

**Corporate Social Responsibility and Sustainability in the
Canadian Built Sector**

By

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Abstract

This analysis examines the effectiveness of sustainability efforts within the Canadian built sector through the lens of the relevant academic literature on corporate social responsibility. The academic literature provides ample support for the value of sustainability and guidelines for effective implementation of these initiatives. A detailed analysis of three Case Companies highlights the perceived value of sustainability efforts in terms of estimated economic benefit and abatement of negative externalities. It demonstrates as well as the effective role of non-governmental organizations and regulatory regimes within the Canadian built sector.

Foreword

My Major Research Paper like my Plan of Study, mirrors my interests in corporate social responsibility as means to mitigate environmental degradation. The analysis involved in the design of this work directly applies to fulfilling a number of Learning Components, Learning Objectives as well as the Area of Concentration as per my Plan of Study. This Major Paper Research provides me with better understanding of corporate social responsibility approaches and actions with the aim of evaluating their effectiveness (Learning Objective 1.1). Moreover, it furthers my familiarity of what the major concerns and criticisms of CSR are, which connects directly with the Plan of Study Learning Objective 1.3. Furthermore, this inquiry advances my awareness of impacts and values of implementing CSR as it relates to Learning Objective 3.1. Finally, this work supports Learning Objective 3.2 - the consideration of long-term economic effects and benefits of CSR as well as other effects of CSR which can be expected outside of economic benefits.

TABLE OF CONTENTS

INTRODUCTION.....	6
METHODOLOGY.....	8
1.1 OVERVIEW.....	8
1.1.1 <i>CSR and Sustainability Academic Literature Review</i>	8
1.1.2 <i>Industry Review</i>	9
1.1.3 <i>Sustainability Case Companies Analysis</i>	10
1.1.4 <i>Performance Analysis</i>	11
1.2 OBSERVATIONS/RECOMMENDATIONS/CONCLUSIONS.....	11
1.2 REVIEW OF CSR AND SUSTAINABILITY LITERATURE	12
CANADIAN BUILT SECTOR.....	28
1.3 OVERVIEW.....	28
1.4 REGULATIONS.....	29
1.4.1 <i>Command and Control style Regulation</i>	29
1.4.2 <i>Incentive-Style Regulation</i>	31
1.5 INDUSTRY ORGANIZATIONS AND STANDARDS.....	32
1.5.1 <i>Canadian Green Building Council</i>	32
IMPLEMENTATION OF SUSTAINABLE BUILDING.....	34
1.6 BARRIERS.....	35
1.7 BENEFITS.....	36
CASE ANALYSES.....	38
1.8 OXFORD PROPERTIES.....	38
1.8.1 <i>Overview</i>	38
1.8.2 <i>Sustainability</i>	39
1.9 MORGUARD CORPORATION.....	44
1.9.1 <i>Overview</i>	44
1.9.2 <i>Sustainability</i>	45
1.10 AECON.....	51
1.10.1 <i>Overview</i>	51
1.10.2 <i>Sustainability</i>	52
PERFORMANCE ANALYSIS.....	57
1.11 OXFORD PROPERTIES.....	57
1.12 MORGUARD CORPORATION.....	59
1.13 AECON GROUP.....	61
1.14 IMPLIED FINANCIAL IMPACT OF SUSTAINABILITY.....	62
1.15 AVAILABLE METRICS.....	62
1.16 OXFORD FINANCIAL PERFORMANCE.....	64
1.17 MORGUARD FINANCIAL PERFORMANCE.....	64
1.18 AECON FINANCIAL PERFORMANCE.....	65
1.19 CONCLUSION.....	65
OBSERVATIONS	66
1.20 OXFORD PROPERTIES.....	66
1.21 MORGUARD CORPORATION.....	68
1.22 AECON GROUP.....	70
1.23 THE CBS.....	72
1.24 BENEFITS OF SUSTAINABILITY.....	73
1.24.1 <i>Financial</i>	73

1.24.2	<i>Customer Satisfaction</i>	74
1.24.3	<i>Reputational Value</i>	74
1.25	EFFECTIVENESS OF EMPLOYING CSR.....	74
1.26	CHALLENGES OF EMPLOYING CSR/SUSTAINABILITY	75
1.26.1	<i>Implementation</i>	75
1.26.2	<i>Monitoring/Measurement</i>	75
1.26.3	<i>Usability of Outside Data</i>	75
1.26.4	<i>Scarcity of Benchmarking Data</i>	76
1.26.5	<i>Lack of Residential Certification/Monitoring</i>	76
1.26.6	<i>Capital Expenditures</i>	76
1.26.7	<i>Lower Energy Costs</i>	76
1.26.8	<i>Divergent Regulation</i>	76
1.27	SHORTCOMINGS IN THE IMPLEMENTATION OF CSR/SUSTAINABILITY	76
1.27.1	<i>Reliance on NGOs</i>	77
1.27.2	<i>Participation in Environmentally Harmful Projects</i>	77
1.28	CONCLUSION	78
RECOMMENDATIONS		79
1.29	SUSTAINABILITY BENEFITS/PERFORMANCE	79
1.29.1	<i>Obtain Recognized Certifications</i>	79
1.29.2	<i>Clearly Communicate Sustainability Goals</i>	79
1.29.3	<i>Develop a Clear and Understandable Business Case for Sustainability ...</i>	79
1.29.4	<i>Set Actionable Goals</i>	80
1.29.5	<i>Develop Systems that Deliver Clear, Actionable Sustainability Data</i>	80
1.29.6	<i>Develop Education Initiatives</i>	80
1.29.7	<i>Foster Bottom-Up Sustainability Initiatives</i>	81
1.29.8	<i>Assure Top-Down Leadership of Sustainability</i>	81
1.29.9	<i>Make Sustainability Mission Critical</i>	81
1.29.10	<i>Firm Principles and Flexible implementation/Response</i>	81
1.29.11	<i>Incorporate Sustainability into the Decision-Making Process</i>	82
1.29.12	<i>Become a Partner for Tenants and Clients</i>	82
1.30	REGULATORY/GOVERNMENTAL	82
1.30.1	<i>Industry Benchmarks</i>	82
1.30.2	<i>Standardized Utility Invoices</i>	82
1.30.3	<i>Improved Residential Measurements</i>	83
1.30.4	<i>Mandates and Incentives</i>	83
1.30.5	<i>Verify Certification Systems Efficacy</i>	83
1.31	INDUSTRY/NGOS	84
1.31.1	<i>Smaller Building Certification</i>	84
1.31.2	<i>Industry Roundtables</i>	84
1.32	CONCLUSIONS.....	84
CONCLUSIONS		85
FINAL THOUGHTS		87
APPENDIX I: INTERVIEW QUESTIONNAIRE		88
APPENDIX II: OXFORD PROPERTIES SUSTAINABILITY MEASURES		91
APPENDIX III: MORGUARD CORP. SUSTAINABILITY MEASURES		95
BIBLIOGRAPHY		97

Table 1: Googins & Mervis Stages of Corporate Citizenship.....	20
Table 2: LEED Certifications.....	32
Table 3: LEED Certification Levels.....	33
Table 4: BOMA BEST Certifications.....	34
Table 5: Level of Sustainable Building in Canada	34
Table 6: Oxford Properties Managed Properties by Sector (Sq Ft)	38
Table 7: Oxford Properties Managed Properties by Sector in 2014	39
Table 8: Oxford Properties GRI Sustainability Reporting Measures	42
Table 9: Oxford Properties GHG Emissions Change 2010-2014.....	58
Table 10: Oxford Properties Energy Consumption Change Total Portfolio 2010-2014.....	58
Table 11: Morguard Corp. Percentage Change in GHG Emissions 2010-2015.....	60
Table 12: Morguard Corp. Percentage Change in Annual Energy Consumption 2010-2015	60
Table 13: Morguard Corp. Percentage Change in Annual Water Consumption 2010-2015.....	61
Table 14: Morguard Corp. Percentage of Canadian Office and Retail Properties – Total Waste Recycled 2010-2015.....	61
Table 15: RMI Calculation of Sustainable Office Value.....	64
Table 16: CaGBC Estimate of Sustainable Building Cost Benefits	65
Figure 1: Freeman’s Stakeholder Model of the Corporation.....	15
Figure 2: Hart & Milstein - Sustainability as a Multidimensional Driver of Shareholder Value	18
Figure 3: Hart & Milstein Sustainability Value Framework.....	19
Figure 4: Canadian Commercial Building Stock by Year	29
Figure 5: Oxford Properties Sustainability Matrix.....	41
Figure 6: Morguard Corp. Stakeholder Materiality.....	47

Introduction

The Canadian Built Sector (“CBS”), which for the purposes of this analysis is defined as comprising commercial, residential and industrial property spaces, infrastructure, and the associated construction services, is one of the largest drivers of economic activity in Canada, as well as a major contributor of greenhouse gas (“GHG”) emissions. As such, the degree to which environmental sustainability is pursued in the built sector can have a major impact on the overall environmental profile of Canada and on national energy consumption levels. “Sustainability” encompasses consideration such as energy efficiency, GHG reductions, water consumption abatement, waste recycling efforts and environmental improvement or remediation efforts. Given the size of the CBS, then, the positive or negative economic impact of sustainability efforts on its financial performance are of great importance for the Canadian economy. Given these considerations, this analysis examines the role and impact of sustainability, within the larger context of corporate social responsibility (“CSR”) in the CBS.

In order to develop a framework for this analysis, a review of the relevant academic literature pertaining to CSR and sustainability has been conducted. This review illustrates the development of CSR as a concept and the change in its definition and perception over time. The academic literature makes clear that CSR, which began as an addition to the concept of the shareholder-driven business entity, has become a defining element of the modern corporation (Bowie, 2012). Further, the academic literature provides guidance as to the value of CSR and sustainability and how sustainability can be effectively implemented. The analysis contained here applies the corporate social responsibility lens to the CBS and specifically to three companies (the “Case Companies”) that are examined in detail with respect to their sustainability initiatives and effectiveness. The conclusions of this analysis are that

sustainability yields tangible economic results and amounts to abatement benefits for the companies that have the ability to implement effective sustainability programs and to incorporate sustainability into their corporate cultures. That being stated, the process of developing and implementing sustainability changes within a corporate body is a complex task that requires serious attention to guiding principles. At the same time, it requires the flexibility to execute against those principles and the systems necessary to provide actionable data upon which to base sustainability improvements.

Within the wider CBS, non-governmental organizations (“NGOs”) that provide certification frameworks for existing and new buildings supply industry participants with one of the major drivers of sustainability: value creation. While this analysis is primarily concerned with the effect of sustainability initiatives within the CBS, it puts forward a basis for argument that additional command and control and incentive regulation would likely improve the rate of sustainability adoption and implementation.

Based upon the analysis, it appears that the Case Companies provide valuable lessons for sustainability within the CBS and broader Canadian economy. In conclusion, properly implemented sustainability initiatives can be a major driver of economic value while improving the environment.

Methodology

1.1 Overview

The methodology employed in this analysis entailed a five-step approach. First, the relevant literature pertaining to CSR and sustainability was reviewed in order to develop an understanding of how CSR and sustainability are perceived, defined and implemented. Second, the relevant literature regarding the CBS was reviewed in order to understand the size and scope of the sustainability challenges and opportunities, as well as the state of the sector with respect to CSR and sustainability. Third, three Case Companies were selected for a more in-depth analysis of sustainability practices in order to better understand their actual implementation. The relevant CSR literature from Case Companies, as well as their press coverage were reviewed and interviews were conducted with sustainability officers at each of the Case Companies. Fourth, a quantitative analysis of the available data from the Case Companies was conducted in order to assess the impact of these companies' sustainability efforts. Fifth, observations and recommendations were put forward on the basis of the CSR and sustainability literature review and the Case Company analyses.

1.1.1 CSR and Sustainability Academic Literature Review

In order to develop a framework for this analysis, a comprehensive review was conducted of the academic literature pertaining to CSR and sustainability. The literature review focused on three principal issues or questions that would inform the rest of the analysis.

1. What, if any, is the level of academic support for CSR?

This initial phase of the literature review sought to understand the academic view of CSR in terms of its potential benefits and drawbacks.

2. How has the academic understanding of CSR evolved, if at all?

The second phase of the review sought to understand how the academic perspective on CSR had changed, if at all over time, in terms of greater acceptance, modified definitions or understandings of what constitutes CSR and various perspective of the subject.

3. How can CSR be defined or understood?

The third phase of the review sought to develop some clear definitions of CSR based on the academic literature.

4. How can CSR and sustainability be implemented, if at all?

The final phase sought to gather academic guidance with respect to the actual implementation and execution of successful CSR or sustainability strategies.

1.1.2 Industry Review

Having reviewed the academic literature to establish an understanding of CSR and sustainability and how they could be implemented, the next step was to focus the analysis on the CBS in order to apply the framework of CSR to this industry sector. This entailed three steps.

1. Assess the size and scope of the CBS

The relevant industry literature was reviewed in order to estimate the size of the CBS in terms of its economic impact on Canada and its scope with respect to sub-sectors to be included in the analysis (i.e., office space, retail space, residential space, etc.). In addition the literature review sought to estimate the environmental impact of the negative externalities of the CBS in terms GHG emissions, energy consumption and other available measures.

2. Review sustainability regulations

Available information on the Canadian regulatory regime for sustainability in the CBS was reviewed in order to understand the impact, if any, of existing sustainability regulations.

3. Analyze Role of NGOs/self-regulatory bodies

The available literature was reviewed with respect to the role of NGOs and self-regulatory bodies in terms of sustainability in the CBS.

4. Assess drivers and barriers to sustainability

The available information on the CBS was reviewed in order to understand the drivers and barriers to effective sustainability programs in the industry.

1.1.3 Sustainability Case Companies Analysis

Having developed an understanding of sustainability in the CBS, three firms within this sector with established CSR/sustainability programs were selected to serve as case studies for the effective implementation and execution of sustainability strategies. The firms were selected so as to represent differing approaches to sustainability that all appeared successful to varying degrees. As such, the firms selected were intended to provide potential lessons in terms of implementing sustainability programs. The case studies were developed in two stages.

1. Review of Case Companies sustainability reports and other relevant materials

Annual sustainability reports, annual reports and any other company materials that provided CSR and sustainability information were reviewed in order to understand the elements of each company's sustainability program. In addition any third party materials that provided information on the companies' sustainability practices were also reviewed.

2. Sustainability interviews

Interviews were conducted with the appropriate sustainability officers at each of the case study companies in order to gain a better understanding of their CSR and sustainability approaches, practices, drivers, barriers and goals. Please see Appendix I for the sustainability interview questionnaire that was used.

1.1.4 Performance Analysis

Where data pertaining to financial and sustainability performance from the Case Companies was available, it was reviewed in order to produce to estimate the impact of each firm's sustainability efforts and the approximate effect of sustainability on the financial performance of each entity, if data was made available.

1.2 Observations/Recommendations/Conclusions

On the basis of the review of the Case Companies' sustainability performance, conclusions were drawn with respect to the companies' ability to produce certain sustainability practices and recommendations were made to enhance the sustainability performance of the CBS.

1.2 Review of CSR and Sustainability Literature

A review of the relevant academic literature pertaining to CSR and sustainability demonstrates that there is ample support for CSR as a key corporate initiative. It also demonstrates the evolution of the concept and the understanding of CSR and its relationship to the corporation. Yet, while the definition of CSR becomes clearer over time, it remains a somewhat vague concept about which researchers take varying views, ranging from a standard framework that applies to all business (Carroll, 1979) to a firm specific application (Van Marrewijk, 2003). For the purposes of this analysis, a review of the literature will assist in understanding sustainability as a CSR initiative and how it can be effectively and successfully implemented within the context of CSR.

Within the modern context of CSR theory, many scholars credit Howard Bowen's 1953 work, *Social Responsibilities of the Businessman* as the genesis of CSR theory in North America (Carroll, 1979). Bowen's work was the first attempt to define the notion of CSR, or to put forward the idea that corporate entities have an ethical or moral duty of maximizing profits. While the notion that corporate entities have an obligation to consider more than their shareholders' interests gained traction in the postwar period, it was by no means a universally accepted approach. In 1963, Friedman first opposed what he saw as a creeping notion that businesses had any obligation other than to maximize profits as "a fundamentally subversive doctrine" that had the potential to undermine the democratic capitalist system (Friedman and Schwartz, 1963). Yet Friedman wrote perhaps the most famous rebuttal of the notion of CSR in his 1971 article *The Social Responsibility of Business is to Increase its Profits*. In it he argued that CSR is equivalent to socialism and that it turns a business manager into a social policy-maker.

Citing McGuire, Carroll states that within the context of the discussion about CSR throughout the 1950s and the 1960s, CSR was still firmly rooted in the view that corporations had economic and legal responsibilities and theoretically had “certain responsibilities to society which extend beyond these obligations” (Carroll, 1979, p.497). As such, the notion of CSR was still entirely undefined and very much an add-on to the corporation’s impetus to derive profits and to obey the law.

The first attempt to define CSR in a measurable way and to potentially place the profit-maximizing principle within the framework of societal demands was Carroll’s 1979 article *A Three Dimensional Model of Corporate Performance*, in which he states that corporations have: 1) economic responsibilities; 2) legal responsibilities; 3) ethical responsibilities; and, 4) discretionary responsibilities. The point that Carroll stresses in terms of the overall corporate performance model is the fact that society’s expectations of the corporation largely determine the form and shape of its responsibilities. He further draws the connection between the economic responsibility to the social obligation, stating, “the social responsibility of business encompasses economic, legal, ethical and discretionary expectations that society has of organizations at a given point in time” (Carroll, 1979, p.500). As such, Carroll argues that corporations have a responsibility to behave as society expects, therefore effectively refuting Friedman’s assertion that the profit maximization be the only guiding principle in the business manager’s mind.

Carroll also attempts to measure the social issues involved in CSR, listing: 1) Consumerism; 2) Environment; 3) Discrimination; 4) Product Safety, 5) Occupational Safety; and 6) Shareholders as the social issues involved in the corporate decision making process (p. 503). As such, with Carroll, we have a concrete step toward defining the corporation in terms of CSR, and not just as an add-on to the economic and legal responsibilities of corporate entities and the

quantification of the environment as one of the key considerations for businesses.

The International Standards Organization (“ISO”) provided what is a similar and now widely accepted definition of the principle elements of CSR, which are as follows: 1) organizational governance; 2) community involvement and development; 3) human rights; 4) labour practices; 5) the environment; 6) fair operating practices; and, 6) consumer issues.¹ Yet neither Carroll nor the ISO defines any of the responsibilities of the corporation in terms of the six social issues to be considered by business managers, but they do open the door for another evolution in CSR theory, namely stakeholder interests.

Perhaps Freeman (2001) best argues the case for a stakeholder rather than a shareholder-centric model of the corporation. In his article, *Stakeholder Theory of the Modern Corporation*, he raises the notion that business managers have a greater duty to shareholders than to other parties involved in, or affected by, the business’ operations. He analyzes the legal and economic arguments for shareholder prevalence, effectively refuting both premises. The legal argument, he states, is misleading for the fact that governments have already limited the ability of the manager to act purely in the interest of the shareholder, citing the National Labour Relations Act, the Equal Pay Act of 1963, the Civil Rights Act of 1964, the Age Discrimination in Employment Act of 1967, the Clean Air Act and the Clean Water Act. While these laws pertain to the United States, as Freeman is writing in an American context, the principle that governments act to effectively limit the ability of business managers to act solely on behalf of the shareholder is applicable to the CBS.

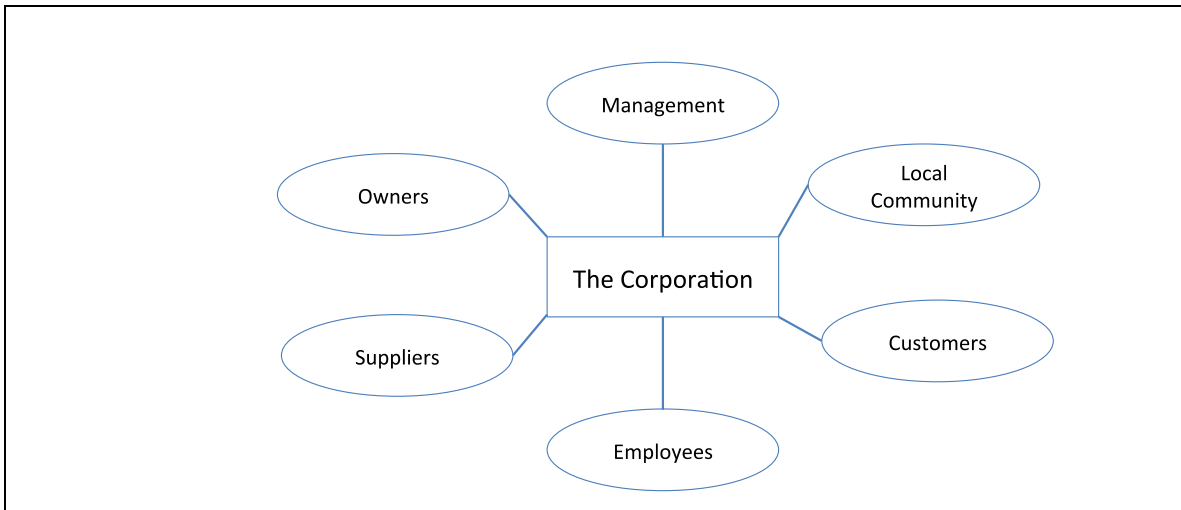
Regarding the economic argument that Adam Smith’s “Invisible Hand” of economically rational self-motivated interest will lead to the optimal outcome in

¹ International Standards Organization,
<http://www.iso.org/iso/home/standards/iso26000.htm>

terms of business decision-making, Freeman examines the problems of moral risk, monopoly interests, and of particular value for this analysis, negative externalities. Specifically citing the problems of air and water pollution as the modern tragedy of the commons, Freeman persuasively makes the case that no purely profit-maximizing polluter has the incentive to clean up the environment because the gain will be dispersed and relatively small, while the cost to the individual company concentrated and relatively large. By polluting the environment, Freeman argues that purely profit-maximizing firms internalize the benefits of lower costs (i.e., no pollution abatement) and externalize the costs in the form of a degraded environment.

Based on the premise that corporate entities must take into account the factors beyond profit maximization, Freeman argues for a stakeholder model of the corporation in what he terms the “Doctrine of Fair Contracts” that is comprised of six principles. For the purposes of this analysis, the third principle of externalities is particularly relevant. In it, Freeman states that if “a contract between A and B imposes a cost on C, then C has the option to become a party to the contract, and the terms are renegotiated” (Freeman, 2001, p. 46). In essence, Freeman is making the claim that those who bear the cost of externalities, and in particular environmental externalities become stakeholders in the corporation, which are represented by the Local Community in his model, but which for global corporations could arguably include be the whole of humanity.

Figure 1: Freeman’s Stakeholder Model of the Corporation (Freeman 2001 at 42)



Clarkson (1995) goes further than Freeman in terms of defining stakeholders and the corporation's responsibility to them, while at the same time introducing a framework for evaluating and implementing CSR practices at the company level. Clarkson divides interested parties into two groups: primary and secondary stakeholders. Primary stakeholders are those parties without whose continued support and participation the corporation cannot survive. Clarkson lists investors, customers, suppliers, employees, but also public stakeholders that include government (who provides regulation) and communities (who provide infrastructure and markets). Clarkson lists groups that may be affected by externalities of the corporation as primary stakeholders, deserving the same level of attention as shareholders or customers and as vital to the survival of the firm.

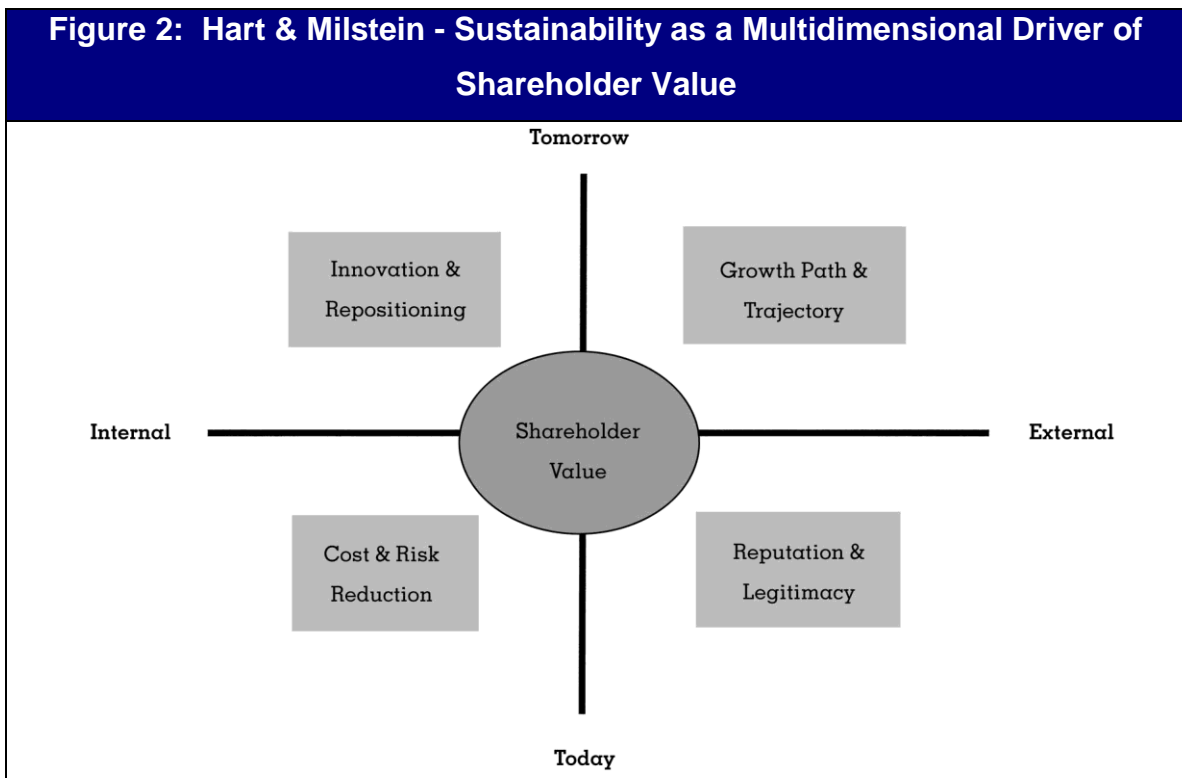
Secondary stakeholders are those that influence or affect or are influenced or affected by the corporation, but that are not essential for its survival. Interestingly, Clarkson references the media and special interest groups as the best example of a secondary stakeholder. But Clarkson (1995, p.112) goes further and states clearly that "stakeholder is not synonymous with shareholder" and that "managers can no longer be held responsible for maximizing returns to shareholders at the expense of other primary stakeholder groups. Instead, managers are now accountable for fulfilling the firm's responsibility to its primary stakeholder groups (Clarkson, 1995, p.112).

In the evolution of the academic research on the subject of CSR over the course of approximately sixty years, there is a noticeable consensus movement from the notion that CSR is an add-on to a shareholder and profit-maximizing focused model of the corporation to one in which CSR and the stakeholder model is the largely accepted norm. Interestingly, by the 1980s, more discourse begins to develop arguing that CSR and stakeholder concerns that it seeks to address present an opportunity for increased profitability and business leadership that should be actively embraced by corporate managers.

Porter and van der Linde (1995) make the case that there has been a paradigm shift in the international business environment in which innovators are the most profitable corporations and that innovators enjoy a considerable competitive advantage, particularly with respect to the environment, or sustainability, and CSR. Porter and van der Linde's case is based on case studies of hundreds of firms that used innovation offsets to effectively address environmental regulations, which will likely result in lower costs and in an absolute competitive advantage. While Porter and van der Linde focus on regulation as the key driver of innovation, their argument could be applied to any sustainability issue that a corporation faces. In effect, they state that corporations should embrace and actively seek out opportunities to address environmental issues as they will drive innovation, differentiation and leadership within the business' particular industry.

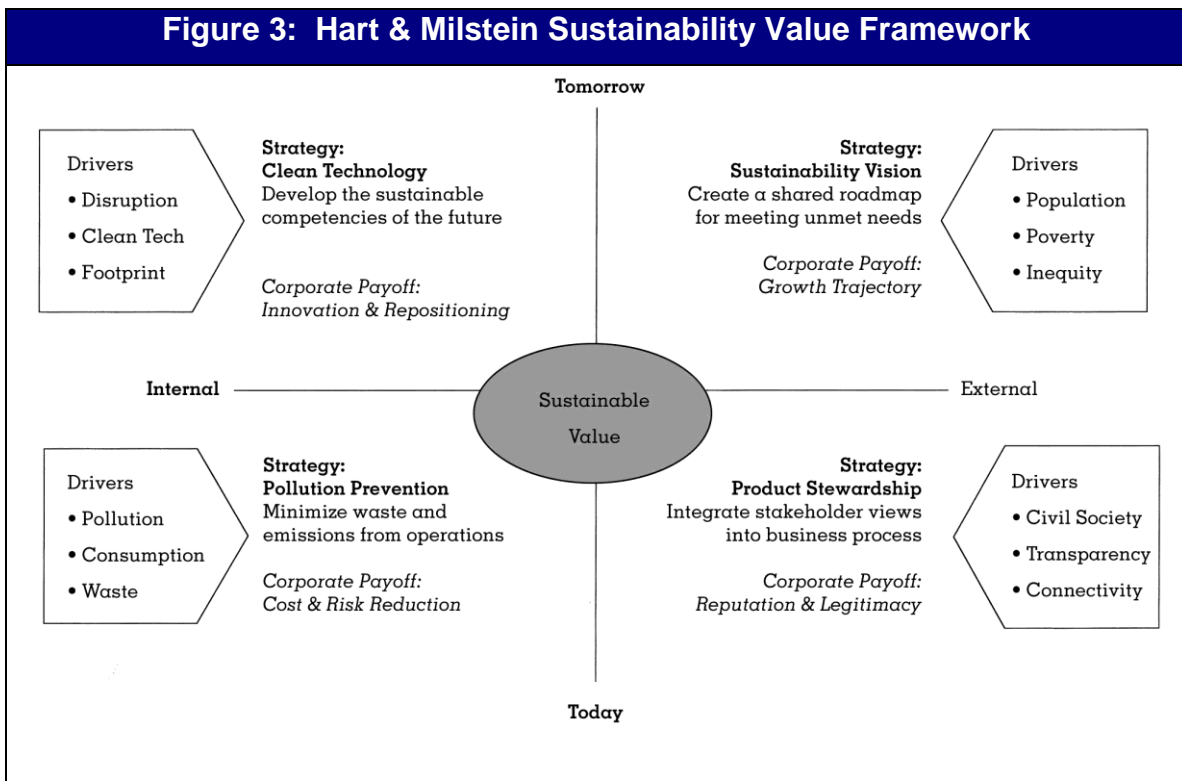
Drucker (1984) uses a historic argument to come to the same conclusion as Porter and van der Linde. Focusing on the case of Julius Rosenwald and Sears & Roebuck, Drucker argues that by addressing a fundamental need of poor farmers, i.e., access to new farming technology, Rosenwald acted in a socially responsible manner and built Sears into the world's largest retailer. Thus, Drucker stands by Rosenwald's motto that "you have to be able to do good to do well," and concludes that it is the proper social responsibility of business to seek out and address social problems, which will lead to the corporation's success.

Hart and Milstein (2003) further advance this theory stating that “rather than simply seeking to reduce negative impacts of their operations, firms strive to solve social and environmental problems through the internal development or acquisition of new capabilities that address the sustainability challenge (p.62). They argue that just abating externalities is not sufficient, not sustainable behaviour on the part of the corporation and it does not maximize shareholder value. While recognizing the importance of other stakeholders, Hart & Milstein look at sustainability through the lens of the shareholder and point out that sustainability is a driver of shareholder value and a multidimensional opportunity.



Hart & Milstein further cover sustainability and shareholder value, demonstrating that each sustainability driver and its corresponding business practice correlates with an element of shareholder value and also raise the notion that sustainability

should be viewed not in static terms, but with respect to the future benefits that it produces.



A comprehensive sustainability strategy has great value according to Hart & Millstein. They argue that by engaging with external stakeholders, the corporation increases confidence in its intentions and activities and that firms that

build a convincing sustainability acumen have the capacity to break into large and deep future markets. But they caution that comprehending the importance of sustainability and stakeholder value does not necessarily translate into a successful sustainability strategy.

Googins & Mervis (2006) provide two frameworks for understanding how corporations can grow into sustainability leaders. They present five stages of corporate citizenship and detail the elements of each one as follows:

Table 1: Googins & Mervis Stages of Corporate Citizenship

	Stage 1: Compliant	Stage 2: Engaged	Stage 3: Innovative	Stage 4: Integrated	Stage 5: Transforming
Citizenship Concept	Jobs, Profits & Taxes	Philanthropy, Environmental Protection	Stakeholder Management	Sustainability or Triple Bottom Line	Change the Game: Business in Society
Strategic Intent	Legal Compliance	Reputation	Business case	Value Proposition	Market Creation or Social Change
Leadership	Lip Service, Out of Touch	Supporter, In the Loop	Steward, On Top of It	Champion, In Front of It	Visionary, Ahead of the Pack
Structure	Marginal: Staff driven	Functional Ownership	Cross-Functional Coordination	Organizational Alignment	Mainstream: Business Driven
Issues Management	Defensive	Reactive, Policies	Responsive, Programs	Pro-Active, Systems	Defining
Stakeholder Relationships	Unilateral	Interactive	Mutual Influence	Partnership Alliance	Multi-Organizations
Transparency	Flank Protection	Public Relations	Public Reporting	Assurance	Full Exposure

The corporation moves through the stages of corporate citizenship through a series of triggers, which begin with the development of credibility for a

sustainability platform and end with firm commitment to transformational change in the business and industry.

Jackson and Nelson (2004) outline seven principles for profitably engaging in sustainability. They are: 1) harness innovation for the public good; 2) put people at the center; 3) spread economic opportunity; 4) engage in new alliances; 5) be performance driven in everything; 6) Practice superior governance; and, 7) pursue purpose beyond profits. Of interest for this analysis, they describe point four as relating to developing relationships with other participants in the corporation's industry, including regulators, government entities and NGOs.

Of particular importance to this analysis is the definition of sustainability as it relates to the environmental impact of the built sector. While Porter & van der Linde, Drucker, Hart & Milstein, Googins & Mervis and Jackson & Nelson all argue that corporations must embrace sustainability as a strategic imperative, they tend to define it in very broad terms, such as addressing general social problems (Drucker). While acknowledging that a singular definition of environmental sustainability is difficult to reach, Morelli (2011) attempts to provide a clear understanding of this term. In his review of the relevant literature, he points to the publication of *Our Common Future* by the United Nations Environment Programme in 1987 as a groundbreaking point in defining environmental sustainability, which resulted in a period of increased work and interest in this term. Morelli notes that *Our Common Future* defines environmental sustainability in terms of ecological sustainability, thus providing greater clarity and depth to the understanding of the term. Based on his review, he defined environmental sustainability as (p.5):

“Meeting the resource and service needs of current and future generations without compromising the health of the ecosystems that provide them (taken from *Our Common Future*) and more specifically as a condition of balance, resilience and interconnectedness that allows human society to

satisfy its needs while neither exceeding the capacity of the supporting ecosystems to continue to regenerate the services necessary to meet those needs nor by our actions demising biological diversity”.

The movement in academic thought about CSR and sustainability from ambivalence or lack of clarity regarding these concepts to acceptance and advocacy has been mirrored in the general business community. A 2009 MIT Sloan Management Review survey of 1,500 business managers revealed that 92 percent were addressing sustainability in some way. The majority also believed that the corporate sector would play a key role in terms of solving global sustainability problems. Yet 70 percent had not developed a clear business case for sustainability (Berns, Townsend, Khayat et al, 2009, p.5). Therefore it would seem that while there is consensus in support for CSR and sustainability across the global business community, in keeping with Hart & Milstein’s assertion, there is also a gap between understanding the value of these concepts and implementing successful and profitable strategies and initiatives.

Eccles, Perkins and Serafeim (2012, p.1) effectively addressed the concerns raised by Hart & Milstein regarding the disconnect between understanding sustainability and its implementation. In 2012, they performed a study of more than 200 companies in order to understand the behaviours of sustainability leaders and how sustainability can be successfully implemented. Their analysis provides one of the clearest roadmaps for a successful embedding of sustainability in a corporate entity.

Eccles, Perkins and Serafeim’s work is based on the premise that “the public is no longer satisfied with corporations that focus on short-term profit maximization. People want corporations to consider broad human needs” (Eccles, Perkins and Serafeim, 2012, p.1) What is more, their research showed that sustainability leaders definitively outperformed traditional firms (those that did not embrace sustainability) in terms of company share performance, which was on average

4.8 percent higher on a value weighted basis. This result confirmed the second premise of their work, that sustainability can be a key driver of profitability, innovation and company performance.

Eccles, Perkins and Serafeim identified two distinct stages of development for a successful sustainability program and its incorporation into the corporate culture. The first stage entails redefining the corporation's identity to include sustainability in its sense of self and purpose. The second stage entails codifying the sustainability driven identity and allowing employees to execute upon it. These stages allow a change in corporate culture and behaviour to integrate around clearly understood and actionable initiatives that are supported by internal and external stakeholders.

In the first stage, the company seeks to reframe its identity with the goal of incorporating sustainability into its culture and daily practices. The key elements that Eccles, Perkins and Serafeim identify at this stage are clear leadership commitment to sustainability, external support and consistent, transparent messages to stakeholders about the company's efforts in this direction.

Support of the CEO and other senior executives is critical for the initiation of a successful movement toward sustainability. If there is no clear sense that sustainability is something that the leadership sees as fundamental to the company's future, there is little likelihood that employees and other stakeholders will support these efforts in a meaningful way, even if they believe that sustainability is important.

External support and engagement is extremely important in the movement toward sustainability in that it commits the organization to this goal in a public manner, which greatly increases the motivation to reach it and it opens the organization to outside assistance and allows it to learn from entities that understand and may have mastered the implementation of sustainability. It also

adds stakeholders that will have a commitment to the success of the corporation's sustainability efforts. Other industry participants, industry groups, self-regulatory bodies, regulatory agencies or sustainability NGOs are all examples of outside entities whose assistance the corporation may seek to enlist. Eccles, Perkins and Serafeim (2012, p.5) cite the "partnership between Dow Chemical and The Nature Conservancy as an example of a successful partnership between a corporation and an outside entity that greatly advanced the corporation's understanding of the value of sustainability for its business model and how to incorporate it into everyday business practices".

Clear, transparent and consistent communication about the sustainability vision, its importance and progress being made toward this goal, including setbacks and challenges is crucial in terms of garnering stakeholder support for and commitment to the sustainability efforts of the corporation. Consistency is key in that stakeholders understand that the sustainability vision does not change on a whim and that the commitment is genuine and not simply "green washing" for the corporation. Communication also allows the various stakeholder groups to understand the key value of sustainability to the corporation on a business unit level.

These three elements, properly implemented, should clearly signal a genuine change in the corporation's identity, as well as provide a basic level of understanding of the benefits of this new identity to the corporation, while also garnering initial stakeholder support.

The second stage of the implementation process, codifying the new identity, involves building employee support for the change in identity and providing mechanisms for its implementation and execution, which builds upon the leadership commitment of the first stage and outside stakeholder support for the business case for sustainability. Eccles, Perkins and Serafeim argue that based on their research, employees need to understand and believe in the reasons for

a change toward sustainability and clearly understand their role in supporting it. At this stage, the corporation must put in place a coordinated, company-wide initiative that: 1) clearly communicates the impact that employees' sustainability contributions have on the corporation; 2) explains the connection between each employee's work and the corporation's sustainability goals; and, 3) facilitates cross-functional idea exchange on sustainability.

The second element of the second stage of the process involves putting in place the mechanisms for sustainability implementation and monitoring. Mechanisms that incorporate sustainability into decision-making and budgeting processes provide employees with the opportunity to make sustainability actionable on a daily basis. Effective systems for monitoring progress and results allow employees to see the tangible results of their efforts, but also to improve their sustainability decision-making and to prioritize projects and initiatives that have the greatest effectiveness.

In addition to the steps outlined above, Eccles, Perkins and Serafeim, state that organizations should foster a sense of trust in support of sustainability in that employees are being asked to take a risk and are more likely to engage if they know that the corporation fully supports them in this undertaking. Eccles, Perkins and Serafeim also argue that internal communication throughout the organization will foster greater innovation that can lead to some of the most productive sustainability ideas and initiatives. Finally, they emphasize that the initiatives and recommendations laid out above are not discrete or static, but must be continued on an ongoing basis as the corporation moves toward its sustainability goals.

Within the context of the CBS, the academic literature provides several notable points for CSR and its responsibilities regarding environmental sustainability.

- 1) The role and responsibility of the corporation is defined by the public or society at each given point in time and is therefore an evolving and not a static concept.
- 2) Stakeholders that affect the corporation or that are affected by its actions must be considered on an equal basis with shareholder interests, despite the fact that the corporation must remain profitable to contribute to its stakeholders.
- 3) Those affected by externalities of the corporation can potentially be defined on a global basis depending on the reach of the corporation.
- 4) Addressing social and environmental problems is the correct role of the corporation within the context of maintaining profitability.
- 5) Sustainability represents an opportunity for the corporation to increase its profitability and to take a defining leadership and to increase shareholder and stakeholder value.
- 6) While understanding and implementing a sustainability strategy are not synonymous, a basic framework for moving toward sustainability leadership can be defined.
- 7) Environmental sustainability can be defined as meeting current needs without harming the ecosystems that provide for current needs or the needs of the future.

Specifically from Eccles, Perkins and Serafeim (2012), a roadmap for implementing the sustainability element of CSR is available which outlines actionable sustainability initiatives based on extensive research of sustainability leaders and laggards.

- 1) A movement toward a sustainable identity must be championed by the corporate leadership. The business case must be made clearly and the message of commitment must be consistent.
- 2) Outside stakeholders that can assist the corporation in developing the business case and in understanding the value of sustainability should be

- recruited. They will also impose the discipline of holding the corporation accountable in terms of its sustainability commitment.
- 3) In order to facilitate employee support, employees must have a clear understanding of the business case for sustainability and their role in its implementation.
 - 4) Cross-functional communication regarding sustainability is key.
 - 5) Corporation-wide mechanisms should incorporate sustainability into the decision-making and budgeting processes.
 - 6) Clear monitoring systems should be put in place that allow employees to see the effectiveness of sustainability and to make better decisions regarding sustainability.
 - 7) Trust and innovation are key for effective sustainability growth.

The literature review clearly demonstrates a movement from ambivalence toward CSR to its embrace as a source of competitive advantage and by extension a justification for CSR on the basis of the current academic work and thinking with respect to the benefit of CSR and sustainability. Further, Eccles, Perkins and Serafeim go so far as to outline a framework for its implementation. While this framework and those of Carroll, Googins & Mervis and Hart and Milstein will not be explicitly referenced in the remainder of this analysis, they provide an implicit guidance for the examination of the CBS and the Case Companies' various CSR efforts, as does the fundamental premise of the vast majority of current academic literature that CSR and sustainability make good business sense.

Canadian Built Sector

1.3 Overview

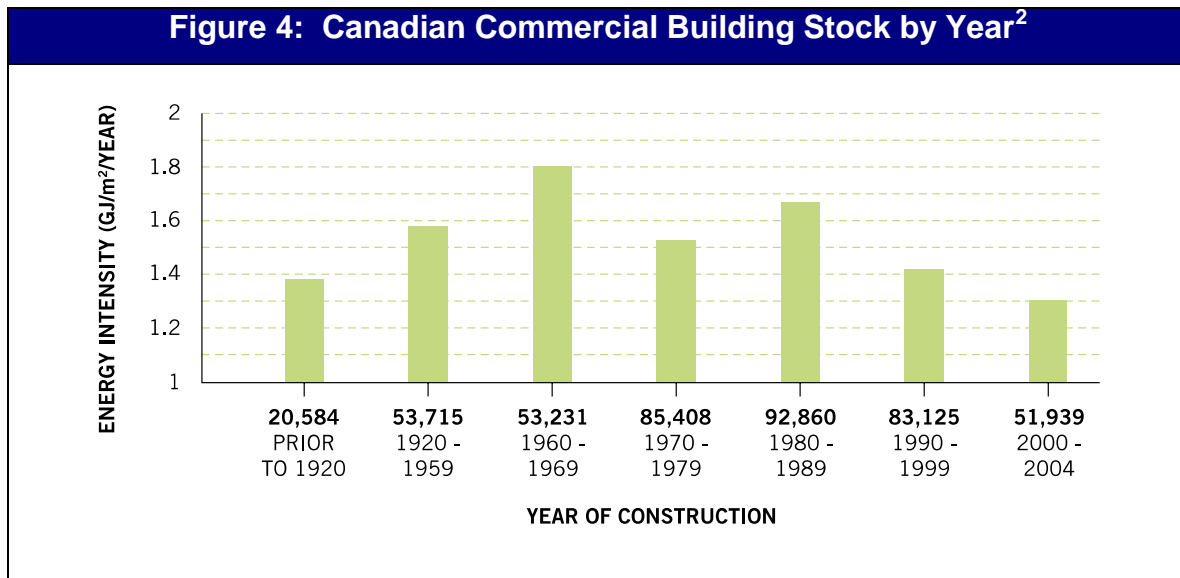
Together, the construction and real estate services sectors are two of the most important components of the Canadian economy, employing approximately 2.1 million individuals or 12 percent of the workforce and generating approximately \$325 billion economic activity, or approximately 20 percent of national gross domestic product (“GDP”) (Statistics Canada, 2014). Currently, there are approximately 480,000 commercial buildings in Canada with an estimated floor space of 750 million m² and 13.1 residential structures and apartment units (Advanced Energy Centre, 2012, p.5).

Yet, while the CBS is a major contributor to the Canadian economy, it is also a leading source of GHG emissions, waste and a major consumer of energy and water. While estimates vary depending on how the CBS is defined and the year measured, according to the secretariat of the Commission for Environmental Cooperation (“CEC”, 2008, p.5) buildings in Canada are responsible for:

- 33 percent of all energy consumption;
- 50 percent of all natural resources used;
- 12 percent of non-industrial water consumption;
- 25 percent of landfill waste generation;
- 10 percent of airborne particles; and,
- 35 percent of GHG emissions.

The majority of the numbers cited above are generated by the operations of the existing building stock in Canada rather than by construction or demolition activity. While current statistics are not readily available, the following chart shows that the majority of the existing commercial building stock of Canada was constructed before the introduction of green building materials or most energy

efficient building technologies and therefore has a much higher level of energy usage than more modern structures.



In addition to the size and scale of the CBS, it is important to note that Canadians spend approximately 90 percent of their time indoors (Government of Canada, 2015). As such, the materials with which buildings are constructed, and their design, have a major impact on the health, productivity and wellbeing of the Canadian population.

1.4 Regulations

1.4.1 Command and Control style Regulation

The literature makes a distinction between “command and control” style regulations, which are the conventional, mandatory legal requirements set down in legislation that applies to the building sector. While building regulations vary widely from municipality to municipality, most building mandates in Canada are

²<https://www.cagbc.org/cagbcdocs/resources/CaGBC%20McGraw%20Hill%20Cdn%20Market%20Study.pdf>

based on the National Building Code (“NBC”), which was first introduced in 1941 in an effort to provide uniformity to the provincial codes. The NBC has been continuously updated approximately every five years. While there are efforts underway in Canada to amend the NBC to include sustainability issues, to date it does not account for these concerns (CEC, 2008, p.7).

Apart from the NBC, in 1997, the Canadian government tasked the National Research Council, which developed the NBC with drafting what became the Model National Energy Code for Buildings (“MNECB”). The MNECB provided the first national standard for building energy performance. The MNECB was superseded in 2011 by the National Energy Code of Canada for Buildings (“NECCB”), which outlined minimum energy efficiency levels for all new buildings. As per CEC (2008, p.8), the 2015 NECCB greatly expands the provisions of the 2011 regulations to include thermal requirements, interior lighting control equipment, reduced hot water discharge, and several other measures to reduce waste, energy consumption and GHG emissions.

While the national authorities are advancing the cause of sustainable building in Canada, provinces or individual municipalities have tended to lead in terms of sustainability requirements and in several cases have more progressive or stringent standards than the NECCB.

The Ontario Building Code (“OBC”) which was originally introduced in 1990 and later revised in 1997 and 2006 required buildings over 600 m² to be designed to certain standards based on the MNECB. For buildings under 600 m², energy efficiency standards were mandated (CEC, 2008, p.10). Among provincial codes, it is perhaps the most comprehensive in terms of sustainable building requirements.

In Vancouver, which has the unique power to establish its own building performance standards, the city has established high-energy efficiency standards

as well as requirements to limit water use and waste. The current building code includes requirements that are based on the Leadership in Energy and Environmental Design (“LEED”) Canada criteria for certification such that all new construction will be compliant with the majority of LEED standards (CEC, 2008, p.10).

In Ontario, individual municipalities do not have the authority to institute building code requirements that go beyond the OBC. That being stated, as per CEC (2008, p.10), Toronto has attempted to drive sustainable building practices by retrofitting municipally-owned buildings for increased energy efficiency and by instituting voluntary standards and using incentive-based programs.

In Calgary and Edmonton, the municipal authorities have instituted standards that require publicly funded buildings to obtain LEED Silver certification (p.13).

While the command and control regulations at the national, provincial and municipal level increasingly support sustainable construction in Canada, the CEC argues that the current codes often present a barrier to green building by hindering the use of green building materials, requiring environmentally harmful practices or not implementing requirements for environmentally friendly practices (2008, p.13).

1.4.2 Incentive-Style Regulation

The national, provincial or municipal authorities in Canada provide incentive programs of various types to encourage sustainable new construction and retrofits of existing building stock. At the federal level, the internal revenue service accelerated capital cost allowance in order to encourage businesses to conserve and utilize renewable energy. In 1998, Natural Resources Canada (“NRCan”) implemented the Commercial Building Incentive Program (“CBIP”) which provides up to \$60,000 in assistance for the design and construction of each sustainable commercial buildings. By 2005, CBIP accounted for 18 percent of new commercial space (CEC, 2008, p.35).

In terms of residential construction and retrofits, as per CEC (2008, p.35), Canada Mortgage and Housing Corporation's green refund will rebate ten percent of the mortgage insurance in support of sustainable new construction, purchase of an energy efficient home or retrofitting an existing house for increased energy efficiency.

At the provincial level, incentives for sustainable construction and retrofits are highly varied, but include grants, rebates, sales tax exemptions and assistance programs from the provincial utilities to assist in increasing energy efficiency.

1.5 Industry Organizations and Standards

1.5.1 Canadian Green Building Council

Established in 2003, the Canadian Green Building Council ("CaGBC") began as a branch of the United States Green Building Council through the membership of British Columbia in this organization. As in the United States, the CaGBC is a not-for-profit organization that represents varied interests and has become the effective regulatory body for sustainable building standards through the LEED system of certification.

1.5.1.1 LEED

The LEED system was originally launched in the United States in 1998 and implemented in Canada in 2002. In addition to educational and accreditation programs, LEED is a comprehensive program that allows for certification at various levels for new buildings, as well as existing infrastructure based on a points system.

Table 2: LEED Certifications³

³ Canada Green Building Council.

New Construction	LEED Canada NC 2009
Core and Shell (>50% ownership)	LEED Canada CS 2009
Commercial Interiors	LEED Canada-CI 1.0
Existing Buildings	LEED Canada EB:O&M 2009
Neighborhood Development	LEED-ND
Residential Homes	LEED Canada for Homes 2009

Table 3: LEED Certification Levels ⁴	
Platinum	80 points and above
Gold	60-79 points
Silver	50-59 points
Certified	40-49 points

As of 2014, there were 2,584 LEED certifications in place and 3,053 registrations for new projects.⁵

1.5.1.2 Building Owners and Managers' Association Canada

The Building Owners and Managers' Association Canada ("BOMA") is the Canadian chapter of BOMA International, a leading real estate advocacy group. While the BOMA BEST certification system is not as widely recognized as LEED, as of 2014, it had more certifications in place with 4,124. The BOMA BEST

http://www.cagbc.org/CAGBC/LEED/CommercGreenBuild/RatingSystems/CAGBC/Programs/LEED/CommercialInstitutional/RatingsSystems/LEED_Canada_Rating_S.aspx?hkey=5490b62b-b10f-45b7-9c41-2b5a299655b8

⁴ Canada Green Building Council, *LEED Canada for New Construction and Major Renovations 2009* (Ottawa: Canada Green Building Council, 2015).

⁵ Canada Green Building Council.

http://www.cagbc.org/CAGBC/LEED/CommercGreenBuild/RatingSystems/CAGBC/Programs/LEED/CommercialInstitutional/RatingsSystems/LEED_Canada_Rating_S.aspx?hkey=5490b62b-b10f-45b7-9c41-2b5a299655b8

system is based on a questionnaire given to the building owner that is scored. Based on the score, the building is rated.

Table 4: BOMA BEST Certifications⁶	
Platinum	Between 90% and 100%
Gold	Between 80% and 89%
Silver	Between 50% and 79%
Bronze	Between 20% and 49%
Certified	Up to 19%

Implementation of Sustainable Building

While definitive figures are hard to find, it appears that the rate of adoption of sustainable building practices has been quite impressive during the past few years. The CaGBC/McGraw Hill Canadian Real Estate Market Survey indicates that a growing number of industry participants are using sustainable designs, materials and technology and the number of LEED certifications has increased at 28 percent CAGR for the last ten years.

Table 5: Level of Sustainable Building in Canada⁷

	2011	2014	2017
More than 60% Green Projects	27%	33%	50%
31% to 60% Green Projects	10%	23%	20%
16% to 30% Green Projects	20%	20%	14%
15% or Fewer Green Projects	43%	24%	16%

In 2016, the CaGBC estimates that non-residential sustainable construction will account for between 35 percent and 50 percent of all non-residential construction activity. In terms of residential construction activity, as of 2014, between 25 percent and 31 percent of construction firms expected to be involved in

⁶ BOMA Canada.

<http://bomacanada.ca/bomabest/aboutbomabest/levels/>

⁷ Canada Green Building Council, *Canada Green Building Trends: Benefits Driving the New and Retrofit Market* (Ottawa: Canada Green Building Council, 2015) 5.

sustainable construction activity (p.5). Perhaps most impressive is the expected level of retrofit activity, which should reach 51 percent of existing stock (CaGBC, 2015, p.5).

While the anticipated level of sustainable building activity looks to be increasing, the actual level of sustainable build stock remains modest at between five and ten percent of non-residential inventory (CEC, 2008, p.17). In addition, it should be noted that the CaGBC's sustainable building figures and projections are generated from a survey conducted with McGraw Hill and that half of the respondents were CaGBC member firms, so the results likely reflect a greater interest in sustainable building than would the results of a survey of a more general population of firms involved in the real estate sector. Regardless, the numbers indicate a growing interest in sustainable commercial and residential space.

1.6 Barriers

While there is consensus support for sustainable building among the Canadian public, the CBS and government, CaGBC and CEC report that considerable barriers to sustainable construction remain.

- 1) Regulatory Misalignment - as previously noted, government regulations often hinder increased sustainable building by mandating environmentally harmful practices or use of environmentally harmful materials (CEC, 2014, p.15)
- 2) Perception of Higher Costs - many builders perceive the increased cost of sustainable design or materials as prohibitive and therefore as posing higher risk.⁸

⁸ National Round Table on the Environment and the Economy and Sustainable Development Technology Canada, Geared for Change: Energy Efficiency in Canada's Commercial Building Sector (Ottawa) 24.

- 3) Perceived Misaligned Benefits – while the benefits of sustainable construction accumulate first and foremost to the occupant or lessee of a space, the costs are clearly borne by the owner. The evidence clearly shows that sustainable or certified sustainable space commands a rental and valuation premium, but there remains a widespread perception that the owner of sustainable floor space does not reap the benefits of the additional cost incurred for sustainable materials or design.⁹
- 4) Low Energy Costs – Canada has some of the lowest energy costs in the industrialized world. As such, there is less incentive for sustainable construction or retrofits of existing building stock as they pertain to energy efficiency or fuel savings.¹⁰

1.7 Benefits

Sustainable building has several real and demonstrable benefits that are as follows:

- 1) Decreased Operating Costs – According to the CaGBC, sustainable design, materials and energy efficient equipment can reduce the operating costs of a building by approximately 8 percent.¹¹
- 2) Increased Lease Rates and Property Valuations – According to the Rocky Mountain Institute (“RMI”), lease rates for LEED certified space is 8.8 percent higher than for conventional floor space and valuations are 12.5 percent higher than for non-certified buildings.¹²

⁹ Ibid. 25.

¹⁰ Ibid. 28.

¹¹ Canada Green Building Council, *Canada Green Building Trends: Benefits Driving the New and Retrofit Market*, 7.

¹² Michael Bendewald Douglas Miller and Scott Muldavin, *How to Calculate and Present Deep Retrofit Value: A Guide for Investors* (Rocky Mountain Institute), 52.

- 3) Enhanced Share Performance – For public companies, adoption of sustainable practices has been shown to have a positive correlation with share performance.¹³

- 4) Reduced Energy Use – For LEED certified buildings a 36 percent average reduction in energy use.¹⁴

¹³ Eccles, Perkins and Sarafeim, *How to Build a Sustainable Company*, 1.

¹⁴ Kats, *Green Building Costs and Financial Benefits*, 4.

Case Analyses

1.8 Oxford Properties

1.8.1 Overview

Established in 1960 as an outgrowth of PCL Construction in Edmonton, Alberta, Oxford Properties (“Oxford”) has grown to become one of the largest property investment and management firms in Canada. Oxford was acquired by the Ontario Municipal Employees Retirement System (“OMERS”) in 2001 and has since been operated as a portfolio company in support of the pension obligations of OMERS. Oxford manages over 30 million square feet of commercial office, retail, residential and hotel property in Canada, the U.S. and Europe.

Table 6: Oxford Properties Managed Properties by Sector (Sq Ft)¹⁵

	2010	2011	2012	2013	2014
Office	20,953,019	21,058,844	19,838,793	19,096,258	17,319,288
Retail	7,020,306	8,988,331	9,578,156	10,244,786	10,875,677
Residential	3,038,464	3,038,464	3,407,498	3,974,167	3,974,167
Total	31,011,789	33,085,639	32,824,447	33,315,211	32,169,132

¹⁵ Oxford Properties, *2015 Sustainability Report* (Toronto, Oxford Properties, 2016) 48-50.

Table 7: Oxford Properties Managed Properties by Sector in 2014

	Percentage by Sector
Office	54%
Retail	34%
Residential	12%

Using reported private real estate assets in the 2015 OMERS annual report as a proxy for Oxford, it can be estimated that Oxford had assets of \$13.7 billion and generated a net return of 15.3% and net investment income of \$1.8 billion. Oxford managed properties valued at \$40 billion during the same year (OMERS, 2015, p.45).

1.8.2 Sustainability

Oxford is the recognized sustainability leader in the CBS, having been ranked number one out of 279 real estate portfolios that are evaluated in the Global Real Estate Sustainability Benchmark (“GRESB”) every year since 2013 (Real Estate Magazine Oct. 21, 2016). At present, approximately 74 percent of Oxford’s office space is LEED certified and energy efficiency has been improved across the company’s managed portfolio by 20 percent since 2010 (Oxford Properties, 2015, p.24).

According to Oxford’s 2015 Sustainability Report and an interview with Darryl Neate, Director of Sustainability at Oxford, the company employs a comprehensive approach to sustainability that fully engages the stakeholder model of the corporation while also driving improved financial performance as the key motivator for its sustainability efforts. As Neate states, “it’s about being a leader, it’s about driving financial performance” (Neate, 2016). Oxford’s sustainability program began as a top-down initiative but developed into a bottom-up program as employees began to see actionable items and were challenged to increase overall sustainability at the company. Key to Oxford’s

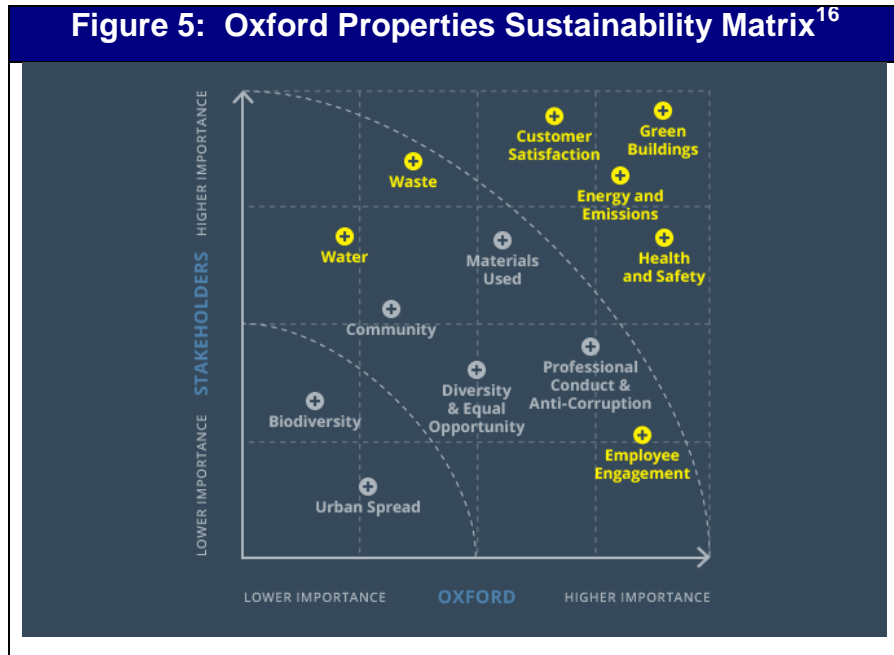
sustainability success are clear and measurable performance metrics and data that can be used to improve overall sustainability at the company.

1.8.2.1 Principles

Oxford (2015, p.2-3) employs six principles that guide its top-down sustainability initiatives, which are:

1. Leadership – in the CBS;
2. Performance – measurement of sustainability progress and achievements;
3. Innovation – in terms of technology and sustainability management practices;
4. Credibility – regarding standards and implementation; and,
5. Risk and Opportunities – active monitoring the market, regulatory and economic issues relating to sustainability;
6. Transparency and Engagement – transparency in terms of reporting and performance and engagement with stakeholder groups.

Sustainability initiatives are prioritized in terms of importance to Oxford's stakeholders and those issues with the highest level of importance to stakeholders and the company are pursued.



1.8.2.2 Measurements and Targets

Oxford employs a comprehensive system of measures and benchmarks against specific goals and targets that appear to be a critical component of the company’s sustainability success. In terms of sustainability reporting, Oxford subscribes to the Global Reporting Initiative (“GRI”) standards, which are used in its reporting structure and measures.

¹⁶ Oxford Properties, 2015, p.9

Table 8: Oxford Properties GRI Sustainability Reporting Measures¹⁷

Green Buildings	Customer Satisfaction
<p>GRI Category: CRE8</p> <p>Measures:</p> <ul style="list-style-type: none"> Percentage of Buildings Certified New Technologies (number of projects) New Construction and Major Renovations <p>Certifications:</p> <ul style="list-style-type: none"> LEED (Canada/US Offices and Residential) BOMA BEST (Retail) Green Key (Hotels) BREEAM (UK Offices) 	<p>GRI Category: PR5</p> <p>Measures:</p> <ul style="list-style-type: none"> Customer Satisfaction Green Leases Green Teams (meetings with tenants) Sustainability Campaign
Energy and Emissions	Health and Safety
<p>GRI Categories: EN3, EN4, CRE3</p> <p>Measures:</p> <ul style="list-style-type: none"> Energy Consumption by Source (ekWh) Total Energy Consumption (ekWh) Energy Consumption Intensity (ekWh/sq ft) GHG Emissions (kgCO₂e) GHG Emissions Intensity (kgCO₂e/sq ft) 	<p>GRI Category: LA7</p> <p>Measures:</p> <ul style="list-style-type: none"> Accidents (number) Lost-Time Accidents /number) Lost Days (number) Injuries (number)
Waste	Water
<p>GRI Category: EN22</p> <p>Measures:</p> <ul style="list-style-type: none"> Office Waste Diversion Rate (% of portfolio) Retail Waster Diversion Rate (% of 	<p>GRI Category: CRE2</p> <p>Measures:</p> <ul style="list-style-type: none"> Water Consumption (M3) Water Consumption Intensity

¹⁷ Ibid. 8-9.

portfolio)	(M3/ft2)
Employee Engagement	
Measure: Engagement Score	

Future categories will include hotel certification and sustainable materials performance targets.

1.8.2.3 Governance

Oxford’s Sustainability Steering Committee provides general direction for the company’s sustainability efforts, determines the importance of individual initiatives and issues, establishes targets and objectives and sets performance measures. In addition, sustainability considerations are built into the company’s decision-making process with respect to acquisition of new assets, design of new buildings and refurbishment of existing properties (Oxford Properties, 2015, p.12).

Oxford has a Director of Sustainability whose office includes five people, two of whom are energy specialists who analyze and measure energy efficiency and two project managers who focus on building certification and customer-facing initiatives. The Director sits on the Sustainability Steering Committee.

1.8.2.4 Sustainability Performance

In terms of its GHG emissions, energy and water usage and waste diversion, Oxford has made considerable progress during the past five years. Please refer to Performance Analysis section for details.

1.9 Morguard Corporation

1.9.1 Overview

Morguard Corporation (“Morguard”) is a leading Canadian real estate management and operations company that is listed on the Toronto Stock Exchange. Morguard’s owned and managed portfolios are valued at approximately \$19 billion (Morguard Corporation, 2015, p.2).

Morguard has three principal operating units as follows:

Investments in Real Property – consists of Morguard’s proprietary portfolio of residential, retail, office, industrial and hotel space that the company actively manages.

Real Estate Investment Trusts (“REITs”) – Morguard owns a significant portion of two REITs, the Morguard REIT, a close-end trust that holds a diversified mix of properties in Canada, and the Morguard North American Residential REIT, an open-ended trust that holds a portfolio of residential properties in Canada and the U.S.

Advisory and Investment Services – as per the company website, it “provides real estate advisory and portfolio management services to institutional clients and private investors for equities and fixed income investments.”

In 2015, Morguard generated revenue of \$883 million and operating income of \$435 million (Morguard Corporation, 2015, p.4).

The Morguard portfolio consists of 69 office and industrial properties, 56 residential properties 42 retail properties and 6 hotel properties (p.21).

1.9.2 Sustainability

According to the Morguard 2015 Annual Sustainability Report and an interview with Elaina Tattersdale, Project Manager, Strategic Initiatives & Sustainability at Morguard, sustainability is a major priority at Morguard, to which the company has dedicated considerable resources. In addition to hiring outside consultants to assist in developing its sustainability priorities, Morguard has arguably the most extensive sustainability reporting systems in the CBS. These efforts are largely driven by two stakeholder groups, the company's institutional shareholders and its clients. The need for sustainability information by both parties has provided much of the motivation for Morguard's reporting structure. Morguard's reporting systems and its drive toward complete portfolio certification have yielded tangible results in the form of impressive reductions in GHG emissions, energy usage and water consumption and an increase in recycling, as well as a high level of BOMA BEST and LEED certification. In addition, the company's efforts to foster sustainability innovation have seem to have built a bottom-up culture of sustainability.

1.9.2.1 Sustainable Morguard

Sustainable Morguard ("SM") is the companywide sustainability initiative that provides the structure for Morguard's response to environmental, social and governance ("ESG") issues and opportunities across business units. SM takes into account concerns and priorities of Morguard's major stakeholder groups, including shareholders, employees, clients, tenants and the local communities where the company operates. The principle issues on which SM is focused are:

1. Decreased energy and water usage;
2. Reduced waste and emissions;
3. Green building certification;
4. Collecting consistent data on sustainability performance;
5. Transparent reporting; and,
6. New implementing of new sustainability policies and initiatives that support the overall sustainability vision (Morguard Corporation, 2015, p.4).

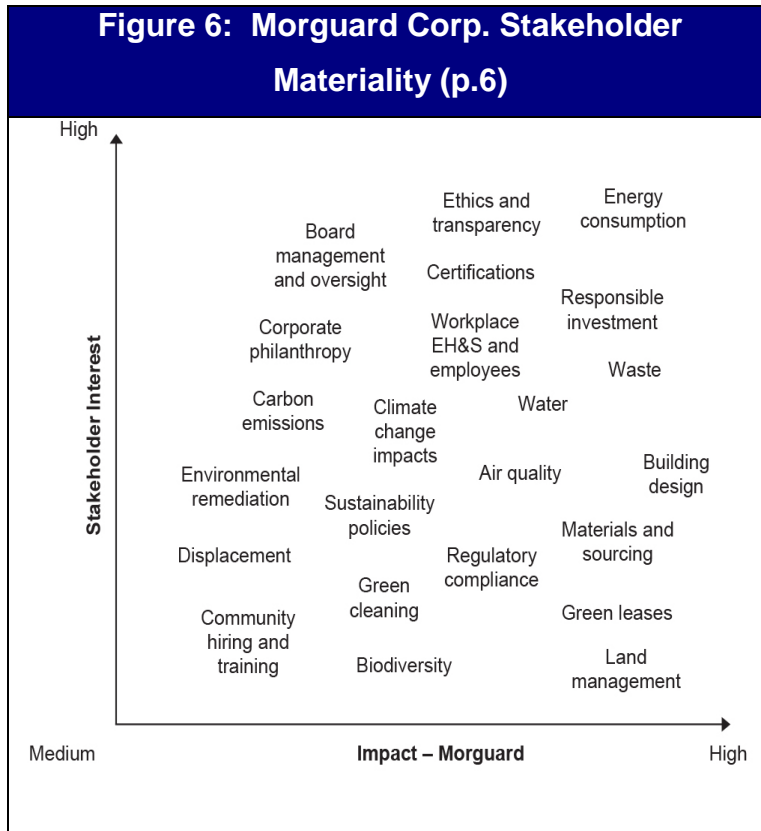
1.9.2.2 2035 Objectives

SM supports and is intended to be a principal driver toward the sustainability goals that the company has set for 2035, which are:

1. Our Voice – becoming a leading advocate for sustainable real estate practices.
2. Responsible Property Investing – become the best-in-class advisor to the company’s clients in terms of providing guidance for sustainable real estate investments.
3. Reaching Net Zero – attaining zero net impact status for all buildings in the Morguard portfolio.
4. Sustainable Development – engaging with local communities in which the company operates to become a philanthropic driver of sustainable real estate development.
5. Responsible Employer – creating a culture of respect that meets employees needs while empowering them to contribute to the success of the company’s sustainability vision.
6. Our Sustainable House – making the company’s corporate offices examples of best-in-class sustainability practices (Morguard Corporation, 2015, p.5).

1.9.2.3 Stakeholder Materiality

In 2010, Morguard engaged Deloitte LLP to assist in developing the company’s sustainability program. With Deloitte’s assistance, the company drafted a materiality matrix which assisted in prioritizing the issues of greatest importance to the internal and external stakeholders.



1.9.2.4 Governance

SM is overseen by a steering committee that is comprised of the CFO of Morguard Investments, the Senior Vice President of Finance and the General Counsel. The steering committee sets overall SM goals and policies based on the input of the sustainability committees that are made up of senior management across the company (p.4).

The sustainability committees are comprised of cross-functional executives. They implement the SM initiatives and are meant to foster innovation and to drive performance throughout the organization. There are two individuals in the sustainability group who are responsible for implementing and driving the sustainability initiatives (p.4).

1.9.2.5 External Associations

Morguard regularly engages with outside entities to help focus and direct its sustainability efforts, such as Energy Advantage, The Natural Step, Deloitte, Quinn & Partners, Ernst & Young, and the Shareholder Association for Research and Education.

In addition, Morguard is a member of the CaGBC, BOMA, GRI, Greening Greater Toronto and the Real Property Association of Canada.

1.9.2.6 Responsible Property Investment

As a major provider of advisory services to real estate investors, and a leading real estate investor, Morguard seeks to enable Responsible Property Investing (“RPI”), which is defined as investing in sustainable real estate assets. In terms of its own portfolio, Morguard completes an RPI analysis of each property that it is considering acquiring. In addition, the company has formed an internal working group that seeks to identify and address ESG issues with respect to real estate investing. The working group has driven many initiatives for SM, including plans to enhance the sustainability profile of all shopping centers with more than 100,000 feet of space (p.8).

1.9.2.7 Monitoring

1.9.2.7.1 GREEN LINK

GREEN LINK (“GL”) is a proprietary program that Morguard uses to target energy efficiency, water use and waste goals in preparation for outside building certification. GL utilizes resource audits and recommends cost saving initiatives.

In addition to GL, Morguard conducts monthly environmental performance measurements which assess energy consumption emissions generation and water usage for all of its office and retail properties. As of 2015, Morguard was able to measure GHG emissions for 95 percent of its owned and managed office and retail properties (p.9).

1.9.2.7.2 EnviroLink/Environmental Management System

Developed in 1994 by Morguard's Environmental Affairs Group, EnviroLink is a proprietary web-based portal that tracks work done at the company's properties by the Environmental Affairs Group or by third party contractors. With the Environmental Management System, EnviroLink allows employees of Morguard and outside contractors to monitor environmental work that has been completed or that is in progress at all of the company's properties (p.34).

1.9.2.8 Leases

As 95 percent of Morguard's tenants have indicated that an environmentally responsible workplace is important, the company includes in its standard lease several provisions that are meant to begin a dialogue with tenants about sustainability (p.9).

1.9.2.9 Certifications

1.9.2.9.1 BOMA

Morguard uses BOMA BEST to certify its Canadian portfolio of office and residential space. As of 2015, 65 properties were certified by BOMA representing 78 percent of the office space (8,220, 437 sq ft) and 93 percent of the retail space (10,227,737 sq ft) owned by the company. Morguard targets BOMA BEST certification for all office and retail properties over 100,000 square feet in size (p.10).

1.9.2.9.2 LEED

In addition to BOMA BEST, Morguard also utilizes the LEED certification system. As of 2015, twelve properties were LEED certified with nine additional properties in process (p.11).

1.9.2.9.3 Certified Rental Building Program

Morguard also uses Ontario's Certified Rental Building Program ("CRBP"), which certifies residential buildings on forty indicators of quality construction and service. CRBP will incorporate sustainability standards in its next version (p.12).

1.9.2.10 *Benchmarking*

Morguard participates in two benchmarking initiatives, in order to better assess the effectiveness of its sustainability initiatives.

1.9.2.10.1 Energy Star Portfolio Manager

In 2015, the company completed a pilot to establish energy profiles for its Canadian office properties using the Natural Resources Canada Energy Star Portfolio Manager, which allows users to measure performance of their properties against a national standard. This initiative assists in prioritizing energy efficiency over capital expenditures for maximum effectiveness (p.13).

1.9.2.10.2 Enclosed Shopping Center Benchmarking

In 2015, the company completed a process to measure and assess the common area energy consumption of its shopping center properties which assists the company in reducing its overall energy profile for these spaces. The data gathered from this initiative were used by the ICSC for their energy benchmarking tool (p.13).

1.9.2.11 *Solar Energy*

The company has rooftop solar installations on six properties in Ontario that each generate 500 kW of power (p.13).

1.9.2.12 *Renewable Energy Certificates*

In 2015, Morguard purchased 367 MWh of renewable Energy Certificates (“RECs”) in order to offset its energy profile at five LEED certified properties in Canada (p.14).

1.9.2.13 *Sustainability Performance*

Measured in terms of reduced energy and water consumption and increased recycling of waste, Morguard seems to have made considerable progress between 2010 and 2015. Please refer to Performance Analysis section for details.

1.10 AECON

1.10.1 Overview

Aecon Group Inc. (“Aecon”) is Canada’s largest publicly traded construction and engineering company with approximately 12,000 employees and a current market capitalization of approximately \$830 million. The 2015 Revenues were \$2.9 billion with adjusted Earnings Before Interest, Taxes, Depreciation and Amortization of \$147 million (Aecon Group, 2015, p.2-3).

The company principally engages in large and sophisticated infrastructure and natural resources projects in Canada and overseas. It is divided into four main business units as follows:

- Aecon Infrastructure – engages in the design and construction of large infrastructure projects including highways, subway tunnels, airports and hydroelectric dams.
- Aecon Energy – provides design and construction services to the nuclear, oil and gas and renewables sectors.
- Aecon Mining – provides mine site infrastructure design and construction and other services to the mining sector.
- Aecon Concessions - focuses on developing public-private partnerships and sourcing required financing for the projects that Aecon undertakes.

Aecon has been listed by Aon Hewitt as one Canada’s Best Employers every year since 2007.¹⁸

¹⁸ MacLean’s <http://www.macleans.ca/economy/business/canadas-best-employers/>

1.10.2 Sustainability

According to Aecon's 2015 Corporate Social Responsibility Report and an interview with Rob Kinnaird of Aecon, CSR is a top-down initiative that is effectively engrained in the culture of the corporation by necessity and is viewed as mission critical. While the corporation is responding to the demands of various stakeholders through its CSR and sustainability initiatives, its focus for meeting these demands is on its employees. Education is a key element and directives and protocol are clearly communicated and understood as a fundamental part of the job. Given the nature of Aecon's work, which mainly involves large natural resources and infrastructure projects that are complex and environmentally sensitive, CSR "is something we simply do every single day and have for years" (Aecon Group, 2015, p.2). Sustainability as such is considered embedded in the corporate culture of the company and is considered fundamental with respect to ecological conservation. Preservation and enhancement of ecosystems where the company works, in addition, to its concerted effort to engage in more renewable energy infrastructure projects, are the definitions of environmental sustainability that are used for Aecon for this analysis. Most of the efforts described below are made by the company in support of the first element of this definition of environmental sustainability, among other CSR goals of Aecon.

1.10.2.1 CSR and Sustainability Policy

Aecon's CSR and sustainability policy is meant to provide clear guidance to employees with respect to how they are expected to conduct themselves on behalf of the company with respect to project management and in Aecon's working partnerships. The guiding principles are (Aecon Group, 2015, p.5):

- 1) Conduct business in a safe and socially acceptable manner;

- 2) Integrate community investment considerations into decision-making and business practice;

- 3) Learn from, respect and support the communities and cultures in which we conduct our business;
- 4) Integrate waste avoidance and reduction initiatives that focus on optimizing the efficiencies of space, time and materials;
- 5) Seek to endorse and deliver cleaner and more efficient energy solutions.

1.10.2.2 Code of Ethics and Business Conduct

While Aecon's CSR and Sustainability Policy (Aecon Group, 2015, p.2) is meant to guide individual behaviour, the Code of Ethics informs corporate behaviour for the execution of the company's business strategy.

- 1) Respect for All – respect for colleagues, partners and clients.
- 2) Conducting Business with Integrity – maintaining integrity and ethical behaviour.
- 3) Safeguarding Company Assets – protection of proprietary company and client information.
- 4) Public Company Accounting Compliance – accurate, complete and timely disclosures of public company information.
- 5) Speaking Up, Raising Concerns and Reporting Misconduct – complaints are treated with confidentiality and will not be subject to reprisals.

1.10.2.3 Governance

CSR and sustainability are driven at the executive level and are top-down in nature. Unlike other companies, Aecon does not have a stand-alone sustainability or CSR department, being understood that these issues are a core element of the business operations not a separate consideration.

1.10.2.4 Sustainability Initiatives

Aecon's individual CSR initiatives support the principles of the CSR and Sustainability Code of Conduct and ensuring the safety of its workers, which is arguably its highest CSR/sustainability concern, and a safe and respectful workplace. In addition, certain CSR initiatives are designed to support the communities in which it operates.

1.10.2.4.1 Women of Aecon

Women of Aecon ("WOA") is an employee-facing program within the company that provides for regular networking meetings and speaker series, mentoring and support for female employees of the company (Aecon Group, 2015, p.10).

1.10.2.4.2 Career Development

Aecon has a formal mentoring program that helps junior employees develop their practical and leadership skills (p.14).

1.10.2.4.3 Aecon University

Aecon University is an internal educational institute that allows employees to gain new skills that will enhance their career advancement (p.15).

1.10.2.4.4 Safety

Aecon has several educational programs in place to promote worksite safety. In addition, safety is actively monitored. In 2013, Aecon received the Canadian Construction Association's National Safety Award (p.21).

1.10.2.4.5 Indigenous Community Engagement

Given that much of Aecon's work is done on or near Indigenous lands, the company makes a joint effort to engage with the local Indigenous communities that are often in remote areas in terms of providing education and employment opportunities. (p.26-30).

1.10.2.5 Environmental Sustainability

Aecon's three pillars of environmental sustainability guide the company's environmental sustainability practices (Aecon Group, 2015, p.36):

- 1) Promoting Environmental Awareness.
- 2) Practicing Environmental Performance.
- 3) Achieving Environmental Stewardship.

The company has strict environmental policies with respect to groundwater management, streamflow protection, protection of aquatic life and habitats, minimizing terrestrial impacts and scheduling around nesting and migration.

In addition, employees working on each project where environmental factors are a consideration are given training in the requisite environmental assessment plan, legal and compliance requirements, regulations, contractual agreements, adherence to Aecon environmental policies and procedures, tactics to minimize environmental impact, reporting procedures for any environmental incidents or witnessed non-conformity, handling of hazardous materials and disposal and recycling of all jobsite materials.

The company cites several case studies for its environmental care, which include:

Salmon River Bridge Restoration and Widening – Aecon removed fish from the area during construction, and constructed special tarp systems to catch any falling debris from the bridge and planted 30,000 aquatic plants to assist in restoring the local ecosystem. 5,000 of these plants were donated by the company (p.41).

Terry Fox Drive Extension - in order to protect the rare butternut tree, of which only 13,000 are left in Ontario, and several hundred would have been destroyed by the extension, Aecon transplanted, fenced off and replaced all butternut trees in the work area (p.43).

Waneta Hydroelectric Expansion – trees that needed to be removed for the project were surveyed for nesting birds, they were only cleared after the nesting season and other fauna, such as black bears were relocated to other suitable habitats (p.45).

1.10.2.6 Renewable Energy Focused

While there is no evidence that Aecon has turned down a traditional fossil fuels project, the company does make a considerable effort, according to the annual report, to engage in renewable energy projects and to secure mandates to convert fossil fuel facilities to renewable generation (p.50).

Performance Analysis

In order to assess the impact of each Case Company's sustainability efforts, the available data from their respective annual and sustainability reports were reviewed and analyzed. Based on the available data, certain measures of changes in sustainability performance were compared in order to assess the impact of the sustainability efforts of each firm over a set period of time. Due to differences in measurements and available data, conclusive indicators of absolute sustainability performance were difficult to reach. In addition, as one of the Case Companies, Oxford Properties, is privately-held, a comparison of financial results was not possible. As such, the following analysis provides an estimated, preliminary indication of the effectiveness of each firm's sustainability performance dependent in degree upon the available information.

1.11 Oxford Properties

While financial data for Oxford is not available due to the fact that it is a portfolio company of OMERS, the sustainability information provided by the company in its annual sustainability report appeared to be the most detailed and consistent. Measurements of energy use, GHG emissions generation, water consumption and waste recycling were available for from 2010 through 2014 for the company's office, retail and residential properties on a square foot basis. What is more, the report provided an intensity measure, which demonstrated per square foot measures of energy consumption, GHG emissions, water use and waste recycling or diversion. While the notes indicated that the 2013-2014 winter had been unseasonably cold, it did not appear that the numbers had been adjusted to reflect this fact. As such, the data was detailed and straightforward with a unit-based measure (per square foot intensity) such that each year could be compared without additional calculations.

**Table 9: Oxford Properties GHG Emissions Change Total Portfolio
2010-2014**

Total Portfolio

	2010	2011	2012	2013	2014
Floor area of buildings (ft ²)	31,011,789	33,085,639	32,824,447	33,315,211	32,169,132
Scope 1 (MT of CO ₂ e)	48,893	51,322	45,092	45,373	42,673
Scope 2 (MT of CO ₂ e)	221,441	232,498	217,772	170,732	128,233
TOTAL	270,334	283,820	262,864	216,105	170,906
Emissions intensity (kg CO ₂ e/ft ²)	8.72	8.58	8.01	6.49	5.31

**Table 10: Oxford Properties Energy Consumption Change Total Portfolio
2010-2014**

Total Portfolio

	2010	2011	2012	2013	2014
Number of buildings	69	71	68	67	53
Floor area of buildings (ft ²)	31,011,789	33,085,639	32,824,447	33,315,211	32,169,132
Electricity consumption (ekWh)	760,813,505	763,282,173	717,509,827	684,078,717	619,889,559
Natural gas consumption (ekWh)	259,491,290	275,248,517	245,679,607	244,766,069	228,169,399
Steam consumption (ekWh)	53,892,795	56,397,234	43,618,046	48,450,458	38,295,380
Chilled water consumption (ekWh)	4,680,638	4,378,040	4,225,849	3,597,660	2,537,234
Diesel (ekWh)	2,463,127	2,391,114	1,796,838	1,723,832	1,744,553
Total Direct Energy consumption (ekWh) (EN3)	261,954,417	277,639,631	247,476,445	246,489,901	229,913,952
Total Indirect Energy consumption (ekWh) (EN4)	819,386,938	824,057,447	765,353,722	736,126,835	660,722,173
Total energy consumption (ekWh)	1,081,341,355	1,101,697,078	1,012,830,167	982,616,736	890,636,126
Consumption intensity (ekWh/ft²)	34.87	33.30	30.86	29.49	27.69

Source: Oxford Sustainability Report 2015, p.45-50.

Total change pertaining to measuring Oxford portfolio's water efficiency, waste diversion rate for residential stock as well as total waste diversion rate were not readily available. Available charts above do indicate, however, that Oxford achieved improvements in its chief sustainability measures during a four-year period across its property portfolio.

Please see Appendix II for detailed breakdown on Oxford's sustainability performance.

1.12 Morguard Corporation

Morguard is a publicly traded company and as such financial and sustainability measures are available in its annual and sustainability reports. That being stated, a review of the annual report made clear that the impact of sustainability on the firm's financial performance could at best only be estimated using the general metrics listed in its sustainability report.

Regarding sustainability measures, Morguard provided data on energy consumption, GHG emissions, water usage and waste recycling for two of its property types, office and retail for the years 2010, 2014 and 2015. 2015 figures were shown on an actual and weather-adjusted basis. No data was available for residential properties. It was not clear from the information provided whether the data included properties held solely by Morguard or also those in its real estate investment trust.

In addition, Morguard provides the same intensity figures as Oxford for energy consumption, GHG emissions, water usage for 2010 and 2015. These numbers are only provided on a weather-adjusted basis, so there is no clear indicator of changes in sustainability performance. It is also unclear what is included in sector portfolios that are measured for sustainability i.e., directly owned retail properties or directly owned and held in a real estate investment trust.

Based on the weather-adjusted figures provided by Morguard, it appears that the company has made progress in terms of its sustainability performance.

Table 11: Morguard Corp. Percentage Change in GHG Emissions 2010-2015

ANNUAL ENERGY-RELATED GREENHOUSE GAS EMISSIONS (tCO ₂ e)						
Actual 2015 versus Actual 2014			Actual 2015 versus Weather and Occupancy Adjusted 2010			
	2014 (tCO ₂ e)	2015 (tCO ₂ e)	Change (%)	2010 (tCO ₂ e)	2015 (tCO ₂ e)	Change (%)
ELECTRICITY						
Office	58,463	56,399	-3.5%	61,546	43,319	-29.6%
Retail	30,926	29,479	-4.7%	38,679	29,011	-25.0%
Total	89,389	85,878	-3.9%	100,225	72,330	-27.8%
NATURAL GAS						
Office	25,220	21,958	-12.9%	18,658	16,388	-12.2%
Retail	9,035	7,812	-13.5%	6,658	6,764	1.6%
Total	34,255	29,770	-13.1%	25,317	23,152	-8.6%
COMBINED E & NG						
Office	83,683	78,356	-6.4%	80,204	59,707	-25.6%
Retail	39,962	37,292	-6.7%	45,338	35,775	-21.1%
Total	123,644	115,648	-6.5%	125,542	95,482	-23.9%

Table 12: Morguard Corp. Percentage Change in Annual Energy Consumption 2010-2015

ANNUAL ENERGY CONSUMPTION (ekWh)						
Actual 2015 versus Actual 2014			Actual 2015 versus Weather and Occupancy Adjusted 2010			
	2014 (ekWh)	2015 (ekWh)	Change (%)	2010 (ekWh)	2015 (ekWh)	Change (%)
ELECTRICITY						
Office	250,640,887	240,901,546	-3.9%	228,889,825	188,127,684	-17.8%
Retail	176,483,499	168,365,177	-4.6%	165,185,965	145,339,961	-12.0%
Total	427,124,386	409,266,723	-4.2%	394,075,791	333,467,645	-15.4%
NATURAL GAS						
Office	137,654,414	119,889,609	-12.9%	101,792,191	89,487,818	-12.1%
Retail	49,660,347	42,933,044	-13.5%	36,588,991	37,164,280	1.6%
Total	187,314,761	162,822,653	-13.1%	138,381,183	126,652,098	-8.5%
COMBINED E & NG						
Office	388,295,301	360,791,155	-7.1%	330,682,017	277,615,502	-16.0%
Retail	226,143,846	211,298,220	-6.6%	201,774,957	182,504,240	-9.6%
Total	614,439,146	572,089,375	-6.9%	532,456,974	460,119,743	-13.6%

Table 13: Morguard Corp. Percentage Change in Annual Water Consumption 2010-2015

ANNUAL WATER CONSUMPTION

	Actual 2015 versus Actual 2014			Actual 2015 versus Weather and Occupancy Adjusted 2010		
	2014 (m ³)	2015 (m ³)	Change (%)	2010 (m ³)	2015 (m ³)	Change (%)
Office	704,578	705,444	0.1%	896,747	655,303	-26.9%
Retail	1,081,567	1,048,368	-3.1%	1,083,743	956,865	-11.7%
Total	1,786,145	1,753,812	-1.8%	1,980,490	1,612,168	-18.6%

Table 14: Morguard Corp. Percentage of Canadian Office and Retail Properties – Total Waste Recycled 2010-2015

WASTE PERFORMANCE (tonnes)	OFFICE AND RETAIL PORTFOLIO	
	2010	2015
Properties Represented	60	80
Total Waste Generated	10,519	14,317
Total Recycled	4,240	7,378
Waste to Landfill	6,279	6,939
% of Total Waste Recycled	40.3%	51.5%

Source: Morguard Sustainability Report 2015, p. 15-19

The statements above should be caveated in that the calculations of energy usage and GHG emissions using the unadjusted 2015 data indicated an increase in natural gas consumption. This may be due to a change in Morguard’s portfolio or increased gas usage during the 2013-2014 winter months.

Please see Appendix III for details on Morguard’s sustainability performance.

1.13 Aecon Group

Aecon is a publicly traded company, and as such financial and sustainability information is available. That being stated, the effect of sustainability on Aecon’s financial performance or even its quantitative sustainability progress could not be determined with the available information.

As stated in the Case Section of this analysis, Aecon is an engineering and construction firm and its sustainability efforts as defined for this analysis largely pertain to environmental restoration connected to individual projects for its clients. As such, while information is available on specific individual projects, no measures for this type of sustainability are employed across projects, and as such, a review of the information in the company's annual and sustainability reports did not yield any data that could be examined for the purposes of determining its sustainability performance.

1.14 Implied Financial Impact of Sustainability

As stated, the data available from the Case Companies does not lend itself to direct analysis of the impact of each company's sustainability efforts. That being stated, certain indicators of the expected result of sustainable building investments are available and can be used in conjunction with the Case Company data to include the estimated financial impact of their sustainability efforts.

1.15 Available Metrics

The Rocky Mountain Institute ("RMI") has gathered several metrics on the value of LEED certification in terms of increased rentals and building sale value from various sources. In addition, the CaGBC McGraw Hill 2015 Canadian Market Study provides estimates of the overall cost savings associated with sustainable building as well as an approximate increase in property values associated with sustainable improvements. Taking an average of the estimates of increased rental rates and sales values provides an approximation of the revenue value of sustainable improvements.

Table 15: RMI Calculation of Sustainable Office Value¹⁹²⁰

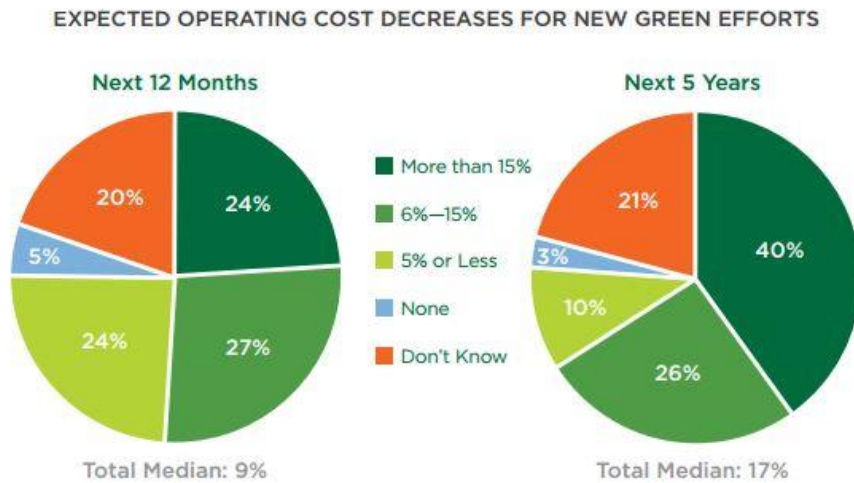
STUDY	Rental Premium	Occupancy Premium	Sale Price Premium
Eicholtz, Kok & Quigley Dec 2010	ES: 2.1% LEED: 5.8%	N/A	ES: 13% LEED: 11.1%
Wiley et al. 2010	ES: 7–9% LEED: 15–17%	ES: 10–11% LEED: 16–18%	N/A
Fuerst and McAllister Mar 2011	ES: 4% LEED: 5%	N/A	ES: 26% LEED: 25%
Eicholtz, Kok, et al. April 2011	ES/LEED: 3%	N/A	ES/LEED: 13%
Newell, Kok, et al.; Australian Study Sep 2011	Green Star: 5% NABERS: N/A	N/A	Green Star: 12% NABERS: 2–9%
Miller, Morris & Kok; Retrofit Study Fall 2011	LEED EB: 7%	N/A	N/A
Pogue et. al.; Do Green Bldgs. Make \$ & Sense 3.0 Fall 2011	LEED: 4.11%	3.14%	N/A
Bernstein, Russo, McGraw Hill/Siemens 2012	13%	16%	10%

The following CaGBC/McGraw Hill figures provide an estimate of the cost savings associated with sustainable improvements over a period of 12 months and 5 years as a result of decreased operating costs.

¹⁹ Bendelwald, Miller and Muldavin, *How to Calculate and Present Deep Retrofit Value: A Guide for Investors*, 52.

²⁰ Canada Green Business Council, *Canada Green Building Trends: Benefits Driving the New and Retrofit Market*, 7.

Table 16: CaGBC Expected Operating Cost Decrease²¹



1.16 Oxford Financial Performance

While financial data for Oxford is not available due to the fact that it is a portfolio company of OMERS, the company website vaguely states that since 2010, as a result of exceeding its energy reduction targets, \$10 million in annual energy savings were delivered to its tenants to date. There is no data currently available linking its sustainability with financial performances. While the above dollar amount is certainly a significant figure, it is unclear how it compares to overall energy expenditures. Based upon the available data, it can be indicated that financial value of Oxford’s CSR/sustainability efforts is present.

1.17 Morguard Financial Performance

As a public company, Morguard’s financial data is available, however, the company 2015 Annual Report does not indicate if Morguard’s financial performance is influenced by its CSR/sustainability efforts.

That being stated, during the interview, Elaina Tattersdale indicated that “when the CFO and the legal counsel came to us and said that they want to report [on sustainability] out in line with the financials, Morguard decided they wanted to do

²¹ Ibid. 7.

it quarterly. (...)We haven't done it yet. We've internally been working towards doing that [however]" (Tattersdale Interview, 2016).

1.18 Aecon Financial Performance

As Aecon does not have a portfolio of property, it is difficult to assess its sustainability measures to its business in order to estimate the financial impact of its sustainability efforts.

1.19 Conclusion

As noted above, there is almost no data readily available in order to provide some indication of the magnitude of the economic benefit being derived by Oxford, Morguard and Aecon from their sustainability efforts. However, the available sustainability statements for Oxford and Morguard make clear that their programs have resulted in improvements in each respective company's environmental profile. In terms of AECON, all evidence is anecdotal, but it does point to an increased level of project flow and an improved environmental footprint.

Observations

This section of the analysis seeks to provide the principal observations that developed as a result of the analysis of the Case Companies and the framing of CSR and sustainability in the academic literature with respect to the effectiveness of each of the Case Company's sustainability efforts while also taking into account the level of sustainability adoption across the CBS.

1.20 Oxford Properties

Oxford's sustainability program began as a top-down initiative that was driven by senior management. The company's initial efforts to drive sustainability at Oxford involved certification of buildings, which by necessity entailed developing relationships with outside stakeholders such as CaGBC. After the company achieved its first successes in terms of improved energy efficiency and GHG emissions reductions, the management challenged the business units to improve their sustainability metrics, which resulted in a bottom-up response whereby employees took responsibility for sustainability innovation at the company and began to drive overall sustainability performance. Oxford seems to recognize the value of this type of initiative and to support and foster innovation in sustainability.

Key to the company's sustainability efforts are its data systems that monitor and measure sustainability performance metrics. As Neate stated, "the key and the real trick is to make sure you're looking at your data in a way that people can interpret it and action it." The clarity and usability of these metrics provide employees with actionable data that can be used to improve individual property performance, thereby enhancing the credibility of the company's sustainability efforts. In addition, the data challenges employees to meet and beat their peers fostering healthy competition and innovation to be the best in the industry, resulting in innovation on the part of employees. The numbers also make clear

the results of the sustainability work that has been done in terms of better financial performance thus making clear the impact of every employee's efforts.

The sustainability data systems at Oxford also assist in developing clear and attainable sustainability goals toward which employees can strive. The company has clear and concrete goals for the coming year in terms of building certifications, retrofitting of existing properties and energy consumption reductions. In addition to the company's data and monitoring systems, Oxford's robust sustainability governance adds to the company's efforts. It appears that Oxford's sustainability group is extremely active in terms of driving and monitoring sustainability in terms of the day-to-day operations of the business units and moving the company toward achieving its stated sustainability goals. Although, Oxford has made significant improvements in the areas of GHG emissions and energy consumption, despite its steadily growing portfolio, its 2015 sustainability report appears to be lacking data on water efficiency and waste diversion. The reasons for the incompleteness of the disclosure are unknown, making the overall data analysis challenging and prompting reader's caution while undertaking sustainability assessment.

In terms of stakeholders, Oxford seems to be a leader regarding tenant interaction in that it seeks to be a partner more than just a landlord. Beyond green leases, Oxford strives to work with its tenants to reduce their energy and GHG footprint and provides multiple points of contact for tenants with the company. Its energy efficiency workshops for tenants in many office buildings are unique in the industry. The effectiveness of its tenant-focused efforts is reflected in the high satisfaction ratings that Oxford receives. Oxford is also cognizant of the sustainability requirements of its parent company, OMERS, whose need for sustainability metrics has driven reporting and certain sustainability initiatives at the company.

Oxford's motivations for its sustainability initiatives are to improve financial performance. Neate bluntly states that "it's really about driving financial returns. ..We are entirely doing it because we think that it is financially it is in our best interests" (Neate, 2016). Unlike almost any other peer in the CBS, Oxford seems to have grasped the opportunities that innovation and sustainability leadership present and to have implemented the necessary systems and mechanisms to foster these drivers. According to Neate, the drive for increased financial performance necessarily entails improved customer satisfaction and industry leadership, so these goals have become part of Oxford's overall sustainability vision. While the company is clearly responding to market demands for more efficient and environmentally sustainable office and retail space, it has taken the opportunity to lead much of the change in the CBS. Again, as Neate states, "it's about driving performance. It's about being a leader" (Neate, 2016).

Oxford provides an example of a company that began with a management led sustainability initiative, but that has implemented the necessary systems and programs to foster a culture of sustainability innovation, such that employees seek to rise to the challenge of becoming the best company in the CBS in terms of sustainability. The company recognizes the opportunities that sustainability affords in the CBS and has successfully put in place the programs and built a culture to seize these opportunities.

1.21 Morguard Corporation

The former CEO, Steve Taylor, who is now the Vice President of Real Estate at Healthcare of Ontario Pension Plan ("HOOPP"), a major investor in Morguard, championed sustainability at Morguard. As Tattersdale states. "he was the main driver in starting the program" (Tattersdale, 2016). Mr. Taylor's efforts provided the early management leadership necessary for a successful sustainability program. In addition, the company quickly engaged with outside stakeholders, joining several sustainability NGOs, such as CaGBC, and employing outside consultants to assist in developing its sustainability program. The company also

sought to implement the systems that would inculcate sustainability into the corporate culture, which appears to have largely succeeded.

However, since Mr. Taylor's departure, sustainability appears to have become more stakeholder-driven, albeit while still supported by the company's management. Morguard's principal shareholders, HOOPP and Graystone have pushed sustainability reporting and performance, as have its clients who demand sustainability metrics for their properties. Like other firms in the industry, Morguard has sought to incorporate sustainability practices into the culture and every day business operations. While sustainability has become part of the corporate culture, the function of the sustainability professionals at Morguard is to continue to influence the decision-making process with respect to capital expenditures and investment decisions.

More than other industry participants, Morguard's sustainability efforts are highly data, monitoring and reporting driven and it appears that the company allocates a significant amount on sustainability monitoring and reporting systems. It is not clear that the additional data being generated is providing enhanced value or improved sustainability performance. It appears that a rationalization of sustainability metrics and data would enhance the usefulness of the reporting systems and provide more actionable items the employees can use to drive improve sustainability performance. Additionally, Morguard's 2015 report as it pertains to water usage and waste diversion, provides data only on the Canadian portion of its retail and office portfolios. That being the case, it leaves approximately 38% (as per company website) of its overall stock unreported. As such, provided data becomes highly difficult to assess and compare in the context of the firm's overall sustainability performance.

It appears that Morguard had perhaps the strongest executive support for sustainability of any CBS participant and that by seeking outside stakeholder support and developing the necessary systems, it successfully nurtured and built

a culture of sustainability. What appears to be lacking is a clear business case or direction for sustainability or the innovative nature to get ahead of the sustainability curve and proactively lead as opposed to react to stakeholder demands. Having sustainability initiatives driven by financial executives and the general counsel sends a mixed message. The reader's immediate attention is perhaps drawn to the fact that by engaging in sustainability, the company's main goal is first and foremost financial benefits as well as legal security. In addition, while praiseworthy, the company's sustainability goals appear to be somewhat remote and lack the actionability of more immediate milestones that could be actioned by more modest, yet current goals.

1.22 Aecon Group

The engineering and construction work in which Aecon engages in the energy, mining, and infrastructure spaces is complex and carries a greater risk of environmental accidents and worker injuries. Given the level of scrutiny of natural resources companies with respect to worker safety and the environment, Aecon must maintain an impeccable record in these areas if it is to effectively operate. As such, good environmental practices are mission critical to the nature of its business and by therefore CSR and sustainability are highly integrated into the Aecon corporate culture. Speaking to this point, Rob Kinnaird, stated that "We've been guided by our mission and our value proposition in the company and our corporate culture and values. They've always been ingrained there" (Kinnaird, 2016). They are emphasized through clearly delineated training, education and reporting programs and requirements. Given the critical nature of CSR and sustainability to its business, Aecon's CSR and environmental initiatives are top-down in nature. Great emphasis is placed on education and protocol and safety and environmental practices, which are assumed to be clearly communicated and understood by all employees. In support of these efforts and to meet the demands of other stakeholders, such as shareholders and clients, transparency is valued and promoted at Aecon. Misaligned with the transparency principle at Aecon, however, is the fact that the 2015 CSR report excludes the firm's energy and mining revenues, leaving the majority, 67%

(Aecon Annual Report 2015, p.12) to be exact, of its overall stock excluded from the CSR/sustainability analysis. Additionally, the CSR report content appears to be strategically enhanced in order to focus the reader's attention on its graphic layout and colourful design while drawing the reader's attention to bold, page-wide statements.

Highlighting the importance of the compliance element of Aecon's CSR and sustainability efforts is the importance placed on reporting worksite non-compliance with internal and governmental regulations regarding the environment. This raises the question of trust as a part of the corporate culture when employees are actively encouraged to report on each other and to make a leap of faith that their careers will not be impacted by such actions. But as was made clear by the company's literature and Kinnaird, environmental responsibility is mission critical to the company such that these types of reporting mechanisms seem appropriate given the nature of the work. Further, it can be assumed based on the extensive employee training that the strictures of environmental compliance are clearly understood and that the goal of the reporting initiative is to reveal willful non-compliance and negligence.

In further support of the company's mission critical view of CSR and sustainability, Aecon places a high degree of emphasis on employee recruitment and retention through competitive compensation and benefits packages, assistance in career advancement (mentoring program) and support for women (WOA).

CSR is highly stakeholder driven. As stated, in order to secure mandates for new work, the company must demonstrate its ability to complete projects without causing environmental harm or injury to employees. Further, it must satisfy regulatory requirements and meet the growing demand for sustainable environmental practices from investors.

In terms of the measures used in this analysis for environmental sustainability - GHG emissions, energy efficiency, water consumption, Aecon has made its corporate headquarters highly sustainable, but more importantly, it points to the environmental results of its projects. This, once again, raises the issue of whether these savings in terms of GHG emissions or energy usage offset the effects of its other projects in the mining and energy sectors, which are not addressed in its Annual CSR Report.

Aecon is an example of a top-down approach to CSR in which sustainability, as defined by the company, has been completely incorporated into its culture, mostly by necessity. Transparent communications and an emphasis on education make clear the role of each employee in terms of sustainability. Highly actionable mechanisms for sustainability provide employees with clear opportunities to implement these elements of their responsibilities. This being stated, there do not appear to be extensive monitoring systems in place to provide measures of sustainability progress. However, as the main trust of the company's sustainability efforts are external and project-based, they may not be necessary. It is not clear whether the company's emphasis on reporting on other employees who appear to be transgressing the sustainability regulations builds or erodes trust in the company. Further, it is not clear whether the company's work on projects that run counter to its sustainability claims in the mining and natural resources sectors harm its credibility in the sustainability space with stakeholders or lay bare a purely practical embrace of the environment in order to maintain a record of compliance and to win new mandates. Overall, Aecon's incompleteness of reported data coupled with strategically enhanced reporting tactic as well as the absence of CSR/sustainability personnel on staff provides basis for questioning the genuineness of the firm's corporate citizenship claims.

1.23 The CBS

While the Case Companies generally present a positive picture with respect to understanding of the value of CSR and sustainability and the ability to effectively implement it, this is not true of the CBS as a whole. As previously stated, the

high level of anticipated use of sustainable technologies and in terms of newbuilding and retrofit activity reported by the CaGBC paints a rosy picture for the future of sustainability and CSR in the CBS, but it must be noted that the CaGBC numbers only reflect the intensions of its own membership, which is comprised of firms committed to sustainability.

Admittedly, the widespread demand for sustainability is a recent phenomenon within the CBS, and many sector participants do not face the same direct pressure from stakeholders (i.e., shareholders, commercial tenants, etc.) as do the Case Companies for sustainability reporting and sustainable space. That being stated, there is no way to ignore the fact that at best approximately ten percent of the CBS stock is certified sustainable or believed to be using sustainable technology or practices (CEC, 2008, p.17). Given the previously stated statistics about the CBS overall energy consumption and GHG emissions profile, and the government's commitment to reducing GHGs, this is a very low figure.

Many of the observed impediments to more rapid and widespread adoption of sustainability practices and technology within the CBS based on the review of the sector are listed below in the Challenges to Employing CSR/Sustainability section of this analysis.

1.24 Benefits of Sustainability

Based upon an analysis of the Case Companies, a review of the academic literature and the industry information, it is clear that sustainability has several benefits for CBS participants.

1.24.1 Financial

The academic literature, industry information and the quantitative analysis all indicate that sustainability in the form of building certification results in enhanced financial performance in terms of increased rental rates, higher property valuation and increased occupancy.

1.24.2 Customer Satisfaction

Both Oxford and Morguard demonstrated high levels of customer satisfaction because of the sustainable spaces that they offer and their efforts to engage with tenants on sustainability issues, which resulted in improved sustainability performance, increased tenant awareness of the value of sustainability and cost savings to the tenant and company.

1.24.3 Reputational Value

The Case Company analysis makes clear that all three companies benefited from the reputational value of being seen as sustainability leaders. This factor enhanced their ability to attract and retain skilled employees and their standing with potential tenants and clients.

1.25 Effectiveness of Employing CSR

On the basis of the company data analysis, the reported levels of client satisfaction, improvement in sustainability metrics and anecdotal evidence of increased lease rates, it appears that employing a focused sustainability strategy that incorporates the relevant elements listed in the Recommendations section below is effective.

Despite questions about the reporting of the data, both Oxford and Morguard demonstrated substantial reductions in their portfolios' energy consumption, GHG emissions, water usage and high levels of waste recycling. While the data represents a large estimate, the financial benefits that can be approximated for the Case Companies' sustainability efforts clearly support ongoing and improved sustainability programs and initiatives, especially with respect to building certifications and the requisite efficiency improvements.

While the evidence is uncertain, it appears that the sustainability efforts of the Case Companies are making progress, if not meeting stakeholder expectations. On this point, it is less clear that sustainability and CSR efforts are having the necessary efficiency. The only evidence to this effect are the customer

satisfaction figures for Oxford and Morguard, which both reflect a high degree of contentment among one stakeholder group.

1.26 Challenges of Employing CSR/Sustainability

While this analysis indicates that there are valuable benefits to be derived from sustainability initiatives, it also demonstrated that there are clear challenges.

1.26.1 Implementation

The Case Company analysis supports the academic literature assertion that there is a gap between understanding the value of sustainability and implementing sustainability initiatives at the corporate level. Employing outside stakeholders of entities certainly helps, but the challenge remains one of developing and communicating a clear, understandable and actionable sustainability vision and platform and the systems of data gathering and analysis and mechanisms through which action can be taken to enhance sustainability performance, as well as ensuring that employees understand the value of sustainability to the company. This is a complex and time consuming task with many hurdles that must be overcome.

1.26.2 Monitoring/Measurement

Clear and usable data is critical for sustainability success in the CBS. That being stated, designing and developing systems that provide the necessary information for employees to understand and address sustainability issues can be a difficult task.

1.26.3 Usability of Outside Data

As was made clear by Morguard, the different measures used by utility providers in different municipalities where the company operates makes understanding and measuring the sustainability profile of its various properties extremely difficult, thus hampering its efforts to improve the sustainability profile of its portfolio. As Tattersdale made clear in her interview about the data that she receives from the various utilities, “it’s inconsistent, so it's hard to compare apples to apples. For example, we have properties all over the country and properties all over the U.S.

When we get an invoice from Calgary and then get an invoice from Halifax and you can't compare them because they're measured in some different way. What is recycling to Alberta versus what is recycling to Halifax” (Tattersdale, 2016).

1.26.4 Scarcity of Benchmarking Data

The relative dearth of benchmarking data makes peer comparison and measurement of sustainability performance difficult.

1.26.5 Lack of Residential Certification/Monitoring

The lack of residential certification of the caliber of LEED or BOMA BEST makes implementation of residential sustainability more difficult, as does the relative inability of property companies to obtain data on residential energy usage, GHG emissions, water consumption or waste generation.

1.26.6 Capital Expenditures

For many smaller participants in the CBS, the requisite capital expenditures for sustainability enhancements or new buildings can be prohibitive.

1.26.7 Lower Energy Costs

The relatively low energy costs in Canada as compared to the rest of the industrialized world reduce the incentive to implement sustainability programs or to make efficiency improvements, as the relative benefits in terms of energy cost savings are less attractive.

1.26.8 Divergent Regulation

While the Case Companies seek to be leaders in sustainability, many CBS participants do what is required by law in terms of sustainability. That being stated, the lack of uniform federal or provincial regulation in terms of sustainability reduces the adoption of sustainable practices in the CBS.

1.27 Shortcomings in the Implementation of CSR/Sustainability

While a review of the media coverage of the Case Companies did not reveal any negative reports about their individual sustainability programs, an analysis of the wider CSR literature raises some concerns about the effectiveness or even the

genuineness of their sustainability efforts and by extension about those of the CBS.

1.27.1 Reliance on NGOs

While LEED certification is widely accepted and used, certain publications, such as Forbes (2014) openly question the effectiveness of LEED certification in reducing GHG emissions and energy usage. Stating that “Applicants can acquire LEED status merely by offering computer models projecting that they will meet a certain threshold...After that, buildings don’t have to demonstrate continued efficiency.”²² The article goes so far as to posit that LEED-certified buildings actually consume more energy than non-certified buildings and that LEED and other certification systems are “expensive scams.”²³ If this were the case, then much of the progress made in the Oxford and Morguard portfolios in terms of GHG emissions and energy consumption would only be bringing the buildings back in line with the emissions and energy profiles of non-certified buildings. While this seems highly unlikely, it does raise the serious concern about Oxford and Morguard’s reliance on NGOs for their abatement criteria.

1.27.2 Participation in Environmentally Harmful Projects

While Aecon goes to great lengths to emphasize its efforts to respect and even enhance the immediate environments and ecosystems in which it works, as well as its support for renewable energy projects, many of its clients are still mining and petroleum extraction companies. The Canadian Centre for the Study of Resource Conflict states that Canadian mining companies have some of the records in terms of CSR and sustainability (Whittington, 2014). As such, Aecon is assisting many of the largest corporate sustainability offenders degrade the overall environment. While Aecon goes to great lengths to improve its sustainability profile, the fact that its clients include environmental abusers raises

²² Anastasia Swearingen, “LEED-Certified Buildings Are Often Less Energy Efficient than Uncertified Ones,” Forbes (30 April 2014).
<http://www.forbes.com/sites/realspin/2014/04/30/leed-certified-buildings-are-often-less-energy-efficient-than-uncertified-ones/#640da6d915d8>

²³ Ibid. 4.

the question of whether or not this association and assistance negates the company's efforts to be environmentally sustainable.

1.28 Conclusion

While the points above raise questions about the efficacy of the Case Companies' sustainability efforts, or their genuineness, it does appear that for the most part the firms that have been examined are effectively implementing various elements of their sustainability strategies in a manner that conforms to many of the principles that were announced in the CSR academic literature and bearing out the usefulness of many of the guidelines provided by Eccles, Perkins & Serafeim, Googins & Mervis and others with respect to adopting a successful sustainability program. At the same time, they are grappling with some of the impediments and barriers to more effective sustainability implementation. This being stated, we must also take into account that while two of the Case Companies have certified most of their portfolio of properties, the vast majority of the CBS stock (90 percent to 95 percent) remains uncertified and therefore, it is assumed, not using energy or emissions reducing technology (CEC, 2008, p.5). If this is the case, then while we can applaud the Case Companies for their embrace of CSR and sustainability, and recommend that other firms in the industry use their practices as an example, we must also recognize the relatively low level of sustainability adoption within the CBS as a failing on the part of the sector that should be remedied. With this in mind, the next section of this analysis focuses on how the lessons learned from the Case Companies and the observations made about the CBS lead to recommendations for greater effectiveness of sustainability implementation and adoption throughout the sector.

Recommendations

Based on the review of the sustainability practices of the Case Companies and in light of the framework provided by the CSR literature review and the analysis of the CBS, several recommendations can be made. While the principal purpose of this analysis is to examine CSR and sustainability practices, certain recommendations pertain to regulatory regimes. While certain recommendations are confirmatory of the models for sustainability laid out in the academic literature, several more are uniquely based on the observed results of the Case Companies and are specific to the CBS.

1.29 Sustainability Benefits/Performance

1.29.1 Obtain Recognized Certifications

On the basis of the estimates of their impact on rental rates, property values and client retention, certifications appear to have a considerable value for CBS participants. It also appears to drive performance with respect to increased sustainability. As public awareness of the impact of sustainable building environments on productivity and health increase, it is reasonable to expect that building certifications will become more valuable until a tipping point is reached and the certification standards become the new industry norm. For the time being, they represent increased value and present a leadership opportunity. This is clear from Oxford and Morguard.

1.29.2 Clearly Communicate Sustainability Goals

Clear communication of sustainability goals and direction are extremely important because they provide a focus point for employees and an understanding of the motivation for the efforts that they are being asked to make.

1.29.3 Develop a Clear and Understandable Business Case for Sustainability

A business case for sustainability is extremely important in that it makes clear the reason and rationale for engaging in sustainability programs and efforts. As the

case becomes clearer, support and ownership for sustainability initiatives becomes stronger and more concrete.

1.29.4 Set Actionable Goals

Actionable goals greatly help in that they provide an attainable target for employees. The effect is to engender a better understanding of sustainability and its benefit for the company as well as to provide a mechanism whereby employees can furl sustainability change and enhance sustainability performance.

1.29.5 Develop Systems that Deliver Clear, Actionable Sustainability Data

For two of the three Case Companies, sustainability data is a critical component of their CSR efforts. Data that is clear and actionable enhances the credibility of corporate sustainability efforts and drives results by providing employees with a valuable tool that can be used to innovate and improve performance. Of equal importance is the ability to see and measure the results of such efforts, which results in a virtuous cycle of engagement and improvement. In contrast, data that is not clear or useable results in lost imitative and sapped support for sustainability initiatives. In addition, given the questions raised about the efficacy of the LEED system, an effective monitoring system that accurately tracks GHG emissions and energy consumption are of critical importance in terms of ensuring that real abatement and financial savings are realized.

1.29.6 Develop Education Initiatives

Unlike Oxford and Morguard, Aecon's CSR initiatives focus on education. While the corporate culture does not foster innovation, it is clear that the company's focus on education results in employees who understand and know how to implement the company's sustainability program and initiatives. They also understand the central importance of sustainability for the company's survival.

1.29.7 Foster Bottom-Up Sustainability Initiatives

As evidenced by Oxford's employees rising to the challenge set by the management to improve their sustainability performance, bottom-up initiatives spur innovation, which is critical for continuous improvement.

1.29.8 Assure Top-Down Leadership of Sustainability

Morguard and Aecon both have top down sustainability cultures. At Morguard, sustainability was driven by one of the company's CEOs. His commitment to sustainability gave clarity and focus to the company's efforts and resulted in impressive improvements. At Aecon, sustainability is a critical component of the company's business, which is continually communicated by the management. This results in a continued clarity that drives sustainability performance at Aecon. However, an absence of CSR/sustainability specialists on staff may also indicate that corporate citizenship is simply part of firm's broader marketing campaign.

1.29.9 Make Sustainability and Transparency Mission Critical

At Aecon, sustainability is a central component of the company's culture and appears entirely embedded in corporate culture. This is, as per Rob Kinnaird, due in large part to the fact that sustainability is considered critical to the survival of the company. Making sustainability a crucial element of a company's strategy or vision can result in an embedding of sustainability into the corporate culture. However, all Case Companies have fallen "victims" of reporting inadequacies and promoting unevidenced data. Making reporting claims less vague and more consistent would enhance companies' transparency and, as a result, amplify their CSR/sustainability efforts.

1.29.10 Firm Principles and Flexible implementation/Response

Given the need to adapt the implementation of sustainability initiatives to changing conditions and circumstances, a level of flexibility in terms of the programs and approach to sustainability are necessary. That being stated, the overall sustainability vision and direction must be concrete and firm such that the flexibility in implementation does not give way to a sense that the corporation or management's commitment is fluctuating.

1.29.11 Incorporate Sustainability into the Decision-Making Process

Incorporating sustainability into the business unit decision-making process fosters greater responsibility on the part of business managers for sustainability performance and makes sustainability part of the business culture.

1.29.12 Become a Partner for Tenants and Clients

As tenants and clients increasingly demand sustainable space and seek assistance with energy consumption issues, an opportunity is created for CBS participants to become a sustainability partner for these stakeholder groups. This allows the company to deepen and transform the relationship while likely improving the sustainability profile of the client/tenant's property or space. In the case of a project-based company like Aecon, being a sustainability partner to its clients means that it reliably assists them in meeting their own environmental needs.

1.30 Regulatory/Governmental

1.30.1 Industry Benchmarks

Given the need for data against which CBS participants can measure their sustainability performance, a set of benchmarks across the industry would greatly assist property owners and managers in their efforts to understand and enhance their sustainability profile.

1.30.2 Standardized Utility Invoices

Data is key in terms of driving sustainability performance improvements and measuring the effectiveness of sustainability initiatives. That being stated, one sustainability manager made clear that utilities in different provinces use different measures for energy usage and water consumed making the data extremely hard, if not impossible, to utilize for sustainability purposes. As such, synthesis of utility invoicing and reporting, or regulation at the federal level that could provide this type of synthesis would prove extremely valuable for increasing sustainability performance and effectiveness in the CBS.

1.30.3 Improved Residential Measurements

Unlike the commercial and retail sectors that have the LEED and BOMA BEST certification systems, there is no equivalent standard for the residential sector. While the variety of residential buildings is considerable, some standard measure of sustainability and accompanying certification would go a long way in terms of enhancing the sustainability profile of a major sector within the CBS.

1.30.4 Mandates and Incentives

While the Case Companies demonstrate leadership in the field of sustainability in their own respective ways, many CBS participants are small and lack the resources and understanding to implement a successful sustainability program and do not face the stakeholder pressures of large and visible corporations, such as the Case Companies. This being the case some form of national mandate and incentive system built into the NBC would likely improve the rate of sustainability adoption across the CBS and, by extension, the sustainability profile of the industry. Given the difficulty of implementing sustainability that even the CBS leaders face, some kind of tax credit or grant for assistance in this area would likely help many small sector participants understand and capture the value of sustainability. This recommendation is given greater emphasis due to the fact that while the Case Companies have certified most of their properties, the rate of sustainable newbuilding or renovations remains extremely low, at less than ten percent of the overall CBS stock.

1.30.5 Verify Certification Systems Efficacy

Given the question raised about the efficacy of LEED, some kind of review of certification of this system and others in order to ensure their effectiveness in terms of abatement of GHG emissions and energy consumption should be established.

1.31 Industry/NGOs

1.31.1 Smaller Building Certification

While LEED and BOMA BEST are applicable to large buildings and retail spaces, there is space for a certification that is more applicable to smaller buildings and that could increase the rate of sustainable retrofits in this part of the CBS.

1.31.2 Industry Roundtables

While CaGBC, BOMA and others do much to promote sharing and diffusion of sustainability best-practices in the CBS, an organization dedicated to gathering and sharing industry experience, such as the Advisory Board, would be extremely beneficial in terms of providing a clear understanding of what practices are most effective for increasing sustainability.

1.32 Conclusions

The Case Companies provide many examples of CSR and sustainability practices that can be implemented and used within the CBS and the international built sector for effective CSR practices. This being stated, there are issues that need to be addressed with intelligent and effective regulation in order to make the sustainability efforts of the Case Companies and the CBS more effective. Regulation also seems to be necessary in order to foster greater adoption of sustainability practices and technology within the CBS and to ensure that the standards being used within the sector are truly effective in helping top reduce energy consumption and GHG emissions.

Conclusions

On the basis of the Case Company analysis, the review of relevant academic literature on CSR and sustainability and an examination of the CBS, it is clear that there are benefits to be realized from the implementation of sustainability initiatives in terms of improved financial performance, increased customer satisfaction and reputational enhancement in the marketplace. Greater sustainability performance and reporting are increasingly demanded by various stakeholder groups, including employees, customers, investors and the general public.

Developing and implementing sustainability initiatives is a complex and difficult task that requires management support and guidance, as well as clear and usable systems for measuring performance and implementing sustainability measures and making improvements to the sustainability profile. In addition, a clear business case for sustainability needs to be made and understood by employees. The likelihood of success in these tasks is enhanced with the support and assistance of outside sustainability stakeholders.

The CBS has clearly benefitted from the participation of NGOs in the industry, which have assisted in the dissemination of sustainability knowledge, but much more importantly, have provided systems and guidelines for enhancing sustainability of existing properties as well as recognized certifications to attest to sustainability performance. This assertion is predicated upon the assumption that the standards being promulgated by the NGOs for use within the CBS are useful in that they foster the adoption and implementation of sustainable technology. This assumption is made based upon the results achieved by the Case Companies in terms of their reductions in energy and water consumption and GHG emissions and waste generation. This being stated, given the concerns raised by Forbes, it seems that there should be some review or oversight of the

standards being set by the NGOs and that the government should not entirely cede this function to third parties.

By mandating greater uniformity in invoices and measurement of energy use across the various municipalities and utilities, the government could greatly enhance the ability of CBS participants to implement effective sustainability.

The Case Companies were chosen because of their leadership within the field of CSR/Sustainability and the examples that they could potentially provide in terms of effective implementation of CSR/sustainability strategies. While the Case Companies and NGOs report a high degree of implementation of sustainability practices and building improvements, the wider CBS remains very traditional in terms of its building and property management practices. That being stated, the Case Companies, although perceived to have grasped the essence of business CSR and sustainability principles, would greatly benefit from even better reporting practices. Great strides are being made and at a certain level stakeholder pressure is resulting in sustainability implementation, but for many participants, there is no such catalyst. This being the case, some form of national mandate and incentive system built into the NBC would likely improve the rate of sustainability adoption across the CBS and by extension the sustainability profile of the industry.

While there is a clear understanding of the value of sustainability, it seems that implementing effective programs and realizing its benefits is a more difficult task that fewer CBS participants manage. Significant progress has been made in terms of sustainability, driven in part by stakeholders, but also by the realization of the value of sustainability. Greater progress still needs to be achieved, for which more assistance and guidance in terms of regulation and incentives would likely provide the needed boost for the rest of the industry to surmount the hurdles that the leaders have already cleared.

Final Thoughts

Beyond CBS, the corporate actors of the industrialized world are beginning to recognize the value of developing and implementing responsible business practice - reporting on the intensity of resources used, accounting for GHG emissions, adjusting reported data to accurately reflect how weather might have influenced the readings. But is that enough? Enough for whom?

While company-level advantages are ascertained, data supporting the notion that CSR contributes to sustainable development by delivering macro-scale results is less evident. It clearly points at the beneficiary being the immediate interests of the corporation rather than the society or environment at large. In an instance when companies resource to reporting on intensity of resources used rather than disclosing absolute measures, consequently they undermine the credibility of the industry in the eyes of an increasingly educated reader. Reason being is that many governments and regulatory bodies state that the adequate measure of emissions, at least at the macro-level, is in absolute terms (Ellerman and Wing, 2003). They caution that the accumulation of carbon dioxide and other GHGs in the atmosphere, along with associated effects, are based on absolute emissions as addressed in the United Nations' Kyoto Protocol, Framework Convention on Climate Change and other international legislative frameworks. The reader becomes further suspicious when reported sustainability enhancements appear significantly more "attractive" once artificially adjusted to reflect median weather fluctuation in a given year or in the event when a company fails to disclose the magnitude of its environmental impact and focuses on its charitable contributions instead.

Above mentioned are straight-forward examples of how the very many sins of corporate green washing²⁴ undermine the credibility of CSR efforts and instead of building a platform of communication between a business and its stakeholders, cause to question corporate citizenship and further fuel the very many tensions already existing in the globalized world.

As evidenced in this paper, there is certainly a significant opportunity for businesses to positively influence those who are affected by their operations. That being stated, it remains to be seen if corporate actors across the industries will leverage this opportunity to deliver benefits of broader social, environmental and economic value.

²⁴ As per Investopedia, “green washing is when a company, government or other group promotes green-based environmental initiatives or images but actually operates in a way that is damaging to the environment or in an opposite manner to the goal of the announced initiatives. This can also include misleading customers about the environmental benefits of a product through misleading advertising and unsubstantiated claims.”

APPENDIX I: Interview Questionnaire

1. You and the company
 - a. Can the company be named in the paper?
 - b. What is your company's main area of business?
 - c. Where does it operate?
 - d. What is your role?
 - e. How long have you worked at the company?
 - f. Why did you want to work for this company?
2. Corporate Social Responsibility
 - a. What are the CSR initiatives and approaches at your company?
 - b. What are the motivations and objectives for practicing CSR from your company's perspective? Value creation?
 - i. Financial
 - ii. Other than financial
3. CSR allocation
 - a. What is the CSR allocation process?
 - i. Per project?
 - ii. Company-wide?
 - b. Where do these directives come from? Who/what is the main driver?
 - c. How does the board/shareholders feel about CSR?
 - d. Are the practices different with different projects, departments?
 - e. Do they differ per budget? Location of a project?
 - f. Are these practices embedded in operations or are they handled by a separate department/individual?
4. CSR implementation
 - a. When did your company begin to practice CSR?
 - b. Has CSR evolved over time? If so, how? If not, why?
 - c. What is the implementation process?
 - d. Do you have CSR policies in place?
 - e. Are CSR policies voluntary or mandatory? Are there incentives?

5. Results and effectiveness of CSR
 - a. Do you monitor and measure the results of CSR? If yes, how? If not, why not?
 - b. Are the objectives (discussed in section 2) achieved through CSR?
 - c. What are the financial results of employing CSR, i.e. numbers in savings, cost efficiencies etc.
 - d. What are other-than financial outcomes of CSR, i.e. good reputation, customer satisfaction and loyalty, competitive advantage, employee satisfaction, social license to operate, future value etc.
 - e. How effective are CSR practices i.e. effectiveness in environmental outcomes such as water savings, mitigation of carbon footprint, energy conservation etc.
 - f. Is it easy or difficult to implement and practice CSR? Why/why not?
 - g. What are the main obstacles/limitations of practicing CSR?
 - i. How can they be overcome?
 - h. How, in your opinion, can companies be encouraged to engage in CSR?
 - i. Why do they get discouraged?
6. Role of Non-State Actors
 - a. Is your company a member of:
 - i. The Green Building Council (LEED etc.)
 - ii. Real Property Association of Canada
 - iii. Global Reporting Initiative
 - b. Why? Why not?
 - c. Any other voluntary organizations?
7. Do you have any final criticisms and/or comments about CSR in your company? The building sector? In general?

APPENDIX II: Oxford Properties Sustainability Measures

Office	2010	2011	2012	2013	2014
Floor Area (Sq Ft)	20,953,019	21,058,844	19,838,793	19,096,258	17,319,288
Scope 1 (MT CO2e)	34,366	33,830	26,477	24,825	23,335
Scope 2 (MT CO2e)	152,880	147,193	132,501	95,937	72,588
Total	187,246	181,023	158,978	120,762	95,923
Emissions Intensity	8.94	8.60	8.01	6.32	5.54

Retail	2010	2011	2012	2013	2014
Floor Area (Sq Ft)	7,020,306	8,988,331	9,578,156	10,244,786	10,875,677
Scope 1 (MT CO2e)	8,347	11,036	10,650	11,763	10,290
Scope 2 (MT CO2e)	65,490	81,935	81,494	71,862	53,911
Total	73,837	92,971	92,144	83,625	64,201
Emissions Intensity	10.52	10.34	9.62	8.16	5.90

Residential	2010	2011	2012	2013	2014
Floor Area (Sq Ft)	3,038,464	3,038,464	3,407,498	3,974,167	3,974,167
Scope 1 (MT CO2e)	6,180	6,456	7,965	8,785	9,047
Scope 2 (MT CO2e)	3,071	3,370	3,777	2,933	1,732
Total	9,251	9,826	11,742	11,718	10,779
Emissions Intensity	3.04	3.23	3.45	2.95	2.71

Total	2010	2011	2012	2013	2014
Floor Area (Sq Ft)	31,011,789	33,085,639	32,824,447	33,315,211	32,169,132
Scope 1 (MT CO2e)	48,893	51,322	45,092	45,373	42,673
Scope 2 (MT CO2e)	221,441	232,498	217,772	170,732	128,233
Total	270,334	283,820	262,864	216,105	170,906
Emissions Intensity	8.72	8.58	8.01	6.49	5.31

Office	2010	2011	2012	2013	2014
Number of Buildings	56	56	51	49	44
Floor Area (Sq Ft)	20,953,019	21,058,844	19,838,793	19,096,258	17,319,288
Electricity Consumption (kWh)	572,930,661	553,427,189	504,281,569	454,432,426	394,003,606
Natural Gas Consumption (ekWh)	179,178,351	181,349,442	142,520,223	132,040,420	124,700,773
Steam Consumption (ekWh)	53,892,795	56,397,234	43,618,046	48,450,458	38,295,380
Chilled Water Consumption (ekWh)	4,680,638	4,378,040	4,225,849	3,597,660	2,537,234
Diesel (ekWh)	2,341,271	2,335,754	1,767,671	1,616,935	1,638,761
Total Energy Consumption (ekWh)	813,023,716	797,887,659	696,413,358	640,137,899	561,175,754
Consumption Intensity (ekWh/Sq Ft)	38.80	37.89	35.10	33.52	32.40

Retail	2010	2011	2012	2013	2014
Number of Buildings	6	8	9	9	9
Floor Area (Sq Ft)	7,020,306	8,988,331	9,578,156	10,244,786	10,875,677
Electricity Consumption (kWh)	151,990,315	172,368,821	171,528,603	186,448,114	189,640,389
Natural Gas Consumption (ekWh)	45,586,648	57,624,006	58,408,181	63,364,115	53,460,764
Diesel (ekWh)	121,856	35,360	29,167	106,897	105,792
Total Energy Consumption (ekWh)	197,698,819	230,028,187	229,965,951	249,919,126	243,206,945
Consumption Intensity (ekWh/Sq Ft)	28.16	25.59	24.01	24.39	22.36

Residential	2010	2011	2012	2013	2014
Number of Buildings	7	7	8	9	9
Floor Area (Sq Ft)	3,038,464	3,038,464	3,407,498	3,974,167	3,974,167
Electricity Consumption (kWh)	35,892,529	37,486,163	41,699,655	43,198,177	36,245,565
Natural Gas Consumption (ekWh)	34,726,291	36,275,069	44,751,203	49,361,534	50,007,862
Total Energy Consumption (ekWh)	70,618,820	73,761,232	86,450,858	92,559,711	86,253,427
Consumption Intensity (ekWh/Sq Ft)	23.24	24.28	25.37	23.29	21.70

Total	2010	2011	2012	2013	2014
Number of Buildings	69	71	68	67	62
Floor Area (Sq Ft)	31,011,789	33,085,639	32,824,447	33,315,211	32,169,132
Electricity Consumption (kWh)	760,813,505	763,282,173	717,509,827	684,078,717	619,889,560
Natural Gas Consumption (ekWh)	259,491,290	275,248,517	245,679,607	244,766,069	228,169,399
Steam Consumption (ekWh)	53,892,795	56,397,234	43,618,046	48,450,458	38,295,380
Chilled Water Consumption (ekWh)	4,680,638	4,378,040	4,225,849	3,597,660	2,537,234
Diesel (ekWh)	2,463,127	2,371,114	1,796,838	1,723,832	1,744,553
Total Energy Consumption (ekWh)	1,081,341,355	1,101,677,078	1,012,830,167	982,616,736	890,636,126
Consumption Intensity (ekWh/Sq Ft)	34.87	33.30	30.86	29.49	27.69

Office	2010	2011	2012	2013	2014
Number of Buildings	49	52	51	49	44
Floor Area (Sq Ft)	16,646,665	18,147,413	16,493,130	14,932,290	15,011,005
Metered Water Consumption (l)	1,971,298	1,806,627	1,638,571	1,369,963	1,285,969
Consumption Intensity (l/Sq Ft)	118.42	99.55	99.35	91.75	85.67

Retail	2010	2011	2012	2013	2014
Number of Buildings	4	6	7	8	10
Floor Area (Sq Ft)	6,177,775	8,145,431	8,246,831	8,912,901	10,560,477
Metered Water Consumption (l)	722,511	769,321	836,300	986,032	1,152,318
Consumption Intensity (l/Sq Ft)	116.95	84.95	101.41	110.63	109.12

Residential	2010	2011	2012	2013	2014
Number of Buildings	7	9	10	10	10
Floor Area (Sq Ft)	1,997,536	3,456,986	4,306,892	4,306,892	4,030,910
Metered Water Consumption (l)	232,733	384,850	457,685	468,925	431,627
Consumption Intensity (l/Sq Ft)	116.51	111.33	106.27	108.88	107.08

Office	2010	2011	2012	2013	2014
Number of Buildings	52	47	43	36	34
Waste & Resources (tons)	17,564	19,947	17,426	15,136	14,880
Waste (Landfill/Incineration)	5,835	6,524	5,277	4,312	4,273
Resources (Recycled Material)	11,729	13,423	12,149	10,824	10,607

Waste Diversion Rate	66.8%	67.3%	69.7%	71.5%	71.3%
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Retail	2010	2011	2012	2013	2014
Number of Buildings	6	7	8	8	10
Waste & Resources (tons)	12,298	13,599	15,615	15,226	15,882
Waste (Landfill/Incineration)	5,835	6,542	5,277	4,312	6,044
Resources (Recycled Material)	5,605	6,807	8,737	8,756	9,838
Waste Diversion Rate	45.6%	49.4%	56.0%	57.5%	61.9%

Source: Oxford Sustainability Report 2015, p. 44-53

Appendix III: Morguard Corp. Sustainability Measures

Energy

Electricity (ekWh)	2010	2014	2015	2015 Wthr Adjsd
Office	228,889,825	250,640,887	240,901,546	188,127,684
Retail	165,185,965	176,483,499	168,365,177	145,339,961
Total	394,075,790	427,124,386	409,266,723	333,467,645

Natural Gas	2010	2014	2015	2015 Wthr Adjsd
Office	101,792,191	137,654,414	119,889,609	89,487,818
Retail	36,588,991	49,660,347	42,993,044	37,164,280
Total	138,381,182	187,314,761	162,882,653	126,652,098

Combined	2010	2014	2015	2015 Wthr Adjsd
Office	330,682,016	388,295,301	360,791,155	277,615,502
Retail	201,774,956	226,143,846	211,358,221	182,504,241
Total	532,456,972	614,439,147	572,149,376	460,119,743

Emissions

Electricity (tCO_{2e})	2010	2014	2015	2015 Wthr Adjsd
Office	61,546	58,463	56,399	43,319
Retail	38,679	30,926	29,479	29,011
Total	100,225	89,389	85,878	72,330

Natural Gas	2010	2014	2015	2015 Wthr Adjsd
Office	18,658	25,220	21,958	16,388
Retail	6,658	9,035	7,812	6,764
Total	25,316	34,255	29,770	23,152

Combined	2010	2014	2015	2015 Wthr Adjsd
Office	80,204	83,683	78,357	59,707

Retail	45,337	39,961	37,291	35,775
Total	125,541	123,644	115,648	95,482

Source: Morguard Sustainability Report 2015, p. 15-19

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