young) in the 1970s, found only one percent of Fortune 500 companies provided a separate social responsibility report (Buhr 2007). The 1980s brought a time of recession in the US and as a result, lessened popularity of sustainability reporting as corporations struggled to remain profitable; however, as the economy recovered and the publication of the detrimental effects of large corporations rose in the 1990s, big business began to counteract this by producing corporate responsibility reports (White 2009). As reporting became mainstream, sustainability frameworks began to be established in the late 1990s.

Sustainability Reporting vs. Financial Reporting

Beyond the inherent distinctions of content, wider stakeholder target market, metrics and purpose, financial reporting and sustainability reporting differ greatly in the challenge of what is efficient. Traditional single bottom line operations have a primary purpose to increase profits; the means of getting to this point may vary by method (decreased costs, efficient labor etc.) but ultimately every strategy's ultimate goal is increased profits. This is displayed in a very fluent quantitative financial report. Sustainability reporting however must appropriately tackle the challenge of communicating sustainability operations where the ultimate goal not only varies by corporation, but where there are often counteracting components. Sustainability reporting deals with the 'Sustainability Triangle'; that being economic, environment and social initiatives. Therefore sustainability reporting must consider the interrelationships between these initiatives. A measure of effectiveness of a specific operation can be tracked for an individual initiative by means of an absolute indicator, however sustainability must be reported by efficiency using relative indicators, that being the relationship between two or more dimensions (Schaltegger et al 2006). For sustainability, these indicators are: eco-efficiency (the relationship between environmental and economics dimensions), socio-efficiency (the relationship between economics and social dimensions) and eco-justice (the relationship between social and environmental dimensions) (Schaltegger et al 2006).

Figure 3: A figure representing the triangle of sustainability and its interrelations as they relate to relative sustainability reporting indicators (Schaltegger et al 2006).

Reporting Frameworks

In combination with increasing public demand and corporations realizing the value of sustainability reporting, corporations have swayed away from producing their own reporting frameworks to using established frameworks in an effort to increase accountability, stakeholder inclusivity, thoroughness and credibility. These frameworks have been established by industry, academic institutions and accounting firms. Sustainability frameworks provide a footprint for corporations to produce their sustainability reports by outlining environmental, economic and social performance indicators, most often leaving it up to the corporation to determine material.

Summarized in the chart below produced by Shirashi (2014) are the five most established sustainability reporting frameworks; the Global Reporting Initiative (GRI), the Carbon Disclosure Project (CDP), the Dow Jones Sustainability Indexes (DJSI), the Global Real Estate Sustainability Benchmark (GRESB) and the Sustainability Accounting Standards Board (SASB).

STANDARD	FOCUS	WHY REPORT	SCORING	WHO REPORTS	REPORTING PERIOD
CDP	Primarily GHG emissions, but has grown to address water and forestry issues as well.	CDP holds the largest repository of corporate GHG emissions and energy use data in the world and is backed by nearly 800 institutional investors representing more than $90 trillion in assets. Its transparent scoring methodology helps respondents understand exactly what's expected of them. CDP was regarded as the world's most most credible sustainability rating in 2013.	Companies receive two separate scores for Disclosure and Performance using a 100-point scale. CDP recognizes top scoring companies in the Carbon Disclosure Leadership Index (CDLI).	Public and private companies, cities, government agencies, NGOs, supply chains.	• Climate Change program: Feb. 1 - May 29 • Supply Chain program: April 1 - July 3 • Cities program: Jan. 1 - Mar. 31 • Water and Forestry programs: Feb. 1 to June 30
Dow Jones Sustainability Indexes	Industry-specific criteria considered material to investors. Equal balance of economic, social and environmental indicators.	Membership in the DJSI is prestigious as it represents the top 10% of the 2,500 largest companies in the S&P Global Broad Market Index. The Corporate Sustainability Assessment (CSA) brings a sector-specific focus and need-to-know simplicity to disclosure for public companies. This index was regarded as the world's second-most credible sustainability rating after CDP.	Companies receive a total Sustainability Score is between 0 -100 and are ranked against peers; includes a Media and Stakeholder Analysis; those scoring within the top 10% are included in index.	The 2,500 largest public companies in the world.	April 3 - May 28
Global Reporting Initiative	Corporate social responsibility with an equal weight on environmental, social and governance factors. Heavy on stakeholder engagement to determine materiality.	GRI was announced as the official reporting standard of the UN Global Compact, making it the default reporting framework for the compact's more than 5,800 associated companies. It's among the oldest, most widely adopted and most widely respected reporting methodologies in the world. Its thorough focus on social and governance aspects of ESG is unparalleled.	Focus is on transparency so no true scoring methodology; new G4 framework requires entity reporting to choose "Core" or "Complete" reporting.	Public and private companies, cities, government agencies, universities, hospitals, NGOs.	Anytime, but typically integrated into a company's traditional annual report.
GRESB	Environmental, social and governance performance in the global commercial real estate sector only. Includes asset- and entity-level disclosures.	Private and public institutional investors look to GRESB's annual survey as the barometer of sustainability performance in the commercial real estate industry. Its niche target audience allows it to give deeper and more accurate insights into industry performance and reveal "investment grade" results.	Responses scored out of a possible 140.5 points distributed across two categories of data. Heavy weighting placed on implementation and asset-level performance.	Commercial real estate owners, asset managers and developers.	April 1 - June 30
SASB	US public companies only. Industry-specific issues deemed material to investors.	SASB's standards enable comparison of peer performance and benchmarking within an industry. Studies by Goldman Sachs and Deutsche Bank have shown the stock of companies who disclose on sustainability outperforms that of companies who do not. SASB is backed by the likes of Bloomberg LP and the Rockefeller Foundation, giving it extra clout with capital markets.	No scoring system. Instead, SASB is a standardized methodology for reporting sustainability performance through the Form 10-K.	No one yet - they've just released their first sector reporting guidelines.	Integrated into quarterly 10-K filings.

Figure 4: A chart summarizing the focus, scoring, details of reporting and reporting period of the fire most established sustainability reporting frameworks (Shiraishi 2014).

The GRI was founded in 1997 as a department in the non-profit Coalition for Environmentally Responsible Economics. In 2000, the first reporting guidelines were created at which point GRI separated to form their own institution. In 2002, the second generation of guidelines, known as G2, were introduced by the United Nations Environment Programme, at the World Summit on Sustainable Development. This encouraged U.N. member countries to use GRI as their reporting framework. In 2006, the third generation, G3, was released along with a formal partnership with the United Nations Global Compact, which enabled GRI to be the default reporting framework for, 5,800 associated companies. In May of 2013, the fourth generation, G4 guidelines were released (GRI 2014). GRI is commonly considered the most widely adopted and respected reporting framework (Shirashi 2014). Most often used as a corporate social responsibility tool GRI places equal value on environmental, social and governance using stakeholder engagement to determine materiality. An important factor of GRI is that the emphasis is on transparency, and therefore no true scoring is used. Report quality (or report grade determined by an external audit) is established by reporting on material indicators, not their performance.

The CDP, established in the U.K. in 2000, was formed as a project to create transparency of corporate carbon footprints in order to measure and reduce their emissions. In 2003, the first carbon data use request was sent out with a response of 235 corporations. In recent years the CDP has expanded its mission to forestry, water use and municipality standardized reporting. In 2013, companies representing more than $90 trillion in assets report their carbon emissions to the CDP. Companies are measured on a 100-point scale that is publicly disclosed in the Carbon Disclosure Leadership Index. The CDP was determined as the most credible sustainability rating by a survey performed by GlobeScan (Shiraishi 2014).

The DJSI is a sustainability index based on the largest 2,500 companies in the S&P Global Broad Market Index. The DJSI performs a corporate sustainability assessment with a sector-specific focus then ranks the companies between 0-100, with the top 10% being listed in the index. This is regarded as a prestigious index with equal balance on economic, social and environmental indicators. In the same survey as above, the DJSI was ranked as the second most credible sustainability rating (Shiraishi 2014).

The GRESB is a real-estate industry specific sustainability survey. Scored on a 140.5-point system this annual survey measures environmental, social and governance performance providing private and public investors with a sustainability performance indicator.

The SASB has been created for US public companies only, geared towards investors, reporting on industry-specific issues with comparisons to peer performance and benchmarks. The SASB has just released their first sustainable reporting guidelines; however, is backed by Bloomberg LLP and the Rockefeller Foundations and will therefore hold weight in capital markets.

Integrated Reporting

Lead by the International Integrated Reporting Council (IIRC), integrated reporting (IR) is a value creation communication report produced by corporations.

> "An Integrated Report is a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term"
>
> IIRC 2014

According to the IIRC, an IR is targeted at the providers of financial capital with a purpose to show how an organization creates value overtime, however, it benefits all stakeholders. An IR acts to assist and communicate an organizations integrative thinking, that being the consideration of the relationships between operational and functional units and the resources used and affected by the organization. The IIRC defines these resources, in the IR framework, as capitals identified as financial, manufactured, intellectual, human, social and relationship, and natural capital. An IR's contents will vary dependent on which capitals an organization deems material, however, will follow a framework of elements as shown below.

Content Elements	Details
Organizational Over and External environment	• Identifies organizations mission and vision • Principal activities, markets, competitive landscape and position within the value chain • Quantitative information (Financial, employees and operational) • Factors affecting the external environment
Governance	• Leadership structure, skills and diversity • Relationship with key stakeholders • Strategic direction and decision-making
Buisness Model	• Inputs, business activities, outputs and outcomes

Content Elements	Details
Risks and Opportunities	• Identifies key risks and opportunities, whether they be internal, external or both • Likelihood of these occurring • Steps to mitigate risks and maximize opportunities
Strategy and Resource Allocation	• Current strategies in place • Organizations short, medium and long term strategic objectives and implementation plan • Resource allocation plans • Metrics for targets
Performance	• Quantitative indicators • Organization's effects on capitals up and down the value chain • Status of key stakeholder relationships • Link between organizations current performance and outlook
Outlook	• Organization's expectations about the external environment • How it will be affected • How the organization will respond
Basis of Preparation and Presentation	• Summary of materiality process • Summary of frameworks used to quantify or evaluate material matters

Chart 1: The above chart describes the detailed contents of an integrative report

Global companies such as; Coca-Cola, Unilever, HSBC, PotashCorp and Danone have produced IR reports in recent years. None of the companies directly involved in my analysis have produced an I; however, Mountain Equipment Co-op's 2014 sustainability communication will be in the form of an IR. Integrated reporting provides a corporation the opportunity to perform and materiality analysis and cumulate other reporting frameworks.

Comparative Sustainability Analysis

This comparative analysis looks at the two categories of corporations (proactive and reactive) and quantitatively records their ability to report on sustainability indicators, much like other sustainability indexes. However it goes a step further to incorporate each corporation's ability to set and achieve sustainability goals. The addition of this second step in the analysis acts to evaluate a corporations' success at bridging the gap between reporting and operations. The result of such an analysis is a numerical score, allowing me to rank and compare corporations.

Methodology

All information has been gathered from formal sustainability/social responsibility/green mission reports, CDP disclosures and corporate websites. While I used historical data for a deeper analysis in the second part of my research, for the purposes of this comparative analysis the most recent year's reported data was used. For most corporations, that is 2013 data; however, for some, 2012 data had to be used (indicated on the analysis chart), since some corporations have not published 2013 data. In the case of Mountain Equipment Co-op the 2013 report was a summary report and therefore the full 2012 report was used in order to maintain a comprehensive level of analysis. Furthermore, if a corporation operates globally, the company wide data was used rather then the information only referring to Canadian operations.

Corporation Selection

The first categorization guidelines were set out to determine whether a corporation falls under the proactive or reactive category. A proactive corporation is one that controls a situation, in this case has created a sustainability business model prior to consumer market trends, rather then being proactive, waiting to develop this strategy after it has already happened. For the purposes of this research, mission statements, when available, were used to determine this categorical difference for the comparative analysis. For each corporation considered, their missions statement at inception was deemed the determining communication. In some cases the corporations considered did not have a public mission statement at inception or an up to date mission statement. In these cases the determination was made by analyzing their current strategies, any public value and goals statement and corporate focus on stakeholders vs shareholders.

Corporations for each category were selected under the following criteria and considerations (described in detail below). Corporations must be medium to large sized to ensure comparability. Canada must be an area in which each corporation operates to some degree. Corporations must produce a formal sustainability report, publicize sustainability performance on their corporate website and/or report to the carbon disclosure project (CDP) in order for their to be enough resources to perform this analysis. The above guidelines resulted in a list of eight corporations for the proactive category, each of which was analyzed. The reactive category resulted in a far greater number and therefore, further criteria were employed to narrow the list in order to make it more manageable. These criteria were economic sector and awards: corporations were selected based upon maximizing the number of industries represented as well as those who had received sustainability awards (these being Corporate Knights' Top 100 and Best 50 Corporate citizens, CDP Leadership Index and the Dow Jones Sustainability Index), resulting in a list of ten.

Categories

Published Sustainability Report

Included as a category as there is inherent value in the process of producing a formalized report. Reports did not have to follow GRI's framework or other established frameworks. Qualification was based upon providing sustainability indicator performance in a formal report published by the corporation. A CDP disclosure did not qualify as a formal report.

Priority Indicators

Financial

Since all corporations analyzed report finances with reoccurring regulatory frameworks and therefore, although an essential part of sustainability, there are no financial priority indicators as all corporations would receive the same score. Revenue was included for each corporation in the individual charts as a means to determine indicator intensities.

Environmental

Four environmental priority indicators were measured for each corporation, as they are deemed material to business across all industries. These four indicators are: greenhouse gas emissions, energy, waste and water. These indicators were used by the Corporate Knights' Global 100 and Best 50 Corporate Citizens (Corporate Knights 2015) and are reported to the CDP (besides waste) and are considered general standard disclosures for the G4 GRI reporting framework (GRI 2013). Greenhouse gas emissions (GHG) was considered total GHG emissions (often broken down into Scope 1,2,3) or GHG emission intensity (tonnes of CO_2 equivalent/revenue). Energy was considered total energy consumption or energy consumption intensity (GJ or MWh/revenue). Waste was considered total waste production, waste avoidance or waste diversion rate. Water was considered total water consumption, water avoidance or water intensity (megaliter/revenue).

Social

Two social priority indicators were measured for each corporation as they are deemed material to business across all industries. These two indicators were community investment and women in the workforce. Community investment was considered monetary donations, grants as well as held charitable events and volunteering contribution. Women in the workforce was considered a percentage of the total workforce or management.

Industry Specific Indicators

Two industry specific indicators were measured for corporations operating within an industry that deems the indicators to be material to business. These two indicators were safety and turnover. Materiality, the determination of which corporations were measured by these indicators, was determined following the Corporate Knights Top 100 methodology (Corporate Knights 2015). Safety was considered injury rate or lost-time/injury frequency rate (cases per 200,000 hours worked). Turnover was considered the voluntary turnover rate for the total workforce.

Subcategories

Within each priority indicator there are three subcategories: reported, goal set and goal achieved. Reported measures were whether or not the priority indicator was reported for, goal set measures if a corporation set a target for that specific indicator and goal achieved measured whether or not that goal has been achieved or if the corporation was on track to do so.

General Categorical Qualification

Qualifications for each category and sub-category were measured as yes or no. Most qualifications were straight forward, however, a few cases complications arose. For long-term indicator goals (biogen, for example:reduction of 80 percent by 2020 based upon 2006 baseline, for 2013 reached 64%), a goal was considered achieved if at the current year, the corporation was on pace or ahead of pace to reach the set goal. A goal was also considered set if a corporation was striving to and comparing itself to the industry and/or an external benchmark. If a goal was merely tracked and compared to previous years or a benchmark year, without a specific numerical goal that was not considered a set goal. A goal to track a specific indicator was not considered a set goal either.

Weighting

In order to ensure this analysis' primary function to measure the successful connection between sustainability reporting goals and operations, I used an emphasis weighting on the "goal achieved" category. This category was therefore worth double the other categories making each priority indicator worth a total of four and the sustainability report category worth one.

Scoring

After all categories were measured, an analysis score, in percentage form, was calculated for each corporation. This score was made up of all the categories deemed material to the corporation as detailed above. For each "yes" a score of 1 was achieved (two for the "goal achieved" subcategory) and for a "no", a score of 0 was achieved. The analysis score was then determined by dividing the score by the total amount achievable for that corporation and communicated as a analysis score percentage. The two categories of corporations (proactive and reactive) were then compared by determine the average score of the corporations within each category.

Results

The final average analysis score for the proactive corporations category was 40.7 whereas the reactive category was 34.2. This resulted in the proactive categories scoring an average 19% higher than those considered reactive. Of the top five scoring corporations four came from the proactive category (Mountain Equipment Co-op, Vancity, Biogen and Whole Foods Market). The highest scoring reactive corporation (TransAlta) ranked 4th at 45% whereas the highest ranking corporation overall scored 56% (Mountain Equipment Co-op). The lowest scoring corporation was Lululemon at 20%. Results are summarized below in the Comparative Sustainability Analysis chart in Appendix A, along with the individual corporate data charts used for this analysis.

An interesting conclusion which must be discussed is the result that the two highest scoring corporations from the analysis were both co-operatives, these being Mountain Equipment Co-op and Vanity. A co-operative being a business jointly owned and operated by its members for their mutual benefit, engaging in the production or distribution of goods or services (Oxford 2015). In the case of MEC and Vancity, these are consumer co-operatives meaning that they are owned by the members which use they're services and products. I believe this is the result of the second co-operative guiding principle, set out by the Rochdale Society of Equitable Pioneers and referred to as the Rochdale Principles, democratic member control (ICA 1937). The co-operative structure lends the opportunity to each of its members to have influence over business operations. Co-op's are very much in tuned with their consumers needs due to this organization and therefore most easily adapt to consumer lead sustainability initiatives. I believe this is the reason co-operatives scored highest on the sustainability analysis.

Limitations

The results of this analysis are based upon publicly available material and therefore there is the possibility that I was unable to gain the whole story for each corporation. Both goal-setting and corporate size may have been sources of limitation.

While generally regarded as a positive step, it is possible that a corporation does not set a goal for a sustainability indicator, even if it out-performs the industry in that category. If this is the case, this index would underestimate a corporation's sustainability performance. On the other hand, a corporation may set easily obtainable goals and therefore, this index would overestimate a corporations performance. Furthermore, lack of a defined goal does not necessarily equate a lack of initiatives working to improve sustainability indicators.

Another limitation to be considered is in some situations a corporation may not be large enough to feasibly create a sustainability report or for the preparation of a sustainability report to make business sense. In the case of both Lululemon Athletica and Whole Foods Market, a sustainability report was not produced and therefore regardless of sustainability performance, the analysis score was low creating a score based upon transparency and reporting rather than their ability to achieve set sustainability goals.

It is these limitations; however, that provide the argument for the next step of my research, a deeper analysis of sustainability operations through the means of interviews and case studies.

Interviews and Discussion

Methods

Using the results of the comparative sustainability analysis, I reached out to corporations to conduct in-person and over the phone interviews. My priority was to speak with those corporations that ranked at the top of my quantitative analysis, as these corporations were deemed to be those that set and achieved sustainability indicator goals most successfully and therefore have most successfully bridged the gap between sustainability reporting and operations. These were foremost the corporations that ranked highest in each category of corporation, Mountain Equipment Co-op (proactive) and Transalta (reactive).

Interviews

Mountain Equipment Co-op (MEC)

I spoke with Valerie Presolly and Amy Roberts from MEC, sustainability manager and director of sustainability respectively. MEC has produced their version of a sustainability report, the accountability report, since 2005 and followed the GRI framework from 2009-2013. MEC's upcoming report will be in the form of an integrative report. Their vision is to be "an innovative, thriving co-operative that inspires excellence in products and services, passion for wilderness experiences, leadership for a just world, and action for a healthy planet" (MEC 2005). MEC was ranked first in 2010, second in 2011, and first in 2014 on Corporate Knights 50 Best Corporate

Citizens in Canada (Corporate Knights 2010, 2011, 2014). Amy Roberts heads up a team which formed in 2000 and reports directly to the CEO, David Labistour.

Labistour himself said in a 2014 interview with Corporate Knights (Corporate Knights 2014a), that he does not operate MEC with the mindset that consumers will buy the products because of their sustainability attributes, however believes is it simply good business. Valerie and Amy spoke with me about risk avoidance and how corporations which stay ahead of the curve will in the long-run be more efficient. They argued the case of enacting beyond compliance within your supply chain, especially as regulations come into place in third world countries. In 2013 MEC set and exceeded their goal for the percentage of bluesign materials (71%) in their apparel brand. These are materials that are produced in facilities that are bluesign partners and have environmental management system in place. Bluesign is a Swiss organization that has developed environmental and health standards for the textile industry (MEC 2012, 2013). Furthermore MEC audits all of their manufactories in compliance with their Code of Conduct standards, with a result of only 8% having 8% unacceptable violations (MEC 2013).

In the same Corporate Knights interview, Labistour said there is no sustainability person within each store enforcing the initiatives, sustainability is simply “part of standard operations of the organization” and is integrated into the deliverables of each employee (Corporate Knights 2014a). This type of mandate requires employee buy-in at all levels of the corporation and is lead by the corporations CEO and executive team. Each member of MEC’s executive team have at least one sustainability related performance goal that is linked to their compensation plan (MEC 2012).

A specific case study that Valerie and Amy shared with me was MEC's revamp of the traditional shipping to store practices that is called "sushi-roll" packaging. Prior to 2009, each garment shipped to the store arrived individually wrapped in a poly bag. The 2009 pilot study changed this process to roll and tie the garments in place with a raffia. In 2010 the initiative was applied to all domestic and foreign manufacturing, resulting in a drastic reduction in material costs for the manufacturers. Valerie and Amy noted this was a huge feat for a relatively small purchaser and attributed the success to its quantifiability.

Transalta

I spoke with Oliver Bussler, director of Transalta's sustainability development department. Transalta has produced their reports on sustainability since 1994, originally termed 'Environmental Performance Report' and even called 'Sustainable Development' in 1995. The most recent report on sustainability is Transalta's 20th following the GRI's framework. Similar to MEC, Transalta's upcoming 2014 report will be in the form of an integrative report, as result of CEO mandate. Their commitment is to "strive to provide reliable service to our customers, to operate responsibly and transparently, and to uphold the safety of employees, our neighbours and the environment" (Transalta 2014). Transalta was recognized as one of the 50 Most Socially Responsible Corporations in Canada on the 2014 Maclean's Sustainalytics list, earned placement on Corporate Knights Best 50 Corporate Citizens in Canada list and listed on FTSE4Good's sustainability index for seven years running in 2013. Oliver's department is under the regulatory and legal department reporting to the vice president of government relations and sustainability.

While Transalta operates in coal and natural gas, as of 2013, renewables represents 24% of its capacity. Transalta opened its first renewables facility, a hydro plant in Seebe, Alberta in 1911, introduced the first wind power generation in Alberta in 1997 and today is Canada's largest wind power generator company (Transalta 2013). Over the past 20 years, Transalta has moved away from coal power generation reducing its coal generated electricity from 89% to 72% and intends to continue to decrease this number with two of their coal-fired plants being shut down in 2019 (Transalta 2013). Oliver argues the cost-saving, value-generating and risk avoidance benefits of sustainable operations.

Since there are regulatory measures set by the Canadian government Transalta must write a cheque to the government as a result of their GHG emissions. Oliver argues that this quantifiability has greatly acted to promote GHG emissions reduction initiatives at Transalta as their success results in realized cost-savings. In 2012, the government set firmer performance standards for coal-fired plants reaching 50 years of age and as a result in some cases it has become more profitable to shift away from coal burning plants which will act to greatly reduce greenhouse gas emissions (Transalta 2013).

Oliver explained to me that in 2013, Transalta created Transalta Renewables as a separate corporation to hold and operate a portion of its renewable facilities, as a market demand was recognized. As of year end 2013, Transalta Renewables owned 29 wind and hydro assets (Transalta 2013). This split has not only created financial value as it realized the market's demand for the renewables industry, but promotes the continued investment in renewables.

Lastly Oliver explained to me a harmony of environmental benefit, cost-saving and risk avoidance case study. At their wind farms outages can occur when birds and other animals contact certain spots, not to mention the wildlife mortality and the risk of grass fires. To prevent this in 2013 Transalta launched the Avian Protection Plan which installed plastic covers on electrified components providing a safe barrier, preventing the risk of outages as well as reducing bird mortality.

Discussion

Throughout the literature review, development and completion of the comparative sustainability analysis and corporate interviews, a few specific overarching characteristics were employed by corporations that most successfully promoted sustainability within their operations. These lessons learnt are CEO and employee buy-in, quantifiability and integrative reporting.

Sustainability Lessons Learnt

These lessons learnt are not sustainability initiatives, but rather best practices and the keys to successful sustainability within a corporation: mainly the characteristics a corporation can employee to successfully operationalize their sustainability initiatives.

CEO Buy-in

A corporation simply cannot operate without the buy-in of its employees and that buy-in is often set by the CEO's influence upon its employees in everyday operations. A common practice in sustainability reporting is for the report to be introduced with a message from the CEO. While I believe this is primarily a public relations exercise, the corporations that ranked the highest in my comparative analysis both discussed with me exemplary CEO and executive led sustainability initiatives. In the case of MEC, the sustainability team reports directly to the CEO and the compensation plans of the CEO and executive teams are linked to sustainability performance initiatives. For Transalta, Dawn Farrell, the CEO has promoted the switch to integrative reporting, facilitated the created of Transalta Renewables and is employing the shift away from coal powered generation towards renewables.

Quantifiability

An overwhelming theme in successful sustainability initiative case studies was the ability to quantify the initiative. In a profit driven corporate world, numbers dominate business decisions. One of sustainability's greatest problems is the inability to numerically communicate the realized benefit of initiatives. However, if a initiative can be quantified, its chances for success greatly improve. In a discussion with Toronto Dominion's (TD) director of corporate responsibility, Rachel Guthrie, a successful case study was brought up. In 2010, TD set an target to reduce 20% of its paper use relative to its 2010 baseline by 2015. In order to promote this, the sustainability team calculated the true cost of this paper use, this included the paper itself, printers, printer accessories, destruction, management, secure couriering etc. and resulted in a cost seven times the procurement of the paper. This has helped to promote the success of the initiative and TD is currently on pace to reach its target. Similar success was experience for both MEC and Transatla in the specific initiatives mention above. 4949

Disclosure and Integrative Reporting

The overwhelming majority of the corporations analyzed in this report have followed the GRI reporting framework, which has been discussed in detail above. The most recent GRI guidelines, G4, promotes each corporation to perform a materiality matrix and then choose which sustainability indicators are material to its operations (GRI 2013). As a result of this corporations have the choice as to what to report on. Therefore one bank can deem energy consumption as material and another not, preventing the comparison and more importantly disclosure of that indicator.

I believe certain indicators should be deemed material to all corporations and it be regulatory to publicly disclose performance of these indicators. It is of my opinion that a corporation in the mining, retail, banking or any other industry consider certain indicators such as GHG emissions, energy consumption, waster consumption and waste production to be an integral part of their business, especially for larger corporations. It is for this reason that in my comparative analysis I included these indicators as priority indicators for all corporations analyzed. Not only would this allow for comparison between all corporations for key sustainability performance indicators (and more relatively comparison within industry), it also forces the corporations to analyze their own operations. It is of my opinion that this type of uniform disclosure practice should be implement by government mandate.

A 2014 report released by the CDP found that of corporations listed on the S&P 500 companies, which have built sustainability into their core strategies, have a 18% higher return on investment than companies that have not and a 67% higher return on investment than companies have refused to disclose their emissions (Confino 2014). Each of the corporations ranked at the top of my comparative analysis excelled at reporting disclosure and are exploring the transition to integrative reporting. This type of reporting will bring credibility, exposure and further development of procedures to sustainability reporting. As part of the annual report, sustainability initiatives will be brought into the mainstream reporting procedures, increasing their exposure. This move promotes sustainability success within a corporation as stakeholders, shareholders, key discussion makers, analysts and the general public read these reports and these groups each hold, to some extent, power to effect the corporations financial success.

Conclusion

The results of my sustainability comparative analysis confirm that corporations who have been proactive to corporate sustainability, achieve sustainability goals more often and more successfully in comparison to those that have been reactive. The proactive category, on average, outperformed the reactive category by 19% as well as containing four of the top five scoring corporations within the analysis. Upon further analysis of the corporations that received the highest ranking from each category, it is clear that sustainability strategies are promoted differently within their operations. These differences being the integration of the sustainability departments into the corporate structure and the implementation of sustainability initiatives into employee mandates.

Throughout the literature review, development and completion of the comparative sustainability analysis and corporate interviews, I identified overarching characteristics that were employed by corporations bridging the gap between CSR reports and operations by successfully achieving sustainability targets, these lessons learnt being CEO buy-in, quantifiability, disclosure and integrative reporting.

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Appendix A: Comparative Sustainability Analysis Chart and Individual Corporate Data

Comparative Sustainability Analysis (CSR Report Survey)

Corporation	Sustainability Report	GHG Emissions Indicator	Energy Indicator	Waste Indicator	Water Indicator	Community Investment Indicator	Women in the workforce Indicator	Safety Indicator*	Turnover Indicator*	Analysis Score (%)
	Proactive Corporations									
Agilent Technologies*	Published : YES (Y)	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:Y	Reported:Y Goal Set: N Goal Achieved:N	Reported:Y Goal Set: N Goal Achieved:N	Reported:Y Goal Set: N Goal Achieved:N	Reported:Y Goal Set: N Goal Achieved:N	N/A	N/A	40
Biogen	Published : YES (Y)	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	N/A	48
Celestica	Published : YES (Y)	Reported: Y Goal Set: Y Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: N Goal Set: Y Goal Achieved: N	Reported: Y Goal Set: Y Goal Achieved: N	Reported: Y Goal Set: N Goal Achieved:N	Reported: N Goal Set: N Goal Achieved:N	33
Lululemon Athletica*	Published : NO (N)	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:N	Reported: N Goal Set: Y Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: N Goal Set: N Goal Achieved:N	N/A	N/A	20
Mountain Equipment Co-op*	Published : YES (Y)	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: N Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: N Goal Set: N Goal Achieved: N	N/A	N/A	56
Umicore	Published : YES (Y)	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	36
Vancity	Published : YES (Y)	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: N Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: N Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: Y Goal Set: N Goal Achieved:N	N/A	Reported: Y Goal Set: N Goal Achieved:N	52
Whole Foods Market	Published : YES (Y)	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: N Goal Set: N Goal Achieved:N	N/A	Reported: N Goal Set: N Goal Achieved:N	41
	Reactive Corporations									
Agrium	Published : YES (Y)	Reported: Y Goal Set: Y Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	N/A	31
ARC Resources	Published : YES (Y)	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: Y Goal Set: N Goal Achieved:N	Reported: N Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	36
Barrick Gold	Published : YES (Y)	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:N	Reported: N Goal Set: N Goal Achieved:N	27
Bell Canada Enterprises	Published : YES (Y)	Reported: Y Goal Set: Y Goal Achieved:N	Reported: N Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	39
Bank of Montreal	Published : YES (Y)	Reported: Y Goal Set: Y Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:N	Reported: N Goal Set: N Goal Achieved:N	Reported: N Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:N	N/A	Reported: Y Goal Set: N Goal Achieved:N	38
Bombardier	Published : YES (Y)	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:N	Reported: N Goal Set: N Goal Achieved:N	33
Canadian Tire	Published : YES (Y)	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: N Goal Set: N Goal Achieved:N	N/A	N/A	24
Canadian National Railway*	Published : YES (Y)	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: N Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:N	Reported: N Goal Set: N Goal Achieved:N	33
Suncor Energy	Published : YES (Y)	Reported: Y Goal Set: Y Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:N	Reported: N Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: Y Goal Set: N Goal Achieved:N	Reported: N Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:N	Reported: N Goal Set: N Goal Achieved:N	36
TransAtla	Published : YES (Y)	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: N Goal Achieved:N	Reported: Y Goal Set: Y Goal Achieved:Y	Reported: Y Goal Set: Y Goal Achieved:Y	45

Comparative Analysis Totals	
Corporation Category	Average Analysis Score (%)
Proactive	40.7
Reactive	34.2

* 2012 Data

Agilent Technologies

	Net Revenue ($ Billion)	**Community Investment ($ million)**	**Energy Consumption (1,000 GL)**	**Water Consumption (1,000 m3)**	**Waste Diversion Rate (%)**	**Total Greenhouse Gas Emissions (Metric Kilotones CO2e)**	**Women in the workforce (%)**	**Recordable Injury/Lost Time Frequency (lost workday injury/illness x 200,000/ worked hours)**
2009	4.48	5.7	951	818	65	125	33	0.13
2010	5.4	6.32	962	921	71	122	33	1.14
2011	6.6	10.4	1011.2	1072.81	90.20	122	33	0.1
2012	6.8	17.1	1045.7	1,194.2	80.8	131	33.7	0.12
	Source: (Agilent 2013)							

Agrium

	Net Revenue ($million)	Community Investment ($million)	Total Recordable Injury Rate (Cases per 200,000 hours worked	Percentage of Women (%)	GHG Emission Intensity (tonnes of CO_2 equivalent per tonne of ore processed)	Hazardous Waste (Tonnes)		
2009	11,153	2.6	3.0	17	0.47	10,500		
2010	10,743	4.5	2.1	17	0.38	13,800		
2011	15,470	6.7	2.1	19	0.39	23,500		
2012	16,024	7.5	2.1	19	0.51	21,600		
2013	15,727	9.2	1.74	20	0.43	13,600		
	Source: Agrium (2013)							

Barrick Gold

	Net Revenue ($million)	Gold ounces produced	Spill Management (KL)	Chemical Related Wildlife Mortalities	Greenhouse Gas Emissions (KG/Tonne)	Enviro Compliance Regulatory Actions	Energy Consumption (MJ)	Water Consumption (L)	Number of Fatalities	Lost-Time Frequency (Cases per 200,000 hours worked)	Number of Regulatory Actions	Community Development ($million)
2009	8,136	7,423,000	82,864	131	25.4	70	253	416.9	4	1.20	794	
2010	10,924	7,765,000	1,798	210	28.7	62	280.7	536.1	6	0.93	723	43,287,163
2011	14,236	7,676,000	11,845	83	25.8	57	269.4	480.3	2	0.92	568	48,110,468
2012	14,394	7,421,000	37,558	107	27.8	35	289.6	515.2	4	0.76	659	54,367,368
2013	12,511	7,166,000	1,740	42	25.9	65	274	490.1	4	0.64	604	80,831,117

Source: Barrick Gold (2013)

Bell Canada Enterprises

	Net Revenue ($million)	**GHG Emissions (Kilotonnes of CO_2 Equivalent)**	**Diversion Rate for Recovered Waste**	**Community Investment ($million)**	**E-Billing (%)**	**Health and Safety Frequency Indicator (lost-time accident cases/200,000/ worked hours)**
2009	17,735	357	87%	13	16.4%	0.35%
2010	18,069	239	89%	15.8	21%	0.38%
2011	17,661	220	91%	16	22% (Missed Goal of 24%)	0.39%
2012	19,978	294	73.5%	17	29.5%	0.39%
2013	20,400	275	69.9%	15.8	39.1%	1.48
	Source: BCE (2013)					
			GHG Goal: To 50% of 2003 GHG emissions by the end of 2020			
			Diversion Rate Goal: Reach 75% in 2016			
			E-billing percentage: To 35%			

Biogen

	Net Revenue ($ Billion)	Voluntary Turnover Rate	Women in the Workforce (%)	Days Away Case Rate (Days away cases x 200,000/ worked hour)	Energy Intensity (MMBTUs/ million $ revenues)	Greenhouse Gas Emission Intensity (metric tons/ million $ revenues)	Water Use Intensity (cubic meters/ millions $ revenues)	Solid Waste to Landfill (metric tons)
2011	5.0	5.7	51	0.14	223.6	21.3	117	317
2012	5.5	6	52	0.12	200.4	18.2	101	44
2013	6.9	4	51.5	0.10	163.8	12.8	84	0
	Source: (Biogen 2013)							

BMO

	Net Revenue ($million)	Greenhouse Gas Emissions (tCO_3e)	Renewable energy purchases (MWh)	Women Executives (%)	Community Investments ($millions)	Incidents of Discrimination (from external bodies)
2009		159,140	24,000	34.6	47.2	
2010	12,239	160,000	115,213	34.5	47.3	
2011	13,742	86,754	115,213	34	38.5	24
2012	14,866	107,786	115,213	33	55.7	21
2013	15,372	110,548	115,197	30	56	24

Source: BMO (2014)

GHG Goal: 10% reduction by 2016

Women Executives Goal: 40% by 2016

Bombarider

	Net Revenue ($million)	Women In Management (%)	Accident Frequency Ratio (Cases per 200,000 hours worked)	GHG Emissions Revenue Intensity (tonnes of CO^2e/ million dollars)	Water Consumption Revenue Intensity (m^3 / million dollars)	Waste Generated Revenue Intensity (metric tonnes/million dollars)
2009	19,700	12.3	0.95	20.9	116.6	1.22*
2010	19,430	14.2	0.68	18.6	118.1	1.09*
2011	17,900		0.5	17.5	120.7	3.1
2012	16,400		0.4	19.0	122.2	3.4
2013	18,200		0.4	17.4	104.4	3.1
	Source: Bombardier (2013)					

	Net Revenue ($millions)	Energy Use Avoidance (GJ)	GHG Emissions Avoidance (tonnes of CO_2 equivalent)	Waste Avoidance (tonnes)	Water Avoidance (m^3)	Low Cardon Energy Generated (GJ)	Waste Diversion Rate (%)	
2010	8,980	106,398	7,844	610,732 (kg)		176,266(ekWh)		
2011	10,387	114,423	6,931	2,450		277		
2012	11,427	232,800	16,200	2,000		2,582		
2013	11,785	175,368	8,710	1,700	2,291	14,640	88	
	Source: Canadian Tire (2014)							

Celestica

	Net Revenue ($ million)	Women in the workplace (%)	Lost-time accident rate (accident cases x 200,000/hour worked_	GHG Intensity (emissions/ millions $ revenue)	Total Energy Consumption (Megawatts)	Water Consumption (million cubic meters)	Waste Conversion Rate (%)	
2009	6,092			34	427,802			
2010	6,526			30	425,090			
2011	7,213			25	347,728			
2012	6,507			31	398,200			
2013	5,796	41	0.11	33	379,118	1,136	84.9	
	Source: Celestica (2010,2011,2012,2013)							

Canadian National Railway

	Net Rail Freight Revenues ($millions)	Total GHG Emissions (million tonnes CO_2e)	Total GHG emissions intensity (metric tonnes of CO_2e/$1,000 rail freight revenue)	Energy Intensity (Megawatt hours per million U.S dollars of rail freight revenue)	Total Waste (metric tonnes)	Injury Rate (Cases per 200,000 hours worked)	Female Employees (%)	Community Investment ($million)
2009	6,632	4.4	0.68	2.36	N/A	1.78	N/A	25
2010	7,417	4.8	0.65	2.30	59,500	1.72	8.5	21.8
2011	8,111	4.9	0.61	2.20	51,291	1.55	8.6	16
2012	8,938	5.2	0.58	2.10	50,234	1.42	8.8	18.8
	Source: CN Rail (2013)							

Lululemon

	Net Revenue ($ million)	GHG emissions (metric tonnes CO2e)	GHG emissions Intensity (metric tonnes CO2e/$ million revenue)	Water Consumption (Megaliters)	Water Intensity (litre/product unit)	Energy Consumption (MWh)	Energy Intensity (MWh/$ million)
2009	452						
2010	711	5,770	8.12				
2011	1,000	7,673	7.67	60.7	3.31	23,408	23.4
2012	1,370	8,864	6.47	72.2	3.18	26,210	19.1
	Source: CDP (2013,2013a)						

Moutain Equipment Co-op

	Net Revenue ($million)	Community Contribution ($million)	Percentage of Community Contribution to Conservation, Access and Activity	Waste Diversion Rate (%)	GHG Emissions (tCO^2e)	Products with Environmentally Preferred Materials	Blue-Sign Approved Materials	Energy Consumptio n (GJ)	Energy Intensity (GJ/ $million)
2011	270	2.76		92		551	39%	51,127	189.3
2012	302	2.06	40%	92	6,786	589	53%	45,314	150
2013	321	3.08	59%	91	6,236	658	71%		

Source: MEC (2012,2013)

GHG Goal: Set in 2007 to reduce GHG emissions by 20% (Specific Goals have been set for facilities (-35% by 2017, business flights (-15% by 2007) an transport by 6% a year.

**GHG emissions accounts for employee commuting

Suncor

	Operating Revenue ($millions)	Energy Use (millions of gigajoules)	GHG Emissions Intensity (Tonnes CO_2e /cubic metres of oil equivalent (m^3OE)	Air Emissions (thousand tonnes/year)	Land reclaimed use at Oil Sands (cumulative hectares)	Lost Time Injury Frequency Rate (Cases per 200,000 hours worked)	Installed Wind Capacity (Megawatts)	Women in the workforce (%)	Community Investment ($thousands)
2009	17,459	268.80	0.370	128.1	6.4	0.11	147	23.2	
2010	31,315	263.70	0.371	115.1	6.6	0.09	147	24.2	
2011	38,339	261.03	0.375	95.8	7.2	0.09	255	23.1	18,449
2012	38,107	282.40	0.413	87.1	7.2	0.04	255	23.3	20,939
2013	39,593	299.33	0.412	69.9	7.9	0.06	255	23.5	26,830

Source: Suncor (2014)

Transalta

	Net Revenue ($millions)	Annual Electricity Production (GWh)	Renewables Percentage of Production (%)	Environmental Spills and Releases	Gross emission intensity (kg CO_2e/MWh)	Water Consumption Intensity (m^3/MWh)	Women in workforce (%)	Employee recordable injury frequency rate (injuries/ 200,000 hours)	Community Investments ($Million)
2009	2,770	45,736	3.9	25					
2010	2,673	48,614	9.4	20					
2011	2,663	41,012	14.1	21	822	0.92	23	0.81	5.0
2012	2,210	38,750	14.5	17	808	0.99	23	0.50	4.5
2013	2,292	42,482	12.8	14	854	1.52	22	0.74	3.8

Source: Transalta (2013)

Umicore

	Net Revenue (million EUR)	Energy Consumption (terajoules)	Water Consumption (thousand m3)	Total waste produced (tonne)	Voluntary Turnover Ratio	Lost Time Accident Frequency Rate (LTA/ million hours worked)	Women in workforce (%)	Community Contribution (thousand EUR)
2010	1,999	7,597	4,617	63,993	3.78	3.54	21.1	1,009
2011	2,318	7,807	4,567	71,416	3.84	3.61	21.6	1,751
2012	2,421	7,315	4,310	69,702	3.2	2.86	21.9	1,759
2013	2,363	7,557	4,343	68,575	3.33	2.08	21.5	1,612

Source: Umicore (2014)

VanCity

	Net Earnings from operations ($millions)	GHG emissions (tonnes)	Waste Diversion Rate (%)	Community Impact Loans as % of total business	Voluntary Turnover rate (%)	Women in senior management (%)		
2009	78.6	5,101	55	N/A	8	34		
2010	86.2	4,783	79	N/A	6	37		
2011	90.6	4,931	75	35.5	6	41		
2012	56.9	5,091	82	34.7	5	44		
2013	61.4	4,549	83	50.7	5	42		
	Source: VanCity (2009,2011,2012,2013)							

Whole Foods

	Sales ($ million)	GHG emissions (metric tonnes CO2e)	GHG Emissions Intensity (metric tonnes CO2e/sales)	Energy Consumption (MWh)	Water Consumption (megaliters)
2010	9,005	768,489	85.3	752,077	No published
2011	10,107	670,218	66.3	1,289,114	1,856 (U.S only)
2012	11,698	722,780	61.8	821,114	Not published
2013	12,917	755,446	58.48	859,088	3,757
	Source: Whole Foods (2012), CDP (2012, 2013b, 2014, 2014a)				