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Planet Building: A Case Study of Corporate Sustainability for a Globalized World

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PLANET BUILDING
A CASE STUDY OF CORPORATE SUSTAINABILITY
FOR A GLOBALIZED WORLD

A Thesis

Presented to

The Faculty of the Office of Graduate Studies and Research/Interdisciplinary Studies

San José State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Darci L. Arnold

December 2010

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The Designated Thesis Committee Approves the Thesis Titled

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Darci L. Arnold

APPROVED FOR THE OFFICE OF GRADUATE STUDIES AND
RESEARCH/INTERDISCIPLINARY STUDIES

SAN JOSÉ STATE UNIVERSITY

December 2010

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ABSTRACT

PLANET BUILDING A CASE STUDY OF CORPORATE SUSTAINABILITY FOR A GLOBALIZED WORLD

by Darci L. Arnold

With the increasing complexities of a globalized 21st-century world, the growing power of industry clusters makes corporations important actors in designing sustainable development strategies. This thesis presents an applied case study at CB Richard Ellis (CBRE) as the company designed and launched its award-winning Sensible Sustainability platform. The research was conducted to determine how a large multinational company could create a business case for sustainability, and the results illustrate that value exists for firms engaged in sustainability initiatives.

CBRE's initial no-cost and low-cost activities resulted in increased operational efficiencies and lower costs. Over the course of the research period, the company migrated toward its more strategic *Planet Building* strategy and has begun to merge its financials with an environmental and a growing social agenda that supports the Triple Bottom Line of transformative sustainability. As a result, the company is engaged with more diverse stakeholders in new markets and is realizing the benefits of increased brand reputation, improved relationships with more demanding clients, and increased market share and revenue.

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It is impossible to thank everyone who has influenced and supported me throughout my graduate studies and corporate career. I am blessed to have so many people that have shaped my journey, fed me, and helped me laugh along the way. To all of you, I extend my most heartfelt thanks.

First, I would like to recognize and thank my graduate committee. Dr. William J. Reckmeyer, my chair, academic mentor, and friend opened his network and his heart to help me develop the academic foundations in leadership, systems science, and global citizenship to support the gap I found missing in Corporate America. Dr. Jan English-Lueck brought me into San José State University and, with her humor and tech-focused brilliance, sparked my passion for studying anthropology. Dr. Dennis Jaehne opened up the world of communications and kept me laughing. Dave Pogue trusted his friendship with Dr. Reckemeyer enough to allow me to join his team at CBRE as they launched the company's Sensible Sustainability Program, which is the heart of this case study.

I was also fortunate to benefit from an international component to my committee, all of whom I met at the Salzburg Global Seminar in 2006. Dr. Jochen Fried, Director of the International Study Program on Global Citizenship at the Salzburg Global Seminar, opened my world to the idea of what it means to be global and gently reframed my corporate stakeholder views toward a more inclusive path that included all people. Charles Hopkins, the UNESCO Chair at York University and the United Nations (U.N.) Chair on Education for Sustainable Development, taught me about Sustainable

Development, the mega-issues affecting our planet, and was another key leader who helped shape my expanding worldview. Dr. Reinhold Wagnleitner, a historian at the University of Salzburg, taught me about history, the role of the United States in shaping global cultures, and was gracious enough to let me lecture at both the University of Salzburg and Salzburg College. To each of you, I extend my heartfelt thanks.

There are also many organizations that deserve special mention. The Salzburg Global Seminar, a U.S. non-profit located in Salzburg, Austria dedicated to uniting present and future leaders in discussions and solutions of global issues, was instrumental in providing my sustainability framework. From my initial participation as an SJSU Salzburg Fellow in 2006 through today, I have been fortunate to become part of the Seminar's family and have subsequently served as a faculty member for five sessions. The Sustainable Enterprise Academy, an organization at York University's Schulich School of Business in Toronto, Canada and its Business Leader Seminar provided the foundation for learning how different stakeholders create a vision and champion sustainable development activities within organizations. Thank you for including me and incorporating me into your extended networks.

Corporate organizations have been important as well. The Asset Services Sensible Sustainability Team at CBRE deserves special mention. Thank you for allowing me into your world to create and laugh with you. Similarly, none of this would also have been possible without the organizations I worked for in Corporate America—most notably Seagate Technology and Komag, Inc.—before attending graduate school. To my

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PREFACE

This thesis summarizes the results of sustainability research that I began in 2006. The research methodology incorporates lessons learned from my participation in global sustainability seminars, an analysis of theoretical literature focused on sustainability, discussions in the corporate sphere, coursework and lectures, and my research and participation with CB Richard Ellis (CBRE) as the company designed and implemented its award-winning Sensible Sustainability program.¹ The results and subsequent analyses support current research findings on the business value of engaging in sustainability initiatives and strategies. I was interested in working with a company as it designed and launched a sustainability initiative to determine whether a large multinational corporation could deploy a Triple Bottom Line (3BL) framework resulting in demonstrable shareholder value and competitive advantage.

My first introduction to sustainability occurred in 2006 when I was invited to attend the Salzburg Global Seminar's International Study Program (ISP) on Global Citizenship (Salzburg Global Seminar 2006) as an SJSU Salzburg Fellow with the SJSU Salzburg Program (Reckmeyer 2010). The Seminar is designed to bring together present and future leaders from diverse stakeholder groups to promote discussion and collaboration on global issues. The ISP has two tracks: the first, for undergraduates at American colleges and universities, is a week-long seminar designed to explore issues that affect the world while also building an awareness of what it means to be a global citizen; and the second track (which I attended), for faculty and administrators in

American higher education, focuses on the institutional strategies for implementing global education (Salzburg Global Seminar 2010). This seminar was important for this research because it introduced me to the complexity and interconnectedness of global issues that include climate change and depleting energy reserves, which are key to this case study. More importantly, I discovered sustainable development as an important framework for analyzing ways to manage these global issues. Sustainable development argues for "...development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland Report 2007). This led me to think about corporate accountability and how corporate behavior and strategies could play a role in mitigating the negative effects of these global issues and contribute to sustainability.

I attended a second seminar that was important to this analysis. In May 2007, I participated in the Sustainable Enterprise Academy's (SEA) Business Leader Summit (2007). Located on the campus of York University in Toronto, Canada, SEA is a part of the Schulich School of Business. SEA has two programs: one is designed for businesses, while the other targets the formal education sector (SEdA). The mission of SEA is to assist leaders in business, government, and other sectors of society in the transformation to corporate sustainability. The Business Leader Summit is a three-day seminar that educates executive level leaders on the Triple Bottom Line (3BL) business case for sustainability, which expands the evaluation of corporate performance beyond financial metrics to include social and environmental agendas for competitive advantage.

At SEA, I met two presenters whose research provided the lenses that I used to analyze the results of this case study. First, Bob Willard (2005), a retired IBM leader considered one of the leading experts linking business value to corporate sustainability strategies, presented his research outlining the key priorities for businesses, the stages of transformation, and the metrics that define value. Second, Dr. Stuart Hart (1999; 2003), an expert on the importance of sustainable development for business strategy and the founder of the Center for Sustainable Global Enterprise at Cornell University, presented his joint research with Dr. Mark Milstein, which focused on the strategies and innovation needed for sustainable development in the corporate sphere. I integrated the work of these authors to provide the research framework for discussing CBRE's implementation of its sustainability initiatives during the research phase. They also informed my analysis of future opportunities for CBRE as the company expands its Sensible Sustainability program into its *Planet Building* strategy.

Selecting CBRE as the company for this case study was important for several reasons. Given that buildings consume energy and emit greenhouse gases on a large scale, the U.S. building industry will be one of the first impacted by climate change legislation and energy regulations. In 2006, CBRE, the global leader in commercial real estate property management, began to face more insistent shareholders, clients, and other stakeholders wanting to know what the company was doing to “green” their building portfolio. This was a direct response to the increasing volatility surrounding the availability and cost of electricity, as well as to the likely risk of increased government

regulatory action. As a large multinational company, CBRE's size and leverage provided the opportunity to influence its supply chain and the wider ecosystem in which the company does business. CBRE is a service organization only. Without any tangible product that could be measured by greening standards, it was clear to me that the arguments and value-based metrics needed to create CBRE's sustainability business case would not be simple. I was curious to see how large global issues (e.g., climate change and increasing energy consumption) could be linked to sustainability, responsible corporate engagement, and shareholder value.

My introduction into CBRE was through Dr. William Reckmeyer, the chair of my thesis committee. As a colleague and friend of Dave Pogue, who was serving as the Senior Managing Director of Asset Services for CBRE's western region at the time, Reckmeyer was aware of Pogue's interest in greening his managed building portfolio and the company's interest in sustainability. Given my interests in corporate sustainability research, Reckmeyer introduced me to Pogue. The three of us met to assess Pogue's needs, present my qualifications, and determine whether there was mutual interest in scoping a role for me to join the sustainability team and produce a case study for my Master's Degree in Interdisciplinary Studies at San José State University (SJSU). We discussed the scope of the project and I was invited to join his Asset Services sustainability team from July 2007 through February 2008 as a participant-observer.

My professional background and academic interests are important in understanding why I was a good match for working on this sustainability project with

CBRE. After graduating with a B.S. in Mechanical Engineering from the University of Colorado at Boulder, I worked in global high-tech for over twenty years and held a wide variety of leadership positions in several functional areas that included engineering, sales, and marketing. My last corporate position was as the first Vice President of Global Marketing at Seagate Technology, which is a multinational corporation in the data storage industry. I retired from corporate America and entered SJSU's graduate Interdisciplinary Program, where I blended courses in business, anthropology, and systems science. Besides the research already described, during my coursework I completed a six-month research project on the science of climate change and the arguments that support a corporate response (Arnold 2007). CBRE was able to leverage my research to provide an argument for stakeholders (both internal and external) on why its sustainability initiative was important.

CBRE's initial interest in greening its managed building portfolio began in 2006 with a primary focus on energy conservation. Pogue saw opportunities for additional value to shareholders, clients, and society-at-large and decided to morph the greening activities in his Asset Services organization into a more overarching sustainability platform. In spring 2007, he assembled a small core team of experts who were each fundamentally interested in the idea of greening or sustainability to link corporate responsibility with positive action to benefit wider stakeholder groups. At the time, CBRE had acquired another company and this merger provided a transitional period of integrating two groups of employees with overlapping responsibilities. This provided

Pogue with the opportunity to select participants for his sustainability team. The assembled team was made up of individuals with complementary expertise and diverse personalities. Aiding this team was a larger group called the Green Knights. The Knights were a group of Asset Services individuals who, because they had demonstrated an interest in sustainability, were selected as sustainability champions and located in each U.S. regional market. They were responsible for implementing the sustainability activities designed by Pogue's smaller team.

As a seasoned leader, Pogue knew that the key would be to design a "sensible" program to create organizational buy-in. Rather than launching large initiatives that would depend on large capital investments, he chose incremental steps marked by small wins to create the traction necessary for the program to grow. This was important because sustainability programs were not (and still are not) fully embraced by corporations as strategies to enhance competitive advantage.

Pogue outlined the timeline. The year 2007 was intended to be an aspirational year focused on learning about sustainability initiatives, benchmarking building performance, training employees, communicating with both internal and external stakeholders, and the launching of programs and activities. The focus of 2008 was operational—marked by the implementation of programs and data collection used to refine and repeat processes. The years 2009 and beyond were intended to be informational and influential years where the company intended to take a sustainability leadership position in the building management industry, the broader society, and within

the industry of sustainability itself. We achieved our goals—CBRE’s Sensible Sustainability program has been awarded numerous national awards since 2008.

CBRE’s initial greening efforts turned into a broader Sensible Sustainability program. By 2008, the program expanded further with a vision focused on the more comprehensive 3BL of sustainability. This was achieved by incorporating the *Planet Building* strategy into the CBRE sustainability platform—a systemic shift in mindset from viewing buildings as discrete entities to viewing buildings as part of a wider group of communities that ultimately link to the planet.

Chapter 1 explores the importance of corporate sustainability programs. Sustainability is defined and discussed through the lens of complex global issues and the resulting ethical implications driving diverse stakeholders toward change. This chapter also examines the role of the corporation and its importance in sustainable development, including Willard’s research (2005) on the stages of sustainability initiatives in corporations, along with examples of how some corporations, including CBRE, are incorporating sustainability as a key business strategy. Chapter 2 presents my case study of CBRE’s sustainability project and describes the goals and results achieved during the research period. Chapter 3 introduces Hart and Milstein’s framework on creating sustainable value (2003) to analyze CBRE’s sustainability journey and includes a discussion of the implications of this case study and opportunities for future value. Finally, this thesis concludes with a summary of the business case for corporate sustainability resulting in increased shareholder value and firm competitive advantage.

CHAPTER 1

THE IMPORTANCE OF CORPORATE SUSTAINABILITY PROGRAMS

This chapter examines the importance of industry clusters and large corporations in contributing to a sustainable world for future generations. Included is a presentation of the theory and research on corporate sustainability strategies to create an argument that shareholder value exists for corporations that engage in 3BL strategies. Sustainability programs are difficult to achieve, but with time and attention this value translates into a business model for corporations that behave responsibly—financially, environmentally, and socially.

Corporate sustainability programs emerged in the latter part of the 20th century and are intended to highlight the responsible behavior of corporations on the global stage (Willard 2005). The interest in these programs developed from the confluence of two major movements: globalization and sustainable development. Globalization is not a new concept, but growing interconnections and dependencies have shifted the meaning of globalization from the latter part of the 20th century and into the 21st century (Chanda 2007; Reckmeyer 2006). Similarly, sustainable development, focused on environmental protection and economic development, is now even more urgent because it is more global.

Globalization and a Complex World

As the 20th century gave way to the 21st century, globalization's key drivers were speed, transparency, and interdependence (Reckmeyer 2006). Global flows (e.g. people, capital, ideas, and culture) became increasingly interconnected, which heightened tensions between the global and the local; the connected and the disconnected; the modern and the traditional; and the haves, have-nots, and have-lots (Appadurai 2000; Barnett 2004; Friedman 2005; Huntington 1996; Reckmeyer 2006). As the global economy fueled middle class growth in developing countries, the flows of capitalism and consumerism drove globalization unlike any other period in world history (Reckmeyer 2006). The Internet ushered in an era whereby more and more people around the globe were able to witness how others live and, more importantly, who had access to the fruits of globalization and planetary resources (Friedman 2005; Reckmeyer 2006).

As the global economy accelerated in intensity, one result was the weakening of state sovereignty (Fried 2007). Developing nations, looking to increase economic growth, pursued large multinational corporations that were seeking to shift manufacturing offshore to reduce costs. These efforts frequently occurred without a supporting regulatory framework, which often equated to an increase in local corruption and a widening social gap between citizens (Fried 2007). The result was that many of these developing nations yielded power to multinational corporations (discussed below). This shift in power resulted in an increasing dialogue among stakeholders that questioned which entity—the state or the corporation—was responsible for redistributing wealth,

caring for citizens, and regulating the consumption of planetary resources (Franklin 2008; Fried 2007).

Technology provided a lens for people in connected regions to compare standards of living and resource usage, which resulted in questions of fairness and emphasized the growing inequities of consumption between the haves, the have-nots, and have-lots (Reckmeyer 2006). A primary example of inequity is an analysis of energy usage in conjunction with greenhouse gas emissions and population in the United States. With less than five percent of the global population, Americans use more than 25 percent of global oil resources and emit roughly one-third of global greenhouse gases (Guggenheim 2006; Smil 2003; Stern 2006). These patterns and consequences of consumption are part of a larger composition of global mega trends.

Global Mega Trends

There are several complex and inter-related global mega-trends shaping the 21st century. Examples of these include population growth, depleting energy reserves, increasing conflicts over water, excessive losses of biodiversity, and climate change (Brown 2006; Guggenheim 2006; Hopkins 2006; IPCC 2007a; IPCC 2007b; Smil 2003; Stern 2007). Any one of these is problematic alone, but in combination they represent a threat to the way of life for future generations (Reckmeyer 2006). The interconnections between these issues make it difficult to come up with a consistent plan of action to

address these challenges; but it is also largely undisputed that business-as-usual practices have profound negative impacts for future generations (Brown 2006; Stern 2007).

For the purpose of this case study, energy and climate change are the most pertinent focal areas. In terms of energy usage, there is a marked shift in how humans use it for development and in its questionable availability for future generations. Vaclav Smil, an environmental scientist at the University of Manitoba, discusses the future of fossil fuels (coal, oil, and gas), hydrocarbons (oil and gas), and energy derived from oil (2003). He opens his book, *Energy at the Crossroads: Global Perspectives and Uncertainties*, by stating that “The most fundamental attribute of modern society is simply this: ours is a high-energy civilization based largely on combustion of fossil fuels” (2003:1). He highlights how fossil fuel usage crossed the 50 percent threshold in the late 19th century, when it replaced biomass energy, and describes the 20th century as notable because it was primarily energized by the use of non-renewable fuels (2003:4-5).

While fossil fuels were critical to powering the 20th century and developing the United States, the 22nd century and beyond will be dependent on forms of renewable energy that include solar, hydropower, and wind (Smil 2003). The complexity of this conversion rests on tracking the future of oil, particularly forecasting its peak. However, estimating this timeline is problematic. Oil is a commodity heavily tied to economic growth and development, political power, and social comforts. As a result, it is also tied to global security—or, perhaps insecurity—mostly because a small percentage of the global population has access to this resource (Wagnleitner discussion with author,

September 7, 2010). Understanding oil reserves is not well quantified or understood and reporting standards do not exist (Smil 2003:188). Energy and oil companies as well as national regimes closely hold the knowledge of reserve capacities and also control access to these reserves. This knowledge is powerful currency on the global stage and is used as political and economic propaganda and capital, sometimes even referred to as a weapon (Smil 2003:150).

Thus, while the 22nd century will not be powered by hydrocarbons, estimating the point of peak oil is a volatile topic because it is linked to economic leadership in the 21st century. Smil reminds us that this type of a transition can proceed systematically and with little disruption:

But historical perspectives show that every one of these transitions—from biomass fuels to coal, from coal to oil, from oil to natural gas, from direct use of fuels to electricity—has brought tremendous benefits for society as a whole. So far, every one of these transitions has been accomplished not only without damaging global economic performance, but with elevating economies and societies to new levels of productivity and affluence, and with improving quality of the environment. So even if we were to experience an early global decline of conventional oil production we should see this trend as an opportunity rather than as a catastrophe. [Smil 2003:212]

Climate change is the second key issue underpinning this case study. While the developed and developing worlds continue to depend on declining oil and gas reserves, the growing rate of consumption of these natural resources also equates to adding increased amounts of greenhouse gases to the atmosphere. There are six greenhouse gases, each of which occurs naturally and is necessary for human life. The most widely discussed are carbon dioxide (CO₂) and methane. Humans have increased CO₂ emissions

through the burning of fossil fuels and methane levels through land use changes such as deforestation and agriculture (Brown 2006; IPCC 2007a; Stern 2007).

The science of climate change is very complex, yet the majority of the scientific community posits that natural causes alone cannot explain the acceleration of the Earth's warming during the second half of the 20th century. In February 2007, the Intergovernmental Panel on Climate Change (IPCC) estimated that it is very likely (i.e. with a 90 percent confidence level) that humans have contributed to climate change (2007a:5). The emissions from CO₂ have increased from 280 parts per million in the pre-industrial era to roughly 380-430 parts per million today (Brown 2006; Duncan 2006a; Guggenheim 2006; IPCC 2007a; Stern 2007). Stern (2007:194) suggests that levels at the end of the 21st century could rise to approximately 625 parts per million if the year 2000 levels of growth are maintained. The IPCC's Third Annual Report on Climate Change (2001) models scenarios that show increasing CO₂ levels from 490 to 1260 parts per million by 2100. Other modeling suggests that these levels could rise to 770 parts per million by 2100 without mitigation strategies (Alexiadis 2007:9).

The IPCC's Fourth Annual Report, which focused on the impact of climate change, estimated a 20 to 30 percent loss of the planet's species by the year 2050 without action (IPCC 2007b:8). Climate change skeptics argue that natural climate cycles dominate any anthropogenic fingerprint (Lindzen 1992). However, no peer-reviewed papers exist to support their claims (Guggenheim 2006). While the issue of climate change is predominately a political and economic debate (Duncan 2009b:4), humans are

at the very least likely amplifying and accelerating the deterioration of climate change on Planet Earth (Alexiadis 2007; IPCC 2007a; Stern 2006).

The scientific consensus is that greenhouse gas emissions pose a serious enough threat that it is prudent to deploy some type of an insurance policy (Duncan 2006a; Hopkins 2006; IPCC 2007a; Stern 2007). Stern (2007:xvi) estimates that action to mitigate climate change will cost the world about one percent of global GDP per year. Similarly, he suggests that the cost of inaction could be five percent and may extend up to 20 percent of global GDP per year (2007:xv). The cost of climate change mitigation may sound significant, but approximately five percent of global GDP was used to shore up financial institutions during the economic recession that began in 2007 (Duncan 2009a:11). Thus, it appears that the global economy can support climate change initiatives and may in fact benefit from a green economy (Stern 2007:xvii)—which suggests that the issue is primarily political: which parts of the world will bear the cost-burden and which will be required to mitigate emissions (Duncan 2009b:4)?

Diverse Stakeholders

The stakeholders participating in sustainability are global, diverse, independent, and interdependent (Franklin 2008; Reckmeyer 2006; Willard 2005). These key actors include governments; corporations and industry clusters; intergovernmental organizations (IGOs) and non-profits; the media; academia; citizen collectives; and individual citizens. These stakeholder groups vary considerably and have not collaborated well on a global

collective basis in problem-solving efforts (Willard 2005:107). Instead, each often functions as an independent part rather than contributing to a unified and co-dependent whole (Porter and Kramer 2003; Reckmeyer 2006). Sustainability strategies and solutions exist within many of these stakeholder groups, but there is no cohesive global strategy at the present time (Duncan 2009b:4). Instead stakeholder groups work in functional silos and focus on individual goals.

Sir Nicholas Stern (2007), former chief economist of the World Bank, was commissioned by the British government to meld the science with the economics of climate change. He suggests that stakeholder groups must move toward unity. In *The Economics of Climate Change: The Stern Review*, he urges global stakeholders to unite within one generation (2007:xv). Similarly, the World Wide Fund for Nature's (WWF) *The Living Planet Report 2008* advocates improved leadership, urgency, and global collaboration in order to reverse our rate of resource usage (WWF 2008:24-25). Time itself thus becomes a precious resource (Fried discussion with author, June 2, 2010) and, in this world of limited resources, global stakeholders will need to unite around shared values and goals (Duncan 2009b; Franklin 2008; Reckmeyer 2006; Stern 2007) in an effort to create a sustainable world for future generations (Brundtland Report 2007).

Managing Planetary Resources

Managing planetary resources has profound moral and ethical implications for future generations and lies at the heart of sustainable development. Particularly relevant

is Garrett Hardin's (1968) notion of the "tragedy of the commons," which suggests that free access and unrestricted demand for finite resources threatens to place such resources in jeopardy. While his insight originally described how privately owned herds threatened communal land, the planet and its resources are clearly the global commons of the 21st century. The tragedy is that humans live in a world of limited resources and if a nation, business, or individual acts selfishly, those actions adversely affect others—including the planet (Hopkins 2006; Reckmeyer 2006). Others extend Hardin's insight into the "tragedy of the vulnerable" (Brown 2006; Steffen 2006; Stern 2007; WBCSD 2010; WWF 2010), in that the poorest humans, those with the fewest means to adapt, will suffer the most.

In 1990, Mathis Wackernagel and William Rees of the University of British Columbia developed the idea of an "ecological footprint," which has become the standard measure of how humans use planetary resources (Global Footprint Network 2010). They estimated that the planet could no longer support people born after the late 1970s. The planet has roughly 4.7 acres of usable land per person, but 21st century usage exceeds 5.4 acres per person worldwide (Steffen 2006:16).

Humanity's demand on the planet has more than doubled over the last half-century and the WWF (2010:1) estimates that more than 75 percent of the world's population live in regions where consumption outstrips available resources. Furthermore, if all 6.7 billion inhabitants of the planet were to live equitably, humans would need five planets to live like North Americans, three to live as Europeans, and less than one to live

as an average Pakistani (Global Footprint Network 2010; Steffen 2006, WWF 2010). China alone would need the entire planet to support its population (Global Footprint Network 2010). It takes approximately 17 months to replenish what humans use in 12 months, which equates to 1.4 planets needed to support the global population. By the mid-2030s, this figure is estimated to grow to the need for two planets (Global Footprint Network 2010). Combined with the complexities of 21st century globalization and the implications from global issues, this overconsumption of planetary resources is why sustainability is so important.

Defining Sustainability

Amidst the turbulence of the 21st century's first decade, stakeholders are beginning to collectively embrace the concept of sustainability. In its most basic form, the word "sustainable" connotes an idea that something can be maintained at certain levels indefinitely. Its definition has evolved over time, however, and through cultural changes. In 1970, the word did not exist (Webster 1970); instead, only "sustain" was in the lexicon and defined as something that provided relief, nourished, prolonged, supported, or endured. In the 21st century the word "sustainable" is defined as "1: capable of being sustained, 2 a: of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged, b: of or relating to a lifestyle involving the use of sustainable methods" (Merriam-Webster Online 2009).

The interest in sustainability is not just from globalization, but also from the tension between pollution prevention in the developed world and poverty reduction through development in the developing world. “Sustainable development” was the political compromise that was negotiated to address the two differing desires—environmental protection and economic development (Hopkins email to author, September 16, 2010).

This conundrum was first addressed in 1972 during the United Nations Conference in Stockholm, which focused on the human environment. In 1983, this evolved further when the U.N. convened the World Commission on Environment and Development (WCED). This group was tasked with analyzing sustainable development from the year 2000 forward. In June 1987, the group published *Our Common Future*, which was also known as the Brundtland Report (2007). This work provided the most widely-cited working definition of sustainable development as “...development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Report 2007).

A shorter, but no less complex definition is provided by Charles Hopkins, the UNESCO Chair at York University and the U.N. Chair on Education for Sustainable Development, quoting a tribal elder he met during his travels: “Enough—For all—Forever” (Hopkins 2009). Both definitions argue for the rights of future generations to have access to the same planetary resources and ecosystems that current generations

enjoy. Fundamentally, this sets up the idea of sustainability's Triple Bottom Line (3BL) at the intersection between economics, ecology, and social responsibility.

“Corporate sustainability” evolved from the definition of sustainable development. The World Business Council for Sustainable Development (WBCSD), a CEO-led global association representing approximately 200 of the world's most influential companies, stated in 2006: “We believe that the leading global companies of 2020 will be those that provide goods and services and reach new customers in ways that address the world's major challenges—including poverty, climate change, resource depletion, globalization and demographic shifts” (WBCSD 2007). The goal of the Council is to be the premier advocate leading businesses toward sustainable development, to participate in policy development, and to create the business case for sustainable development in order to contribute toward a sustainable future.

Merging Economics, Politics, and the Media

Corporations and industry clusters are important sustainability stakeholders. Industries drive the economy and their size, scale, operational efficiencies, and innovation resources are needed for global sustainability initiatives. Jochen Fried, Director of the International Study Program on Global Citizenship at the Salzburg Global Seminar, says “Global capitalism is intensifying the regional and transnational integration of markets, production, and services, resulting in the weakening of state power and economic sovereignty” (Fried 2007). As the nation-state weakens, other stakeholders fill

the vacuum left behind. Fried suggests that this equates to the “corporatization of the public sphere,” placing power and control in the hands of the few rather than in the hands of the many (2007). Citizens have looked to government to provide infrastructure investments, but large corporations are increasingly providing these longer-term capital investments (e.g. roads, health care). This power shift is confusing—which actor, the state or the corporation—is responsible for the redistribution of wealth, the care of citizens, and the consumption of planetary resources (Fried 2007).

This blurred distinction between the public and private sectors shifts stakeholder responsibilities as politics and economics merge. Table 1 emphasizes this shift in power by comparing the 2008 purchasing power parity GDPs of countries (CIA World Factbook 2009) against industry cluster 2007 revenues and other contextual comparators.

Table 1. U.S. Corporate Power Shapes Politics and Economics

Rank	Country or Other	2008 GDP (PPP) (billion \$) ¹	2007 Revenue (billion \$)	Other (billion \$)
	World	\$70,650		
	European Union	\$14,960		
1	United States	\$14,580		
	U.S. Household Debt (June 2008)			\$14,500
	U.S. Gov't Debt Outstanding (As of September 30, 2008)			\$10,025 ²
2	China	\$7,800		
3	Japan	\$4,490		
	U.S. Fiscal 2010 Budget			\$3,552
4	India	\$3,320		
	U.S. Fiscal 2008 Budget			\$2,983
5	Germany	\$2,860		
6	United Kingdom	\$2,280		
7	Russia	\$2,220		
8	France	\$2,100		
	Top 10 U.S. Companies		\$2,070	
9	Brazil	\$2,030		
10	Italy	\$1,800		
	U.S. Power/Energy Cluster		\$1,700	
11	Mexico	\$1,580		
	U.S. Financial Cluster		\$1390	
12	Spain	\$1,380		
24	Thailand	\$570		
	U.S. Auto Industry		\$543	
25	South Africa	\$506		
	2008 Global Advertising Spend			\$479
26	Philippines	\$443		

What emerges is a picture of how industry cluster revenues and marketing practices eclipse the economies of many countries. A few highlights worth mentioning include:

- The combined revenues of the top ten U.S. companies in 2007 is larger than Brazil's GDP (CIA World Factbook 2009; Fortune 2008).
- The revenue of companies comprising the U.S. energy and power sector is larger than the entire GDP of Mexico (CIA World Factbook 2009; Fortune 2008). This cluster represents 73 companies on the Fortune 500 list involved in energy, utilities, petroleum refining, mining, crude oil production, pipelines and oil and gas equipment and services. These companies represent a powerful lobbying sector, which is an important consideration for climate change and energy legislation.
- Both the U.S. financial cluster and the U.S. automobile industry revenues exceeded the GDPs of Spain and South Africa, respectively (CIA World Factbook 2009; Fortune 2008). Both sectors have been deemed too big to fail and have been bailed out by the U.S. American taxpayer.
- Global advertising spending in 2008 was almost \$500 billion and exceeded the GDP of the Philippines (CIA World Factbook 2009; MediaBuyerPlanner 2008). With approximately 50 percent of this spending directed at the U.S. consumer (MediaBuyerPlanner 2008), the power in influencing what U.S. citizens do and where money is spent has a direct impact on the global economy and industry success.

The U.S. media, owned by corporations, are other important stakeholders in that they shape public opinion (Wagnleitner 2003; 2009). In 1983, 50 companies owned the media outlets that provided the bulk of reporting to the U.S. public. By 2004, this number shrank to five large corporations (Media Reform Information Center 2009). The result of this consolidation, or corporatization of the media, is increased competition and the drive for profitability. The stories that are aired or published are selected to attract viewers or subscribers, meaning that Americans (and audiences around the globe) are primarily informed about the issues that corporations select (Wagnleitner 2003; 2009).

Dr. Reinhold Wagnleitner, an expert on U.S. history at the University of Salzburg, urges Americans to learn more about global events so they can understand how they are perceived in other parts of the world. In his presentation “The United States of America and the World: Views from a Distance” (Wagnleitner 2003; 2009), Wagnleitner uses headlines from international media sources and surveys from outlets that include *The Economist* and Pew Research to highlight how important the United States is to other countries. As an example, Wagnleitner underscores that Americans who exercise their right to vote represent approximately one percent of the global population and emphasizes how small a group ultimately decides who becomes the most powerful leader in the world. He goes on to question how many in this small group truly have an understanding of key global issues. Going further, as he discusses the corporatized U.S. media, Wagnleitner shows an image of the American flag where the stars are replaced by corporate logos to emphasize his point about the power of corporate marketing messaging (Wagnleitner 2003; 2009).

Sustainability Drivers

The role or purpose of the firm has long been an issue of debate. The prevailing view in the U.S.-dominated world of corporate enterprise during the last several decades is exemplified in the work of Milton Friedman, a Nobel Prize winner in Economics at the University of Chicago’s School of Economics. Friedman was known for promoting free market virtues and minimizing government intervention. In 1962 he published an

influential book, *Capitalism and Freedom*, in which he stated: “there is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits” (Friedman 1970). This statement proposes that the sole purpose of the firm and role of the CEO is to ensure shareholder returns and nothing else. In other words, profit is the only responsibility of a corporation and any other CEO action violates that premise (Willard 2005:215).

With the growing power of industries in shaping politics, economics, and public opinion, Friedman’s view of the firm is under pressure and the debate is re-energized. It is important to connect the classic priorities of business executives with emerging sustainability drivers to clarify this transformation. In his book, *The Next Sustainability Wave: Building Boardroom Buy-in*, Bob Willard, a retired IBM leader now considered one of the leading experts linking business value to corporate sustainability strategies, outlines key priorities for businesses (2005:23). Included in this list are: shareholder growth, cost reduction, ethics, risk management, competitive advantage, talent acquisition and retention, secure supply chains, quality products and services, leadership, customer satisfaction, and—increasingly—reputation.

From the 1980s until the present, the growing power of the media and the Internet combined with increasing transparency made it easier for stakeholders to observe and scrutinize corporate performance and behavior. While financial markets measured finances, other interested citizen collectives analyzed corporate behavior and the treatment of both people and environmental resources (Willard 2005:107-117).

Increased transparency meant that companies faced a potential for reputation or brand chaos and threats of regulatory increases (Willard 2005:45). The most widely touted example illustrating these threats was the 1984 Union Carbide disaster in Bhopal, India (Hart and Milstein 1999:25). Deadly toxins were released that exposed roughly 500,000 people to methyl isocyanate. The death toll remains unknown, but questions linger regarding work conditions, safety measures, and Union Carbide's lack of response to earlier accidents and warnings. To compound this problem of reputation and corporate responsibility, data was not made public for years and chronic health and groundwater contamination issues remain.

Other events in the 1990s accelerated these issues into the 21st century. In the 1990s, companies increasingly moved manufacturing operations offshore to reduce costs in order to increase profits. Several apparel brands were criticized for operating sweatshops, which resulted in accusations of human rights and labor abuses. Notable examples involved the Nike and Kathie Lee Gifford brands.

Public distrust of corporations continues to grow. Oil companies are accused of funding campaigns against climate change (Revkin 2009). Microsoft battles anti-trust laws (Lohr 2007) and human rights abuses in its supply chain (Barboza 2010). As the global economy entered a recession in 2007, executives of firms deemed "too big to fail" received multi-million dollar severance packages (New York Times 2010) or bonuses (Andrews 2009). The public was required to bail out banks, automobile companies,

mortgage giants, and insurance agencies without any assurance that what caused these “too big to fail” giants to tumble would not happen again.

Corporate reputation, image, and brand have always been important to businesses (Willard 2005:59). Yet, as the power of multinational corporations expands, reputation is more important as transparency magnifies corporate scandals. Willard (2005) highlights recent surveys suggesting that reputation is more important than at the beginning of the 21st century. He discusses the 2004 World Economic Forum’s “Voice of the Leaders” poll of leading CEOs, who responded by saying roughly “60% of the market capitalization of corporations is based on ‘hard’ financial data, while 40% is dependent on ‘reputation’” (2005:59). Similarly, once a brand or reputation is compromised, estimates vary but suggest brand recovery takes approximately four years (Willard 2005:62) and results in significant loss of “financial and reputational capital” (2005:63).

Willard (2005:90-91) creates a context that combines the mega-issues with demanding stakeholders (green consumers, activist shareholders, civil society/NGOs, governments, and a watchful financial sector) to highlight increasing threats that loom for businesses failing to embrace sustainability. These challenges include: (1) market risks that result in decreased sales and quality due to increasing regulations; (2) balance sheet risks due to lawsuits, damage, and insurance increases; (3) operating risks that involve increased costs due to clean ups, worker safety, reduced process yields, supply chain issues, and regulation-driven process changes; (4) capital cost increases due to changing standards, regulations, and waste management or pollution abatement upgrades; and (5)

sustainability risks due to a loss of competitive advantage and increases in regulation and taxes. However, Willard also provides hope as he translates these risks into value for sustainable businesses. He equates corporate sustainability initiatives to improving the attraction and retention of top talent; productivity increases; reduced operational costs; increased revenue; and access to financing and preferred insurance rates (2005:135).

Thus, more demanding shareholders and a more demanding public expect higher responsibility standards from corporations than has historically been the norm. Corporate Social Responsibility (CSR) programs have emerged “as an inescapable priority for business leaders in every country” (Porter and Kramer 2006:78). However, more sustainable practices are needed to ensure competitive advantage and these practices are emerging as a business model for 21st century firm leadership. C. K. Prahalad, who was considered a leading expert in corporate strategy at the University of Michigan’s School of Business, created what resembles the “Grand Unification Theory of Globalization: that environmentalism, development and profit-making are not only compatible but also interdependent” (Bahree 2009). Fried agrees, “by increasing profits and contributing to the greater good of society and the health of the planet, sustainability merges with capitalism” (discussion with author, January 29, 2008).

From CSR Programs to Sustainability

Willard (2005:27-29) provides a continuum of “stages” to describe the transformation from Corporate Social Responsibility (CSR) programs toward

sustainability strategies (Table 2). For the purposes of clarity, the term CSR will be used when referring to Willard's first three stages and sustainability when discussing his more differentiable fourth and fifth stages.

Compliance-driven CSR programs, described in Stage Two, emerged in the mid-1990s as companies focused on customer satisfaction and reputation. Porter and Kramer describe these types of programs as responsive rather than strategic (2006:85-88). Responsive CSR programs typically focus on creating goodwill within local communities where business is conducted and on mitigating harm to both people and the environment. Such programs are usually more defensive in nature and focus on governance platforms that mitigate corporate risk (e.g. regulations, fines, or law suits). The results of these efforts are typically unproductive because business and society are seen as adversaries rather than interdependent stakeholders with shared values. These fragmented programs remain outside corporate strategies and do not provide competitive advantage opportunities (Porter and Kramer 2006).

Table 2. The Stages of CSR and Sustainability Programs³

Stage	Type	From-To Description
1	Pre-Compliance	<ul style="list-style-type: none"> • Company sees no obligation beyond profit.
2	Compliance	<ul style="list-style-type: none"> • Obeys laws and regulations • Social and environmental actions are added costs. • CSR is a necessary, but not focused initiative.
3	Beyond Compliance	<ul style="list-style-type: none"> • Company moves from defense to offense to reduce costs and improve operations. • CSR program remains marginalized. • Social and environmental actions are primarily marketing-driven.
4	Integrated Strategy	<ul style="list-style-type: none"> • Company moves from continuous improvement transitions to transformation. • Sustainability strategy enters the boardroom, operations, and becomes part of the corporate culture. • Focus moves from cost and risk mitigation to implementation of breakthrough technologies to provide value added products and services. • Company prospects for opportunities and investments to maximize revenue, innovation, and productivity. • Re-branding occurs with a commitment to sustainability. • Result is improved competitive advantage and reputation.
5	Purpose and Passion	<ul style="list-style-type: none"> • The company is driven to do the right thing for the company, society, and the environment “because it is the right thing to do.”

The third stage, highlighting CSR activities that go beyond mere compliance, is standard today (Hart and Milstein 2003; Willard 2005). While primarily marketing-driven, there are examples of progress in both the social and environmental domains. First, cause-related marketing, or social marketing, efforts connect branded products with social issues. Product Red (2006) is a program launched by Bono and Bobby Shriver. The brand is licensed to companies that sell products and donate proceeds to the Global Fund to fight diseases in Africa. Companies that participate include leading firms such as American Express, Emporio Armani, Motorola, Gap, Apple, and Dell. Critics point out inefficiency and a lack of transparency when compared to direct giving, and accuse affiliated companies of using diseases to boost revenue and profits. Porter and Kramer (2003:28-31) suggest that there is no true value in cause-related marketing and encourage enterprises to look for more social value in aligning economic goals with social goals.

Companies are also marketing green practices. Many companies promote the value of their products and services as recyclable, energy saving, or manufactured with fewer toxic ingredients (Willard 2005:185). Most of this is marketing “green-washing” because most products are not measured from a lifecycle analysis perspective (from resourcing, production, and through to disposal), making it difficult to understand the true value of these green claims. The resulting risk can impact corporate reputation if consumers become cynical and regard such claims as merely cosmetic (Franklin 2008; Hart and Milstein 1999; Willard 2005).

Stage Four and Five strategies may look similar to each other, but Willard suggests that motivation differentiates between the two: “Stage 4 companies ‘do the right things’ *so that* they are successful businesses. Stage 5 companies are successful businesses *so that* they can continue to ‘do the right things’” (2005:29). The chasm between Stage Three and Stage Four is wide and difficult to achieve, but companies do exist that are closing the gap.

In his book *Drive* (2009), Daniel Pink describes a new form of capitalism that explores the melding of profit and purpose. He uses TOMS Shoes as an example. Each time a consumer purchases a pair of shoes, the company gives a new pair of shoes to a child in a developing country. Pink discusses TOMS’ corporate role as follows:

Is TOMS a charity that finances its operation with shoe sales? Or is it a business that sacrifices its earnings in order to do good? It’s neither—and it’s both. The answer is so confusing, in fact, that TOMS Shoes had to address the question directly on its website...TOMS is a “for-profit company with giving at its core.” [Pink 2009:136]

Similarly, Patagonia’s founder, Yvon Chouinard, has donated at least one percent of sales since 1985 to environmental causes and cofounded One Percent for the Planet, made up of small businesses that share a similar philosophy. With over 1,000 members, the group has given \$42 million to approximately 1,700 groups. Chouinard says, “There’s no such thing as sustainability. It’s just kind of a path you get on and try—each day try to make it better” (Foster 2009).

Large companies are embracing Willard’s transformative stages and are forming non-profit ventures. Google.org (2010) combines the Google Foundation with other for-

profit and non-profit alliances. Their strategy focuses on global poverty, energy, and the environment. The founders, Sergey Brin and Larry Page, say, “We hope someday [Google.org] may eclipse Google itself in overall world impact by ambitiously applying innovation and significant resources to the largest of the world’s problems” (Google.org 2010). Their strategy was to commit one percent of Google’s profit in addition to employee time. Other companies launched similar initiatives, including Salesforce.com’s “1/1/1 model” (Salesforce.com 2010). The company provides employees with one percent time, or six paid days per year for volunteerism. In addition, one percent of their products are donated or discounted for non-profits and one percent of their equity goes to funding grants and providing monetary assistance.

The transformation from CSR to sustainability is often referred to as the Triple Bottom Line (3BL). “Everyone agrees the legs of the three-legged stool of sustainability are economic, environmental, and social responsibilities that contribute to public good and quality of life” (Willard 2005:17). Porter and Kramer describe these transformative stages as “strategic CSR” programs where innovation benefits society and competitiveness (2006:88-89). The examples provided—TOMS Shoes, Patagonia, Google.org, and Salesforce.com—illustrate how different companies strive to achieve Willard’s Stages Four and Five strategies. These transformations are difficult and take time to achieve.

This chapter has highlighted the importance of corporate sustainability programs; issues of the 21st century are complex and corporations have become key actors on the

global stage. While there are several key drivers for CEOs to consider prior to engaging in 3BL strategies, reputation is more important than ever in this transparent era of globalization.

Armed with Willard's sustainability stages (2005) and several examples, I wondered how a large multinational company would embark on a journey toward sustainability. The building industry, with its increasing rate of consumption of planetary resources, seemed to me to be an industry that would feel the pressure from U.S. stakeholders to reduce greenhouse gas emissions and conserve other resources. I was curious to see how such a program would unfold. What key drivers would be important? What key elements would be included? How would a program and a strategy be implemented? How sustainable would a sustainability program itself be with the ever-changing landscape of initiatives in the corporate domain? The next chapter presents the CBRE case study from its inception through the early results achieved during my research participation.

CHAPTER 2

CASE STUDY OVERVIEW AND RESEARCH RESULTS

Like most change initiatives moving through an organizational system, stakeholders engage when it becomes a risk not to do so or because of an individual's passion (Willard 2005). Compared to the rest of the world, the United States was slow to engage in corporate sustainability activities. The threat of impending legislation and regulation surrounding carbon emissions and the use of energy are key drivers in motivating many U.S. industry clusters to engage in more sustainable business operations. The building industry, as illustrated by CBRE, found itself on the short list of industries that would be affected first due to its consumption of planetary resources and greenhouse gas emissions.

My research project with CBRE unfolded at an opportune time. The building services industry found itself moving toward sustainability, not only as a marketing program, but more importantly because it was urged to do so by shareholders and other key stakeholders. This research activity occurred during a timeframe when the U.S. national dialogue was critically examining the effects of climate change and the use of non-renewable planetary resources writ large.

This chapter presents as a case study, CBRE's design and implementation of an award-winning Sensible Sustainability platform. The key drivers that motivated the building management industry, CBRE, and Dave Pogue (who at the time was the Senior

Managing Director of Asset Services for CBRE's western region) are examined and contrasted with a comprehensive market analysis. Like other business initiatives, the root of this program's initial success originated in the desire to create a business case where economics needed to prevail. Ultimately, incremental no-cost and low-cost actions drove an acceleration of success metrics—both during the research period and afterward.

CBRE: The Company

CBRE, the global leader in commercial real estate services, produces nothing and owns nothing. Service is CBRE's only product. The company provides real estate owners, investors, and tenants with sales and leasing strategy and execution; corporate services; appraisal and valuation; development; investment management and mortgage banking; research and consulting; and property, facilities, and project management (CBRE Press Release 2007). Managing 1.7 billion square feet globally, with 1.2 billion located in the United States, requires more than three hundred offices and twenty-four thousand employees (CBRE 2007d). Thus, while greening and sustainability were clearly important goals for this industry leader, the complexity of their business meant that influencing clients and tenants to change behavior presented unique and specific problems.

There are two other important issues that affect the CBRE case study. First, in 2006, CBRE acquired the second largest company in the commercial real estate services industry. This merger was complicated and time-consuming for top executives, who

were focused on blending two very divergent cultures and consolidating and improving operational efficiencies. While Pogue was involved in this merger, the attention the merger required provided an environment for projects like this sustainability initiative to flourish outside a more typical management overview.

Second, while this case study follows CBRE's Asset Services (CBRE-AS) sustainability efforts, which ultimately became the model for the company's U.S. operations, it is important to note that other sustainability efforts did exist within the company. At the beginning of the research period, there was already in place a "Global Task Force on Environmental Sustainability." This task force included people representing all major markets and disciplines, with participants having varying degrees of expertise. Sustainability efforts at CBRE's regional offices in the United Kingdom, Australia, and New Zealand had been in place for some time. While strategies and programs were fragmented, this task force realized the need for a corporate business case and operational policy for CBRE's success. It was an important early resource and the CBRE-AS group incorporated its focal areas into its Sensible Sustainability program.

Initial Goals

As the project began, Pogue identified our team's major goals. Initially, the program was designed to green CBRE's managed building portfolio, but more strategic goals were added. Due to the fragmented strategies that were found in the market ecosystem, he believed only a handful of U.S. enterprises fundamentally understood what

it meant to be green or sustainable. Thus, other goals included learning all we could in order to build a business case that would influence the behavior and attitudes of clients and employees.

Learning about sustainability and analyzing competitor and other industry activities aided us in defining CBRE's strategy. Greening is often marketing hype (Franklin 2008). We wanted to leverage the hype, but create change in order to build competitive advantage for CBRE. Our intent was to design and implement a program that was simple, sensible, and differentiable—financially, environmentally, and socially. Necessarily, this also included looking at ways to make the program profitable in some way for CBRE.

Pogue knew that building the business case would take time. 2007 was defined as the aspirational phase, when we launched the journey. This first year was slated as a year of discovery: understanding what it means to be green, benchmarking building performance, defining and implementing sensible green habits, training, and evangelizing the need for sustainability to both internal and external stakeholders. The second phase, designed to launch in 2008, would be operational in nature. Key activities would include the implementation of programs, measuring, refining, and repeating in order to build a business case that would connect with stakeholder needs. Finally, 2009 and beyond were identified as informational and influential phases whereby CBRE would leverage their Sensible Sustainability program to serve a wider group of stakeholders.

Key Sustainability Drivers

As discussed in chapter 1, businesses respond to changes or the possibility of changes when there is risk to their competitive advantage (Willard 2005:57). In 2006, rising oil prices and the subsequent volatility in energy resources and pending legislation had an impact on the cost of building operations (Pogue discussion with author, July 18, 2007). Concurrently, the national and global debate on greenhouse gas emissions and resource usage was growing. As a result, grassroots groups were demanding more corporate responsibility toward the environment and resource usage and disposal. This movement began to showcase responsible enterprises deploying sustainability practices and those key individuals, often at high levels within these enterprises, whose personal passion fueled these initiatives (Willard 2005:47). All of these elements existed at CBRE: costs were beginning to affect the bottom line, there was client and tenant pressure to green building portfolios, and Dave Pogue personally believed that sustainable practices were important for both the industry and the global commons.

Economics emerged as CBRE's initial driver (Pogue discussion with author, July 18, 2007). In mid-2006, the net operating income (NOI) of CBRE's managed assets, a property's positive operating income less operating expenses calculated prior to deducting for income taxes and interest, became a more important metric for determining the value of individual buildings or building portfolios. As global energy prices began to rise, building energy use was negatively impacting operating expenses across all economic sectors including the building industry. This added a cost-risk factor for

corporations, because it had a direct impact on return-on-investment (ROI). Pogue realized the need to study energy consumption and implement conservation processes.

Another major risk factor for 21st century firms was the link between energy usage and the growing national debate on climate change in the minds of the American consumer. As never before, Americans began to identify corporate polluters and vote with their wallets when making purchasing decisions (Willard 2005:89). Individuals and collective shareholders also began placing investment pressure on corporations (Willard 2005:89). CBRE was impacted, as institutional real estate portfolio managers comprised of third party investors (e.g. pension funds) started asking CBRE what it was doing to reduce resource consumption and participate in the growing greening movement. Furthermore, clients and tenants pressured CBRE to manage buildings with an increased consciousness toward the environment (Pogue discussion with author, July 18, 2007).

The emerging likelihood of energy and carbon regulations was another risk factor for CBRE (Pogue discussion with author, July 18, 2007). In 2007, the building industry was largely unregulated and Pogue suggested that this could change over the next few years. He believed that green practices would be a central theme of those changes and that CBRE needed experience in order to participate in influencing such legislation. The issue of sustainability took on an even larger focus when on May 31, 2007, CBRE issued a press release announcing that the CEO had committed the company to a goal of becoming carbon neutral by 2010 (CBRE Press Release 2007). CBRE clearly had internal momentum toward greater corporate responsibility and sustainability.

Thus, Pogue's vision in conjunction with the corporate commitment to carbon neutrality by 2010 provided a backdrop for CBRE to emerge as the sustainability leader in the building management industry. CBRE touched many people and its size alone would ensure scalability and a multiplier effect that would build the supporting infrastructure. The company had the potential for significant competitive advantage and sustainability appeared to make good business sense.

Key Inhibitors and Challenges

There were several issues considered while defining CBRE's Sensible Sustainability program. In addition to nonexistent or confusing legislation and regulations, the cost and risk/value equation posed problems for the commercial property management industry due to the lack of a supporting business case for investing in greening and sustainability initiatives. These industry issues, combined with the challenge of motivating stakeholders, provided us with many opportunities.

In the latter decades of the 20th century, owners typically held buildings for long periods of time—often ten years or more. By 2007, following the real estate boom of the prior three years, these holding periods had decreased substantially to as little as eighteen months or less. Buildings were considered fungible assets and were traded as commodities, or stocks, primarily due to changing capital markets. Owners focused on profit taking and building turnover rather than capital infrastructure improvements that equated to long payback cycles. Even when the 2009 economy decelerated the building

turnover rate and again extended ownership periods, building owners would still not engage in projects with long pay back periods due to lack of capital (Pogue discussion with author, July 18, 2007).

Additionally, the commonly held view was that the savings from implementing building cost reductions initially benefitted tenants rather than building owners given the nature of most commercial leases. Tenant rent typically included a base rent plus operational costs over a base year. Until lease terms expired and were renegotiated, it was the tenant who received the benefit of reduced operating expenses.

An overall business case was the missing element needed to incentivize any level of sustainability investment. Greg Kats, a leading consultant in the green building industry, estimated an additional cost of two percent to design and construct a green building from the ground up and suggested that this premium was justification for green investments in new construction (2003:4). Yet, no similar or supportive green cost argument was available for existing buildings, which comprised nearly 98 percent of all U.S. buildings (Pogue discussion with author, July 18, 2007).

With few supplier and product choices available in 2007, Pogue estimated that greening an existing building would carry a cost premium (Pogue discussion with author, July 18, 2007). Research suggested that green buildings correlated positively to employee retention, productivity, and reduced absenteeism (Willard 2005:135), but the value of this soft-cost benefit was subjective. Thus, Pogue could only surmise that existing cost premiums needed to be reduced to incentivize low-cost investments in

greening existing buildings. To do this, Pogue believed that CBRE could build the supporting supply chain by leveraging the company's size and scale to increase green product availability while reducing associated costs. Emphasizing these hard dollar savings would help sell the cost of and transition to sustainability.

In addition to these industry issues, CBRE stakeholders were also important. Pogue realized that motivating clients, employees, and occupants to embrace sustainability initiatives began with the definition of key terms. What is sustainability and what does it mean for the building management industry? What does green mean? What makes a building green? What is carbon neutrality? How will U.S. companies get "there?" How will CBRE do this by 2010?

Next, our team had to figure out how to shift the attitudes and behaviors of many hundreds of Asset Services clients—each of whom had varying degrees of interest and levels of engagement. Many of these clients tended to focus on capital, or the reduction of capital, so we knew that we would have to provide incremental no-cost or low-cost improvements before considering any type of capital expenditures.

Finally, it was important to determine how to motivate CBRE employees. Like most corporations, CBRE has historically responded to present risks. These responses resulted in "initiative fatigue." This fatigue resulted in employee cynicism when faced with the latest "crisis du jour" (Pogue discussion with author, July 18, 2007). These "crises" had affected the building industry for many years (table 3). 2006 marked a shift in greening and sustainability interest as economics collided with the green world.

Table 3. Building Industry Issues¹

Timeframe	Crisis-du-Jour Issue
Early 1990s	Indoor air quality, the effects of mold, and the banning of asbestos
1992	Americans with Disabilities Act, Title III Public Accommodations and Commercial Facilities
Mid-1990s	Phase out of chlorofluorocarbons (CFCs)
2000	Y2K
Early 2000s	Energy shortages in California due to deregulation and subsequent rolling blackouts
Early 2000s	Dot-com bubble implosion changed the capital markets that had fueled real estate investments
2001	Security issues as a result of September 11, 2001
2006	NOI emerged as a driver of portfolio value.

Nevertheless, we knew we had to motivate skeptical or completely uninterested employees. There were several different types of employee issues to consider: (1) employees not financially motivated beyond the transaction of leasing, (2) employees affected by the 2006 acquisition and merger, and (3) employees who believed climate change and greening were politically motivated schemes. There was also the fusing of employees from two different corporate cultures and processes due to the 2006 acquisition and merger.

The Project Ecosystem

In defining the scope of CBRE's sustainability program, it was necessary for our team in general and for my learning in particular to analyze the building management industry to identify: (1) key actors, (2) the various definitions of sustainability, and (3) greening initiatives within the building industry sector. What were these stakeholders (competitors, suppliers, and partners) doing to influence sustainability? What guiding standards or principles existed? Were industry-supporting structures, such as government agencies or trade associations, supporting such an initiative? How would these efforts ensure CBRE's success? In order to learn about the industry and provide an overview of what adjacent stakeholders were doing in the area of sustainability, I volunteered to review websites as my contribution to CBRE's market assessment activities.

Competitor Assessment. Mapping the competitive landscape was an important first step to determine what sustainability actions had been implemented and where we might create competitive advantage for CBRE. I analyzed three competitors' websites and CBRE's to assess both the scope and the quality of sustainability activities and program messaging. CBRE defined their business success:

We need to become recognized as THE source of Sustainable management practices in the marketplace. We need to lead the industry in developing programs, policies, and practices so that clients' buildings can lead in their markets and are the first choice for environmentally sensitive tenants. This will absolutely strengthen our current service offering allowing CBRE to maintain our market dominant position and be THE choice for property management assignments. [CBRE 2007h]

In general, these competitors had some form of greening or sustainability initiatives. CBRE was not a first-mover, which is typical for market leaders. In my experience, first-movers tend to be smaller companies that create a competitive niche and initiate programs while larger companies wait for market traction before committing resources.

Transwestern's site was the most informative and was the easiest to navigate (2007). The site messaging communicated the company's story crisply and Transwestern was awarded the EPA's Energy Star Partner of the Year in 2004 and 2005. The company was an active member of the U.S. Green Building Council (USGBC) and pursued Leadership in Energy and Environmental Design (LEED) certification on millions of square feet in their building portfolio (LEED is discussed below). The company provided case studies describing how it had solved problems, added value to clients, and provided tips and events to aid clients in greening. While Transwestern provided information on energy and sustainability efforts, it was not clear if its strategy included the social sustainability pillar.

Two other competitors, Jones Lang LaSalle (JLL) (2007) and Cushman & Wakefield (2007), had links to sustainability efforts, but neither appeared to have an overall strategic focus. JLL's information included the white paper "People, Planet, Profit: Property" highlighting CSR and 3BL activities in the Asia-Pacific region, an Environmental Sustainability Policy, a Code of Business Ethics, and a Vendor Code of

Content. However, neither site seemed to provide the messaging that would point toward an interconnected strategy that supported the 3BL model of sustainability.

CBRE's own website (2007d) presented a more foundational sustainability effort because its messaging incorporated economic, social, and environmental activities in line with 3BL sustainability. The company could further meld its financial strength, environmental initiatives, and social agendas to create better competitive advantage. Overall, this research exercise confirmed my sense that sustainability efforts would be an opportunity for development in the commercial real estate management space.

Supplier Base Assessment. More sustainability activity was taking place within the supplier base, particularly in the areas of flooring and chemical production. Flooring manufacturers were early adopters of sustainability and greening initiatives because these companies had high resource usage, high landfill impact, and used chemicals that have a negative impact on a building's indoor air quality. Likewise, chemical manufacturers were motivated by impending regulations to reduce air emissions, control volatile organic compounds (VOCs) that vaporize and affect indoor air quality, reduce greenhouse gas (GHG) emissions (e.g. CO₂), conserve water and energy, and promote land, forest, and biodiversity stewardship.

Several metrics were used to assess these websites. Key areas of focus included: sustainability statements; where sustainability activities report within the organizational structure; time engaged in sustainability; energy and greenhouse gas emission metrics; use of standards, third-party verifications, and product certifications; LEED efforts;

awards; R&D statements; and key initiatives. This analysis was important to determine if CBRE's key suppliers could act as sustainability thought leaders and support the company's carbon neutral goal.

Three flooring manufacturers were selected for analysis: Interface (2007), Shaw (2007), and Tandus (2007). While all three suppliers were engaged in sustainability efforts, Interface appeared to be a clear sustainability thought leader due to the company's extensive experience and practices. Ray Anderson, Interface's founder, had a passion for sustainability and introduced initiatives dating back to 1994. Anderson's work had been internationally recognized and, during the Clinton administration, he co-chaired the President's Council on Sustainable Development. Anderson consulted regularly with clients that included Walmart, General Mills, Sara Lee, and NASA. Interface had clear sustainability goals and was committed to reducing CO₂ emissions by 60 percent from 1996 levels while deriving all fuels and electricity from renewable sources—all by the year 2020. Sustainability initiatives touched many of its business functions and the company used outside standards in conjunction with internal metrics to validate, track, and communicate its progress.

Similarly, three chemical suppliers' sites (3M 2007; JohnsonDiversey 2007; Spartan 2007) were assessed for sustainability initiatives. Like the flooring manufacturers, all communicated 3BL sustainability strategies and activities. 3M embedded sustainability in its business practices—even before it was named sustainability. In 1953, the 3M Foundation was established for charitable efforts. In

1975, the Chairman, CEO, and Board adopted the 3M Environmental Policy, which is still being used. Its sustainability effort coalesced in the 1990s and was driven forward by the Chairman and CEO. In 1997, the company established an energy policy and began efforts to reduce GHG emissions. Like Interface, 3M's strategy had interconnected initiatives that were made more credible through verification against outside standards.

Partner Assessment. CBRE partnered with other organizations to enrich its Sensible Sustainability platform. For my education, I reviewed the partner programs that CBRE had already begun to integrate prior to the research period. Included in this brief study were programs offered by the Environmental Protection Agency (EPA), the U.S. Green Building Council (USGBC), and the Building Owners and Managers Association (BOMA).

In 2006, shortly before its World Conference, CBRE engaged with the EPA to launch its Energy Star program, a joint program between the EPA and the U.S. Department of Energy (Energy Star 2007). Energy Star's goal and design were to promote cost savings and protect the environment through product and process labeling and certification. This program was estimated to save "businesses, organizations and consumers about \$19B in 2008 alone" (Energy Star 2007).

Another initial partner was the U.S. Green Building Council (USGBC) (2007). The USGBC, a non-profit organization, supports every sector of the building community. Its voluntary and consensus-based LEED (2007) program provides a national rating

system for the development and operation of high-performing sustainable buildings including existing buildings (LEED-EB), new construction, commercial interiors, and core and shell. It is a point system that uses established criteria to measure sustainability. CBRE was primarily interested in LEED-EB and its focus on site development, energy savings, water resource savings, indoor air quality, and the selection of green materials. While comprehensive, LEED-EB certification was expensive and difficult to achieve. As of October 2007, Pogue stated that only 59 of the approximately 65,000 office buildings in the U.S. were LEED-EB certified (discussion with author, October 18, 2007).

Finally, CBRE partnered with the Building Owners and Managers Association (BOMA) (BOMA International 2007a), an international organization of building associations and affiliates. Its mission is “to enhance the human, intellectual and physical assets of the commercial real estate industry through advocacy, education, research, standards, and information” (BOMA International 2007c). Collectively, members were estimated to own or manage nine billion square feet globally.

Within the BOMA structure there was a non-profit foundation providing research and education to BOMA members. In particular, BOMA and CBRE partnered to co-brand BOMA’s Energy Efficiency Program (BEEP) (BOMA International 2007b; 2007c). BEEP, developed through a partnership with the EPA’s Energy Star affiliates, is a training program designed to promote energy conservation through the implementation of no-cost and low-cost solutions. The goal was to train CBRE employees on key strategies that could “help reduce commercial real estate’s energy usage by as much as 30

percent, which is the equivalent of removing 120 billion pounds of carbon dioxide emissions from the air or 12 million cars from the road” (BOMA International 2007c).

Standards Assessment. The team requested research on green standards, benchmarking, third party validation, product and process certification, and rubrics. Outside verification adds credibility to programs and the team wanted to design CBRE’s program with these standards in mind. We found this to be a fragmented landscape that will likely experience consolidation and alignment toward a more common set of standards and tools in the future. However, a few category leaders emerged from this analysis.

Investors used the Dow Jones Sustainability index (2007) or the FTSE4Good Index (2007), which is more commonly used in Europe, to identify companies that showed competence in several areas. These included: strategy, financial performance, customer satisfaction, product sustainability, and corporate governance. Similarly, the Global Reporting Initiative (GRI) (2007) focused on evaluating corporate processes and management practices. A comprehensive tool that measured the 3BL, this framework was utilized by roughly one thousand organizations from more than sixty countries.

There were also relevant environmental standards for buildings, products, and processes. While the most recognizable certification for buildings was LEED and Energy Star, other certifications existed for products and processes. For example Cradle-to-Cradle Certification (2007) and Green Seal (2007) were consumer standards that certified

manufacturers who sourced, produced, recycled, and disposed of their goods or services in an environmentally responsible fashion.

Concrete standards did not exist to score an organization's social sustainability. For example, ISO 26000 (2007), which focuses solely on social sustainability, is not expected to launch until 2010. While many companies have internal dashboards focused on customer satisfaction and global citizenship, the social leg of the 3BL remains the least developed and may ultimately be what differentiates a sustainable organization from one that is not. Consider Walmart, a company that has had strong financials and launched an environmental program, but has struggled with its treatment of employees. Using the 3BL as a framework, it is my opinion that Walmart is not yet an example of a sustainable company.

Thus, while standards and certifications existed to benchmark sustainable companies, the landscape is fragmented and will change as a result of pressure from corporate entities. As sustainability and triple bottom line reporting become more common, these standards will likely become more widely recognized and respected.

Core Deliverables of Sensible Sustainability

During the beginning phases of CBRE's program, a critical focus of the company was establishing a branded campaign—admittedly green-washing in its early phase, but far more of a strategy in its latter phases. “Toward a Greener Tomorrow” was chosen by the company and served as the theme for CBRE's 2007 World Conference, which was

held in September. This endeavor was launched in the late spring of 2007 with ad placements in the *Wall Street Journal*, the *LA Times*, and the *Chicago Tribune*. These newspapers reached markets of early adopters who might also have been interested in utilizing CBRE's Sensible Sustainability Program.

As part of the campaign and as a foundation for what would become its sustainability program, our team created the "101 Tips Toward a Greener Tomorrow" (101 Tips), a reverse-engineered version of the existing LEED-EB point model and designed as a tool kit for operating a sustainable building (CBRE 2007a). Each tip described a sustainable process and many were available electronically. Included were suggested materials; approved suppliers with pre-negotiated terms and conditions; estimated costs; and links to LEED credits.

We also created the "Five Pillars of Sensible Sustainability" (Five Pillars) as the program's cornerstone; these were defined as communication, education and training, resource management, green building materials, and waste stream management. Each consisted of initiatives designed to underpin and promote the overarching program (CBRE 2007e).

By 2008, we bundled the Five Pillars and the 101 Tips under an umbrella document called the "Standards of Sustainability" (CBRE 2007g). Initially developed in July 2007, these standards outlined behaviors for operational actors, or CBRE employees and service partners, and helped navigate the challenges of reducing a property's environmental impact through "benchmarking, developing and implementing a low-

cost/no-cost energy management plan” (Pogue discussion with author, August 9, 2007). By 2009, many of the more than 1,000 managed office buildings had incorporated these standards with many success stories. The best examples were presented to clients as individual case studies and included the challenge, the CBRE solution, and the benefits to stakeholders.

Sensible Sustainability Pillar One: Communication

Once our group developed the vision, the toolbox, and the brand, we needed an effective communication strategy to reach both internal and external stakeholders. Our goal was to describe why sustainability mattered and what CBRE was doing to meet the challenge. Pogue chose to use climate change and energy usage as the portal to demonstrate the need for improved practices within the building services industry. We developed a “stump speech” presentation (CBRE 2007i), which then led to other documents, marketing pieces, posters, and videos that were all delivered through a variety of media intended to consistently reach the widest possible audience, internally and externally, with the same message.

My research on climate change was used to build this stump speech—a PowerPoint presentation that framed the issue, defined CBRE’s corporate commitment to carbon neutrality by 2010, outlined Asset Services’ Sensibility Sustainability Program development and rollout, and clarified a call-to-action for various stakeholder groups. Pogue began delivering this pitch to his Asset Services employees and it was received

with interest, even though the discussion of climate change was sometimes polarizing. By linking the pitch to energy usage and the need for an industry energy insurance policy, we were able to engage climate change skeptics. This stump speech was presented primarily to internal constituents up to and through World Conference 2007.

In the fall of 2007, Pogue began to meet with key clients and other industry actors (e.g. EPA, BOMA, USGBC) with the goal of meeting all CBRE-AS clients by the end of 2008. To prepare for Pogue's road show, we changed the presentation to focus more directly on client needs: value statements, commitments, standards, solutions, and metrics. This client-focused presentation, which provided a philosophical underpinning, ensured the success of the project by providing an implementation strategy and a rubric vision for tracking change. The message was that CBRE was learning about sustainability; Asset Services would help clients learn how to operate a green building and bring them the benefits of sustainability.

By January 2008, the stump speech changed even further as Pogue met with larger clients. The core of the speech shifted back toward emphasizing why sustainability mattered, but with a focus on the business case, particularly highlighting how CBRE was meeting the challenge. To fine tune this presentation and develop messages for all of its CBRE-AS client stakeholders (client owners, tenants, and occupants), we defined specific value propositions for each group. This was an important process that began with determining what constituents cared about in general and why sustainability would matter to them in particular. Next, it was important to frame their needs with the benefits

of implementing sustainability practices and the role that CBRE would assume in managing both short- and long-term sustainability activities.

The value proposition for client owners was problematic because it was the least tangible. This group often did not realize the immediate dollar savings and NOI value that resulted from energy and water conservation until lease operational terms were reset. Yet, despite the limited initial financial benefits, client owners could leverage the marketing value of environmental stewardship. As tenants and occupants looked for healthier and more sustainable work environments, this resulting social value could yield higher rents from more green behavior conscious occupants. CBRE's focus on no-cost and low-cost activities was determined to be the best way to provide value and influence this group toward change until other factors, such as LEED certification or other market forces, pushed this group to invest in capital changes.

Tenant value was the most tangible as this group immediately realized the direct financial benefit resulting from any resource usage or waste stream reductions. This was also the stakeholder whose daily behavior could contribute the most toward sustainable change through simple efforts such as providing recycling stations, changing janitorial patterns, implementing temperature set point modifications, and by providing the tools and information to conserve electricity and water. CBRE's role was to educate tenants on the benefits of sustainable operation methods in order to influence and change tenant behavior. Pogue summarized the challenge: "How do you motivate behavior in people

who don't have an economic interest in the outcome?" To help facilitate this, the team created and made available the "101 Tips for the Office" (Pogue 2010).

Occupants are the tenant's employees. By using U.S. Census data (2000) and the average number of people occupying 1,000 square feet of office space, we estimated that CBRE touched roughly two percent of the U.S. working population on a daily basis. Our team knew that providing value to this group would primarily be driven through education and by providing the tools needed to make incremental and daily behavioral changes. We wanted to extend any changes made in the workplace into this group's wider communities of daily living practices. In other words, if we could influence the attitudes and behaviors of two percent of the U.S. working population, imagine how many others could benefit from our information. We implemented programs that emphasized the benefits of environmentally responsible commuting, recycling at home, no-cost and low-cost home changes, green cleaning, and energy and water conservation. Besides these educational components, services such as periodic tire inflation checks, access to low-wattage light bulbs or low flow plumbing fixtures, and e-waste and battery disposal were provided.

Once we identified these external stakeholder value propositions and definitive programs, we produced specific client-facing documentation intended to emphasize CBRE's role in implementing Sensible Sustainability. First, we produced the "Client Commitment" (CBRE 2007c), a short one-page document highlighting key low-cost and no-cost best practices. These included the Energy Star program, no-cost and low-cost

audits, training, green cleaning, water and energy conservations, and budget planning. Second, we created the “Strategy for Client Engagement” (CBRE 2007h) detailing Asset Service’s plans to introduce sustainable technologies and practices on the vast majority of facilities by 2010. Clients were further informed via the *Update*, an Asset Services communication piece sent to every Asset Services client quarterly. The July 2007 issue was solely devoted to green issues (2007j).

Besides external stakeholders, we also understood that we could never lose sight of internal stakeholders and the values that motivated each group into action. In particular, we needed to find a way to overcome the “crisis du jour” mentality (described earlier) that could lead to widespread avoidance of new initiatives in the field. Early on, we felt the need to engage a group of field employees into the process. We wanted one or more sustainability “champions” in each U.S. regional market. Pogue looked for people who had an interest in the topic and who had already undertaken some type of a sustainability activity on their own (e.g. pursuing Energy Star labeling for a building or a LEED-AP designation). Ultimately, this green team became known as the Green Knights and the program grew from approximately 40 participants in 2007 to more than 100 (Pogue 2010). It was important to communicate regularly with the Green Knights, providing them with the latest sustainability updates and motivating them to make changes in their regions. Similarly, regular communication with CBRE property managers provided the vision and expectations of job success as Asset Services employees.

In July 2007, we launched our messaging to key stakeholders through a variety of delivery mechanisms. Asset Services employees were informed through the *Weekly Compass* (CBRE 2007k), an existing medium where Green Knights wrote informative articles describing tips and progress in implementing Sensible Sustainability. The web was used to electronically reach both internal and external stakeholders. We began to work on an intranet site to house the growing links to sustainability documents and practices while designing the architecture for CBRE's Sensible Sustainability on www.CBRE.com to inform the general public on CBRE's sustainability practices.

As we neared September's World Conference 2007, our team continued to create additional branded messages intended to reach all key stakeholders. These included a marketing trifold (CBRE 2007f), posters, and videos that supported key components of the program. By World Conference 2007, key information was loaded onto a USB drive, called the "Green Thumb," and given to conference attendees. In addition to the documents and marketing pieces already discussed, we included key articles; case studies; informative websites; and information on Energy Star, LEED, and BOMA. Finally, as Dave met with more and more clients after the World Conference, information was left for clients on an Apple iPod Touch, which served as an additional sustainable source of information like the USB drive.

Sensible Sustainability Pillar Two: Education and Training

Education and training formed the second pillar because CBRE was committed to training the industry's most advanced and knowledgeable "green thinking" professionals (CBRE 2007f). To meet this challenge, we partnered with and co-designed training programs with recognized leaders in the sustainability field. These included the EPA, the USGBC, and BOMA International.

After the 2006 World Conference, CBRE partnered with the EPA to develop on-line Energy Star (2007) training modules for CBRE employees. These courses provided tools for initial building benchmarking and program registration, as well as information on process implementation necessary to achieve building certification. By the 2007 World Conference, over 500 individuals had completed the training, marking the largest rollout in Energy Star's history (Pogue discussion with author, September 14, 2007).

Second, CBRE partnered with BOMA International to co-brand and launch BOMA's Energy Efficiency Program (BEEP) training (BOMA International 2007c). BEEP courses focus on no-cost and low-cost solutions proven useful for achieving Energy Star certification. BOMA's design was changed slightly to match CBRE's needs and resulted in a four-session on-line training module facilitated by a trained CBRE employee. This program was launched in September 2007 with a goal of training more than 1000 employees over three years. Within a few months, more than 250 people had completed the training and this exploded to more than 5,000 employees by January 15, 2009 (CBRE 2009b). The initial training goal was shattered.

Finally, CBRE partnered with the USGBC to offer dedicated LEED Accredited Professional (AP) training (LEED 2007). LEED certification, considered the standard benchmark for building sustainability, can be a complex and costly endeavor. The training objective was to expedite that process by having trained professionals, or LEED-APs, coordinate the task.

Pogue's goal was to have 100 LEED-APs on staff by the end of 2007 (discussion with author, July 18, 2007). We missed the initial goal for two reasons. First, coordinating a USGBC trained facilitator with a roomful of CBRE employees meant that full-day sessions were less frequent than we would have initially desired. Second, the test was more difficult than CBRE professionals expected. It required a significant amount of memorization as test questions focused on the application, intent, and interrelation of LEED credits. Although we missed the original goal, by January 2009 there were 238 LEED-APs, which included more than one-third of the Green Knights (CBRE 2009b). Pogue was proud of this traction and I was proud to pass the LEED-EB test in October 2007.

Sensible Sustainability Pillar Three: Resource Management

The resource management pillar included initiatives designed to conserve electricity, natural gas, and water. These tools enabled building managers to benchmark building operations and processes in order to develop site-specific strategies that promote conservation and environmental preservation. Strategic priorities revolved around no-

cost or low-cost solutions designed to reduce operational costs. For example, “the simple act of saving 15% on utility costs adds about \$1 million in value for every 135,000 square feet. For a 500,000 square foot building, that equals \$3.75 million in added value!” (CBRE 2007f). Similar efforts were launched to conserve water and included the use of waterless urinals, low-flow or restricted-flow water fixtures, and exterior landscapes designed for reduced irrigation or use of rainfall.

The aforementioned Energy Star program (2007) was part of the resource management pillar. Earning the Energy Star plaque was difficult, only achieved by scoring 75 percent or more against a rubric for energy efficiency. By World Conference 2007, building managers of 260 CBRE buildings assessed their buildings against the EPA’s rubric and identified areas of opportunity. The goal was to earn one hundred plaques by the end of the year. By early 2009, more than 1,200 buildings were registered into the Energy Star system and awaiting benchmarking, and 199 buildings had earned the plaque (CBRE 2009b)—double the goal. CBRE’s momentum and focus with the Energy Star program was so targeted and so large that the company earned an EPA Energy Star Partner of the Year Award for both 2008 and 2009 and the EPA’s 2010 Energy Star Award for Sustained Excellence (CBRE 2010).

The “Change a Light, Change the World” (2009) project is another example of resource management. Developed in 1999, this campaign is a “national call-to-action from the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE) to encourage every individual to help change the world, one light—one

energy-saving step—at a time” (Change a Light, Change the World 2009). It was designed to bring together individuals, schools, communities, organizations, states, and the nation in a pledge to reduce energy and greenhouse gas emissions through the use of energy-saving bulbs such as compact fluorescent lights (CFLs). CBRE partnered with the EPA in the fall of 2007 and launched this year-long program in April 2008 as a way to celebrate Earth Day.

Lighting accounts for about 20% of household electricity and the installation of these lamps could account for significant consumer savings (Change a Light, Change the World 2009). Their longer life cycle and reduced energy usage makes CFLs a more environmentally sensitive solution to incandescent or fluorescent bulbs in many applications. While more expensive initially, the estimated pay back time is roughly one month, as they consume up to two-thirds less power than incandescent bulbs. It is estimated that a single CFL “can save more than \$30 in electricity costs over the lifetime of the bulb and prevent more than 450 pounds of greenhouse gas emissions” (Change a Light, Change the World 2009). If only five lights were changed in every average U.S. home, “each home would save more than \$60 a year in energy costs, and together we’d save about \$6.5 billion each year in energy costs and prevent greenhouse gases equivalent to the emissions from more than 8 million cars” (Change a Light, Change the World 2009). As of mid-January 2009, over 193K of these bulbs were moved through the CBRE program with an estimated savings of 55,000,000 kWh and the removal of almost 80 million pounds of greenhouse gases (CBRE 2009b).

Sensible Sustainability Pillar Four: Green Building Materials

Green building materials can be used in construction, interior renovations, decorating, and cleaning processes. While the definition of a “green” product is not yet standardized or regulated, CBRE chose Green Seal (2007), the Global Reporting Initiative (2007), and the U.S. Green Building Council LEED program (LEED 2007) as three means to recognize partners for their sustainability efforts. By employing these standards, CBRE built partnerships with key suppliers who design, make, and market environmentally sensitive products. These supply chain partners were chosen because they “bring to market products that are not only resource efficient throughout their manufacturing and installation lifecycle, but are close-looped recyclable and can be re-manufactured into a variety of new products” (CBRE 2007f). Examples of the types of suppliers vetted for this program included those who manufactured paint, cleaning agents, and flooring. CBRE negotiated favorable pricing and terms so that building owners, tenants, construction contractors, and property managers would have access to these suppliers through the 101 Tips toolbox (CBRE 2007h; CBRE 2007f).

CBRE supplier reviews began in the summer of 2007. By the end of the year, programs were in place to use environmentally preferable restroom paper products and janitorial supplies. The program expanded to include all materials, finishes, and products used inside and outside of buildings. Ultimately, CBRE planned to have a complete catalogue of recommended suppliers and products for all aspects of building site construction, renovation, and operation.

Sensible Sustainability Pillar Five: Waste Stream Management

The goal of waste stream management is to reduce building waste destined for landfills or other waste treatment facilities. CBRE's partnership with the EPA allowed the team to utilize their WasteWise program (WasteWise Program 2007), which focused on the 3Rs of managing waste: reduce, reuse, and recycle. Waste audits benchmark the composition of a building's total waste in order to determine what sustainability methods to deploy for maximum results. Examples of reducing waste include: the installation of waterless urinals; coreless paper towel rolls in bathrooms and kitchens; implementing total building green cleaning; and paperless business practices for tenants (e.g. electronic billing). Reuse efforts focus primarily on construction and demolition processes and the reuse of cell phones, computers, and printers. Recycling efforts were prioritized around high usage (e.g. white office paper) or high toxicity waste streams (e.g. fluorescent lights, batteries, ballasts, and e-waste) that could not be donated or reused.

CBRE's national recycling plan is one program example. Initial audits uncovered waste commonalities that made it easier to design and implement a standardized menu-driven program. Once a particular building's waste composition was baselined, CBRE program managers could deploy specific recycling programs focused on the individual waste profile.

Even though there are financial and environmental benefits, the recycling of white paper in office buildings is still not common in many areas of the country. Yet, one ton of paper made from recycled fibers conserves 7,000 gallons of water, between 17-31

trees, 4000 kWh of electricity, and roughly 60 pounds of air pollutants (CBRE 2007i).

To expand the application, the team recognized that CBRE would need to provide ease-of-use paper recycling processes for tenants and occupants in conjunction with developing outside recycling contractors who would provide an efficient and cost effective recycling process. Additionally, an important next step for reducing white paper waste was for CBRE to implement paperless processes in their own business practices in order to design more comprehensive white paper programs for tenant and occupant stakeholders.

CBRE's recycling program also included the reduction of toxic waste streams. Fluorescent lighting, batteries, and ballast all have high amounts of mercury, which was known to be a high contaminant in landfills. Similarly, e-waste (computers, printers, and cell phones), manufactured with plastics and other toxic contaminants (e.g. lead, mercury, cadmium), was also known to leach chemicals into landfills. The team worked with a national service provider who determined best practices for recycling and toxic contaminant disposal processes.

Initial recycling programs for lighting, batteries, and ballasts were in place by August 2007. White paper and e-waste recycling programs were added in early 2008 and completed the initial phase of CBRE's integrated program. The demand was high for this program as several of CBRE's market leaders actively prepared launches in over ten cities during the first quarter of 2008. As more waste stream benchmarking was completed, landscaping and pest control processes were included in the program. As the

program expanded and as stakeholders requested implementation, the team planned for a more comprehensive recycling program to be in place by the end of 2008.

The Power of Big Numbers

The true success of CBRE's Sensible Sustainability program lies with the results. While concrete metrics were not defined during the research period, an analysis of the 2007 World Conference, escalating client interest, and recognition and awards (discussed in chapter 3) show significant results.

September's World Conference 2007 was the team's target date to deliver a comprehensive program. With the theme, "Toward a Greener Tomorrow," CBRE recognized that the event itself was an opportunity to implement actions promoting environmental stewardship. Al Gore was the headline speaker and he set the agenda, highlighting the need to preserve the environment and mitigate climate change.

With this focus, CBRE staged the event to provide attendees, sponsors, and other suppliers with the opportunity to offset carbon emissions due to travel and other energy usage activities. This was achieved in two ways: (1) by purchasing offset certificates and (2) through resource conservation. CBRE provided tips that emphasized recycling, use of public transportation, food waste elimination, and water and energy conservation.

According to the CBRE Case Study (2007b), the event achieved the following results:

- Eliminated 250,000 printed items, compared with prior years, saving the equivalent of 30 trees.
- Used only 500 sheets of letterhead in producing the event, compared with 10,000 sheets at World Conference 2006.
- Used 100 percent donated “green” electricity, or energy from a combination of wind and low-impact hydropower. This saved 8,000 tons of carbon.
- Eliminated the need for 9,000 plastic bottles with drinking water stations.
- Diverted roughly 98 percent of waste from landfills making the conference essentially waste-neutral.
- Donated unused food to Second Harvest and composted food waste.
- Donated 500 trees to the city of Toronto.

Ultimately, this was a carbon neutral event where the “company offset at least 200 percent of the CO₂ produced and at least 60 percent of other emissions that affect health” (CBRE 2007b). Thus, solid efforts were underway toward the 2010 overall corporate carbon neutrality goal.

Once the 2007 World Conference concluded, the client pull was another measure of the program’s traction. While client attention was an initial driver in the development of CBRE’s Sensible Sustainability program, the velocity of client engagement in the last quarter of 2007 increased Pogue’s travel schedule. By September 2007, a significant portion of his phone calls were about sustainability, either with offers to assist CBRE or to ask for CBRE’s help (discussion with author, September 21, 2007). This was in stark

comparison to his call volume a year earlier, when Pogue might have received one call monthly regarding the company's sustainability platform.

Perhaps the most salient measurement of client interest was the traction of LEED activities. By early 2009, 309 existing buildings (more than 60K square feet) were engaged in "Certification Sustainability Services," which was the LEED gap analysis program; four newly constructed buildings were certified; two "core and shell" projects were certified; and several other projects were identified (CBRE 2009b). By mid-2009, CBRE's "Sustainability Update" highlighted their progress: "Today, CBRE has registered nearly 250 existing buildings, and is currently managing nearly 30 LEED certified office properties nationwide. We expect that number to exceed 60 by the end of 2009—again, significantly more than any other firm" (Pogue Sustainability Update Cover Letter to Clients, emailed to author August 9, 2009).

These results (achieved during the action research period) highlight how vision, focus, and team dedication can lead to measurable results on sustainability initiatives. While the project began with a focus on greening CBRE's building portfolio with incremental no-cost and low-cost activities, it quickly escalated into a more expansive sustainability program that created value and competitive advantage for CBRE. A detailed analysis is presented in chapter 3 and includes more general discussions on how sustainability programs transform into strategies that provide corporate value to shareholders and the broader society.

CHAPTER 3

CASE STUDY ANALYSIS AND IMPLICATIONS

This case study on CBRE's journey toward corporate sustainability provides insight into how corporations drive change when challenged with risk. The commercial building services industry is an industry targeted for legislation and regulation that could shape future business processes and profits. The company, our team, and the wider ecosystem initiated efforts toward merging corporate financial profits with social and environmental agendas at an appropriate time.

In analyzing CBRE's experiences as the company initiated its sustainability program, it is important to use a theoretical framework to look at what worked and what opportunities remain by using a theoretical framework. CBRE has certainly built an award-winning CSR program and it has demonstrated a strong business case for activities in greening existing buildings. More can be achieved as the company transforms toward sustainability as a corporate strategy and incorporates a social agenda with additional, and more costly, capital upgrades for environmental stewardship. I will now discuss this case research and suggest where CBRE can accelerate its sustainability strategy to improve competitive advantage.

First, CBRE's Sensible Sustainability program had many positive implications for the company, the building industry, broader society, and sustainability strategy itself. Each of these areas will be discussed. Second, in reviewing the durability of corporate

sustainability efforts, it is important to look at the barriers, obstacles, and challenges that could thwart these initiatives in the corporate sector. It is also important to review how CBRE can continue to lead and facilitate change in the face of such challenges, as well as next steps for research. Finally, this thesis concludes by reviewing the business case sustainability provides.

Project Analysis

What Worked. The CBRE project is the single most successful implementation of a program that I have witnessed or participated in during my twenty-plus years of corporate engagement and leadership, primarily in terms of velocity and traction. This success was marked by a blend of external and internal factors, which combined with CBRE's size and scale, provided the context for a small team to drive a project that will likely have significant impact beyond the building services industry.

As previously discussed, the growing debate over the effects of greenhouse gas pollution and the high consumption of planetary resources by industry was gaining U.S. national attention as this program commenced. Given that the building industry in the United States consumes 72 percent of the nation's electricity and is responsible for 38 percent of the nation's CO₂ emissions (USGBC 2010), key stakeholders were demanding change. Sector leaders like CBRE recognized that their commitment was necessary to participate in forming impending legislation that would affect the industry.

Enter Dave Pogue, a man with a personal interest in preserving the environment, a commitment to CBRE, and a leader with a vision. Pogue's leadership of a small team was important to this case study. His strategy was to "Keep it small, prove it out, make it robust, build confidence, and ask for approval later" (discussion with author, July 18, 2007). He knew that the key to program traction and success was not to lead by large strides toward a long-term vision, but to lead with small steps while entering territory that was unknown, without a proven economic value, and, perhaps, contentious. Pogue knew that creating organizational buy-in was of critical importance and change could only be managed through incremental steps and small wins in order to gain traction on a larger scale.

Admittedly, by October of 2007 we realized that our first steps toward communicating with internal stakeholders to gain buy-in was more about "green-washing," marketing smaller and less-impactful changes that would ultimately shift the building industry and its ecosystem into sustainable behaviors. These early efforts, marked by no-cost or low-cost improvements rather than more dramatic actions (e.g. renewable energy), were intended to project and market the image of sustainability while gradually focusing on conservation and pollution prevention. The creation of tool-kits such as the 101 Tips and our messaging succeeded in engaging stakeholders, both internally and externally. Our team slowly walked the company talk of sustainability and moved from a marketing platform toward the metrics needed to build a solid business case to attract executive attention and create lasting change.

Leaders cannot be successful without a strong and collaborative team.

Interestingly enough, the makeup of our team could have resulted in failure. As the program was launched, two companies were merging and team members came from two disparate corporate cultures, lived on opposite coasts, worked in separate functional areas, and had no pre-existing relationships. Adding to this, we functioned primarily in the virtual domain in that we met infrequently and our communication took place mostly over the phone or through email.

Nonetheless, our small team was another critical factor in the project's success.¹ We accomplished much in a short time. Dave Pogue provided leadership and set both the long- and short-term vision. Pogue is a self-described "incrementalist," in that he defines progress as a series of small steps rather than large leaps. During our brainstorming sessions, we were able to create a strategic framework and timeline that ensured our success. In other words, while we moved aggressively, we never over-promised to stakeholders.

Brett Rutler was our chief technical expert with experience in both building engineering and energy management. Rutler was the original program coordinator for the Energy Star Program, instrumental in developing CBRE's relationship with the USGBC and overseeing the LEED-EB Certification program, and was actively involved in the development and introduction of the BOMA BEEP training program for Asset Services employees. As a result of these collaborative efforts, Rutler was responsible for creating the 101 Tips materials, collaborating in the design of the no-cost and low-cost

framework, and coordinating the Green Knights' activities. In addition, he was actively involved with clients in determining and implementing practical applications of energy management programs with demonstrable outcomes for building management operations. In August 2007, Rutler became a direct employee of CBRE; he had previously been part of a related but outside group.

Gerome Parsons, a purchasing and contracts expert who came to CBRE through the merger, leveraged the Five Pillars and 101 Tips into a low-cost sustainable procurement strategy and infrastructure. These efforts included several initiatives and sustainable practices that would eventually become primary elements of the broadly imposed Standards of Sustainability (CBRE 2007g). Most significant were his efforts in developing programs, practices, and commodity purchases in the areas of recycling (where he is considered an industry expert) and green cleaning practices and products. Parsons led the company's efforts to participate in the EPA-sponsored "Change a Light, Change the World" program (2007) and was very active with the USGBC. He is personally highly committed to the philosophy of sustainability and his research and study of the topic added great depth and knowledge to our overall efforts.

Mona Giovanni's primary expertise lies in the areas of process management, document control, training, and integration. As a former field auditor responsible for ensuring compliance to internal processes, she had the best knowledge of the daily work experience of the CBRE staff and was instrumental in motivating onsite personnel to adopt new programs and practices, which was a necessary component in gaining traction

of new and complex initiatives. Giovanni ultimately took responsibility for overseeing the organization and activities of the Green Knights, BOMA BEEP training, and collecting data from the Energy Star program. These efforts provided a significant contribution toward the Energy Partner of the Year awards. Finally, Giovanni's expertise in document management and handling made her the natural sustainability librarian. We knew that providing key stakeholders with the most relevant information was of vital importance. Storing and accessing the copious amount of information that we wanted to make available was a significant task. It required the architectural design of an on-line library along with clear revision history for documentation. Document handling needs were discussed throughout 2007 and implemented in early 2008. Giovanni was a key participant in melding the legacy of document control with the library we needed.

Howard Santo's expertise and creativity in marketing, design, and production was the glue that cohesively branded the Sensible Sustainability program. Throughout the project, we recognized that communicating our message and success was very important. In the early days, Santo's expertise was particularly important in "telling a good story very well" (Pogue discussion with author, October 7, 2010). He harnessed the company's "Toward a Greener Tomorrow" brand and incorporated the Asset Services programs and results into consistent messaging through vehicles that included brochures, posters, and videos. Santo improved Pogue's stump speech (CBRE 2007i) by making it more visually engaging and thus more interesting to target audiences. He developed the team's sustainable delivery mechanisms, including the 2007 World Conference Green

Thumb USB drive and the client-facing Apple iPod Touch, which he re-named the CBRE One Touch. In 2008, he created a new and more systemic campaign, *Planet Building*, along with the CBRE.com web architecture and layout.

I was also a key participant. My graduate research on climate change was useful in explaining why action was needed. My participation with the Salzburg Global Seminar and the Sustainable Enterprise Academy provided me with knowledge on the systemic effects of the 21st century mega-trends along with Triple Bottom Line (3BL) competitive advantage. This knowledge served me well in brainstorming, strategy creation, and research. For example, CBRE was initially focused on greening and my knowledge provided the sustainability focus as a more extendable global brand promise.

What made our small team successful? Were any team members expendable? How might this project implementation have been different with a different team configuration? My experience in Corporate America suggests that something rather unique took place with our team. Our small group was comprised of functional experts who, in combination with each other, provided expansive knowledge from complementary domains. In contrast, I have worked within other models of leadership where leaders fill team slots with people who behave, have skills and weaknesses, and solve problems in the same style and with the same skills as the leader. Instead, our team was not only highly skilled, but these skills and our personalities were also very diverse. We conducted ourselves with humor and mutual respect. This is not to say that we did not disagree or sometimes grow frustrated with each other. It just seemed like any

negativity did not last for long until we were creating again amidst the laughter and teasing. We bonded quickly and produced meaningful and lasting results. While any single one of us may have been replaceable at any given time, it is likely that replacing more than one would have delayed or changed the outcome. The diversity of skill sets, the cohesiveness of behaviors, and our general attitudes made our team very unique.

Understanding the success of this project must also include a discussion of the immediate context, or CBRE. As this project was underway, CBRE had purchased a competitor and the two companies were merging. Employees were concerned about keeping their jobs. Company executives were focused on the complexity of blending two large organizational structures and cultures. Pogue's immediate boss, a manager who focused on the details, left the company and was replaced by a manager with a more macro-level style. Our small team was able to build our program that initially went largely unnoticed until we had enough program traction to declare success.

Finally, CBRE's sheer size provided the context whereby this program could provide changes to the industry that other competitors could not. As discussed earlier, large companies are not usually the first-movers in new initiatives, but when they engage, their size provides the scale needed to shift industries. Unlike smaller competitors, CBRE's industry dominance included a wider group of industry stakeholders who together began to change the building management industry infrastructure to support sustainability programs and strategies. As CBRE leveraged its buying power and engaged its supply chain, it was clear that sustainable products and services could

become more available and at lower costs than before CBRE embarked on this initiative. Similarly, CBRE's engagement with industry trade associations and government agencies virtually guaranteed its seat at the bargaining table for developing industry standards and legislation. Finally, CBRE was able to influence the behaviors and attitudes of a significant stakeholder group—the two percent of the U.S. working population that moves through CBRE-managed buildings on a daily basis—who has the power to influence an even wider group.

Turning Points: From Bumps in the Road to Major Awards. With any project, it is important to ask: “What have we learned?” and “What could have been improved?” Learning opportunities often appear by examining the underbelly of success. In other words, our roadblocks stemmed from our successes and, not surprisingly, were primarily located between internal CBRE interfaces and the company's changing organizational culture. Luck, timing, and external forces were important factors that helped us as in any complex enterprise.

CBRE's Sensible Sustainability program began modestly in early 2006 and was initially introduced to the Asset Services group at the firm's World Conference in September of that year. Consequently, there was some degree of momentum for the program by the time the entire firm began focusing on the issue of sustainability by April 2007. While the corporation initially focused on promoting its carbon neutral announcement in September 2007, the urgency of the topic propelled the company leadership to make an announcement in May. Subsequently, although we had continued

in stealth mode and communicated primarily only to Pogue's organization, we realized that the Asset Services team had, in many ways, become a "sustainability poster child for the company and knew more than 99% of others within the company." Interestingly enough, we gained our speed, traction, and knowledge based on the "vision of only trying to stay one-inch in front of competitors and other key sustainability influencers" (Pogue discussion with author, July 18, 2007).

While our initial work went largely unnoticed, our first potential setback occurred in August 2007. At that time, all business units were asked to report on their efforts in the general area of sustainability. Many of the other business lines were not yet highly engaged and were being asked why by the executive team. Conversely, our success was noticed and began to gain visibility with corporate leadership. In my experience, I have observed that successful programs breed power in corporate organizations, which potentially results in two types of negative internal behaviors: (1) others will want to take over the project for their own political capital, or (2) they will want to inhibit the program's success in order to focus on their own goals and explain away their own failures to engage.

Adding to the timing of this potential internal minefield, a large client mentioned to Pogue's boss that competitors were far ahead of CBRE in their sustainability practices. While true in the initial phases, these competitors had been working on sustainability for a longer period and focused on a smaller and less complex portfolio. As described earlier, CBRE was not the first-mover, but CBRE was certainly the largest influencer.

These bumps in the road took a toll on the team. For each team member, the sustainability initiative was work added to an already full-time job. Pogue began to feel the pressure of needing to return to his “real” job. Fatigue, burnout, and time management issues were discussed among our team.

By December 2007, Pogue had an internal meeting with a major internal stakeholder where he presented a sustainability dossier and asked for more resources to build a deeper team. He expressed concerns about where the rest of CBRE was headed on the sustainability drive and requested more “arms, legs, and money for tactical help” (discussion with author, December 20, 2007). Interestingly enough, the key executive with whom he spoke expressed a similar frustration with some elements of the company. The initial belief was that many ideas in the company would bubble to the surface where entrepreneurship would win and change would be organic. Little of this had happened so far and the Asset Services programs were considered to be ahead of much of the organization.

These inconsistencies in adoption over the business lines could have derailed our team’s traction, but other effects emerged that highlighted the growing external interest in the program. First, by Summer 2007, an increasing number of clients were asking for help and CBRE’s sustainability efforts were considered a value-added service that was beneficial in business generation and retention. By October and through the early part of 2008, presentations to clients were accelerating and we could barely keep up with its service offerings. Other competitors were not going to this level of commitment and the

Sensible Sustainability platform was becoming a measurable competitive advantage for CBRE.

Additionally, CBRE's Sensible Sustainability program was recognized with several awards. In early 2008, the team learned that CBRE would be recognized as an EPA 2008 Energy Star Partner of the Year. This award was important on many fronts. The consultant that helped prepare the application indicated that the EPA typically recognizes companies with more seasoned programs. Yet, they were apparently "wowed" by the application and chose to recognize CBRE for its comprehensive and systemic efforts (Pogue discussion with author, February 7, 2008). Ultimately, CBRE also won this award for 2009 and 2010 as well. The awards, partnerships, and press continued to flow. Key examples are presented in Table 4. By the end of 2008, Pogue was also recognized by CBRE for his exceptional work and appointed the company's National Director of Sustainability.

Table 4. CBRE Sensible Sustainability Awards²

Date	Award or Recognition
Nov. 16, 2007	CBRE Announces Partnership with U.S. Green Building Council to Achieve LEED Certification for 100-Building Portfolio
Jan. 9, 2008	CBRE Group, Inc. 2007 World Conference: Gold Level Emissions Offset Achievement
March 4, 2008	EPA Names CBRE 2008 Energy Star® Partner of the Year
April 1, 2008	EPA Honors Major Commercial Property Managers
April 23, 2008	CBRE Achieves Fluorescent Bulb Milestone
April 24, 2008	CBRE Group, Inc. Becomes First Commercial Real Estate Services Firm to Join the Climate Group
Nov. 20, 2008	CBRE Earns U.S. Green Building Council Leadership Award
March 6, 2009	U.S. EPA Names CBRE 2009 Energy Star® Partner of the Year
April 27, 2009	CBRE Awarded Special sustainability Commendation at 2009 CoreNet Global Summit
July 7, 2009	CBRE Group, Inc. Registers 225 Office Buildings for U.S.Green Building Council’s “LEED EB” Rating
Sep. 22, 2009	Newsweek Ranks CBRE Group, Inc. No. 45 Among Top 500 Greenest U.S. Companies

Analyzing Corporate Sustainability

CBRE’s Sensible Sustainability program can be analyzed by Hart and Milstein’s framework (2003), which is supported by Willard’s (2005:27-29) CSR to sustainability stages (presented in chapter 1). Stuart Hart and Mark Milstein are experts on the implications of sustainable development for business strategies and co-leaders of the

Center for Sustainable Global Enterprise at Cornell University. Their research focuses on strategy and innovation for sustainable development and emphasizes shareholder value (or sustainability value) as a primary result when firms follow a balanced approach in assessing sustainability transitions and transformations (2003). Hart and Milstein's model is presented in Figure 1 (2003:60).

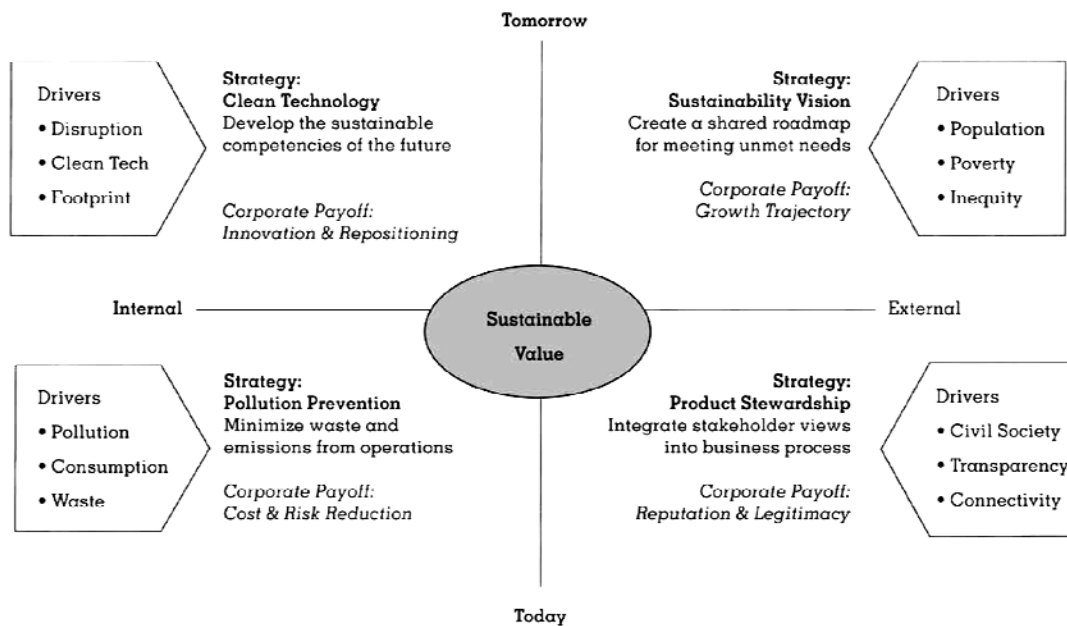


Figure 1: Sustainable Value Framework³

The two axes represent key focal continuums for corporations. The horizontal axis highlights boundary forces between internal and external factors that define the firm, its industry, and the wider ecosystem in which it operates. Similarly, the vertical axis represents the tension corporations face when choosing between focusing on today's needs versus those of the future. The result is four quadrants that represent the basic

components of shareholder value, which is used interchangeably with sustainability value (Hart and Milstein 2003).

The lower-left quadrant highlights sustainability activities that revolve around reducing pollution, cost, and risks to current operations. Sustainability activities primarily include process optimization and the reduction of material resource usage and waste output—primarily, at least for this case study, no-cost or low-cost improvements. Increased shareholder value is realized through incremental cost reductions, which should lead to increased profits (Hart and Milstein 2003:58). CBRE’s no-cost and low-cost activities through Energy Star, LEED, and the 101 Tips all fall into this category.

Lower-right quadrant strategies improve today’s shareholder value through product stewardship, which “extends beyond organizational boundaries to include the entire product life cycle” (2003:61). By incorporating the needs and value propositions of key stakeholders (e.g. customers, suppliers, the media, and government agencies) into products and business practices, firms demonstrate that they are open to outside influences on corporate vision and behavior. Sustainability activities in this quadrant are typically compliance-focused and are intended to improve existing products and services for existing or incremental markets. Output may include corporate statements regarding governance and corporate citizenship resulting in brand integrity and reputation (2003:58-64). CBRE’s focus on clients and LEED certification have resulted in numerous national awards, increased market share, and increased press coverage, which

has increased their reputation within the building management industry and its wider ecosystem.

The bottom half of Hart and Milstein's framework corresponds with Willard's (2005:28) "beyond compliance," or the first three stages of CSR development. During the research period, or through the aspirational and initial operational periods, CBRE's Sensible Sustainability program was primarily located in the lower half of Hart and Milstein's framework. Focused on the "today" portion of the continuum, it primarily included stakeholders with whom the company has had prior business relations or new partners supporting their sustainability journey.

The top half of the framework correlates with Willard's (2005:27-29) transformative Fourth and Fifth Stages. Here CSR programs are strategic in nature (Porter and Kramer 2006:88-89). Strategies leverage innovative corporate systems, organizations, and competencies intended to drive disruptive technological changes. Future markets are served with new products and services designed, sourced, produced, and disposed of utilizing creative and disruptive technologies (Christensen 2006; Hart and Milstein 1999). Investments in the upper half of the model are higher and riskier with far longer payback periods. Innovative clean technologies, processes, and markets fall into this quadrant (Hart and Milstein 2003:62-63). The result is to achieve an environmentally neutral operational performance (Hart and Milstein 2003:60).

While upper-left quadrant strategies focus on a firm's or industry's technology, operational, and corporate focus, the upper-right quadrant focuses on the firm's external

future and requires a vision describing strategies for growth and acquisitions of new markets and new products designed to serve a wider group of stakeholders. These efforts may include growth through offering new services or products into an existing customer base, or by providing significantly different and more innovative products and services into previously underserved markets (Hart and Milstein 2003:63).

These underserved markets will be hardest hit by the complex issues discussed in chapter 1 (e.g., population growth, climate change, or access to clean water and available energy resources) and have been largely ignored in corporate strategies. As firms have leveraged the bulk of the available markets in the upper and middle classes of the developed and developing world, future growth is dependent upon serving what theorists define as those in the “bottom of the economic pyramid” (Prahalad and Hammond 2003).

While activities in the lower-right quadrant focus on existing products and services, upper-right sustainability activities complete the triple bottom line (3BL) pillars of sustainability by incorporating strong financials with a strategy that supports future environmental and social issues. Examples include the Grameen Bank’s micro-financing program, the One Laptop per Child program, health and educational programs for those in severe poverty, and water purification technologies. Value is realized through sustainable efforts in growth and acquisition of new markets, brand equity associated with serving the world’s poor, and the creation of new metrics that define financial performance (Hart and Milstein 2003; Porter and Kramer 2003; Prahalad and Hammond 2003).

CBRE's efforts to extend its Sensible Sustainability program into previously underserved markets include (Pogue discussion with author, April 27, 2010): the development of "101 Tips for the Home," which was designed in collaboration with the WWF; an alignment with San Diego State University in an effort to survey building occupants to understand attitudes, behaviors, and productivity to underpin the business case for existing buildings (discussed later); efforts to leverage CBRE's multiplier effect to harness the communities of practice that extend from the two percent of the working population that moves through a CBRE-serviced building on a daily basis; and increased communication and collaboration with other stakeholders that include climate luminaries (e.g. Al Gore and Tony Blair), government policy brokers (e.g. USGBC and EPA), non-profits, and lectures within universities and other institutions. While incremental efforts will no longer suffice to take the company to the next step, Pogue's initial three-year vision and CBRE's momentum and progress to date shows that the company has the necessary drivers to take Sensible Sustainability to the next level.

CBRE's Sustainability Transformation

Hart and Milstein recommend implementing activities and projects in each of the four quadrants to attain the most shareholder and sustainability value. They suggest that most sustainability programs focus primarily on the lower quadrants where incremental activities support current business practices and stakeholders. "Relatively few established companies, however, have begun to exploit the opportunities associated with

the upper half of the model—the portion focused on building new capabilities and markets” (2003:64). The framework provides organizations with a balanced diagnostic tool for assessing opportunities and uncovering vulnerabilities (2003:64).

CBRE has the opportunity to capitalize on what worked well during the initial launch of its program. In order to move into the upper half of Hart and Milstein’s model, the company will want to move from stated aspirational, operational, and informational phases to incorporate strategies that are more developmental and collaborative in nature. Sensible Sustainability will have a longer lasting effect if it is changed from a program to a strategy that is embedded into the DNA of the company’s organization, management, and cultural value systems (Franklin 2008; Hart and Milstein 2003; Willard 2005). By linking a 3BL sustainable strategy into all that CBRE does, the company has the chance to leverage its leadership, scale, and multiplier effect to build social and environmental value. This will benefit CBRE, the building industry, other enterprises, and the broader society.

Strategic Vision: Planet Building. In late 2007, the team’s philosophy shifted from viewing buildings as single entities toward the idea that buildings are “concentric circles of communities” (Pogue meeting with author, January 17, 2008). This more systemic vision of property management transformed the relationship between clients, tenants, and occupants into a different type of service relationship. By leveraging CBRE’s knowledge and supplier base infrastructure, buildings were no longer to be managed as simply a space, but as broader communities that ultimately connect to the

planetary biosphere. *Planet Building* was launched as a strategy and campaign intended to leverage common interests between people, processes, and technologies in order to transform the power of one into the power of many (meeting with author, January 17, 2008).

The “Change A Light, Change the World” (2009) program is an example of how the company initiated efforts to influence communities of practice beyond the two percent of the U.S. working population that passes through a CBRE-managed building each day. Similarly, by collaborating with the WWF (Pogue 2010), CBRE transformed its 101 Tips for Buildings into 101 Tips for Occupants and 101 Tips for the Home. With programs that systemically and metaphorically connect the earth hour, earth day, climate week, energy month, and carbon neutral year, CBRE is taking the task further and is asking participants to sign commitments to make simple and permanent lifestyle changes (Pogue 2010).

Clients are benefitting from this systemic view of buildings as communities. Sensible Sustainability has shifted from a one-size-fits-all standardized interface into a strategy customized for different types of clients with unique goals. Standardization worked well for early adopters, but Pogue realized that influencing laggard clients required a more customized and menu-driven strategy that addressed these different needs and goals, which translated to measurements with distinct performance reports.

However, for CBRE to transform into a Stage Four or Five company as described by Willard (2005:29), Sensible Sustainability must leapfrog from the program level to the

strategy level. Willard encourages companies to get sustainability into the boardroom and embed the concept within the corporate culture. For success, Willard emphasizes that senior executives must visibly sponsor and support the integration of sustainability into the organization's strategy, purpose, and vision and expect the entire company to buy into the cultural change (2005:159). Porter and Kramer emphasize that CEOs should drive this unified strategy (2003:54). Furthermore, firms will miss opportunities in innovation and competitive advantage if sustainability is disconnected from the overall business and strategy (Hart and Milstein 2003; Porter and Kramer 2003; Willard 2005).

3BL Strategy: Create a Social Agenda. As CBRE moves further into the upper half of the model, the firm will need to create a social agenda to complete a comprehensive 3BL strategy (Porter and Kramer 2006). Porter and Kramer (2003; 2006) advocate moving beyond the usual communities of practice to realize increased economic benefits. They go on to suggest that the company and community are symbiotic in that they are mutually reinforcing and expanded collaboration can raise living standards in locations where firms operate (2006:89). *Planet Building* launched CBRE into this realm as CBRE's view of community expanded beyond stakeholders involved in conducting business transactions. Instead, the focus shifted to connecting with the two percent of the U.S. working population that moved through their buildings each day and with a strategy to connect with individuals who interfaced with those constituents.

Even more can be achieved. In "Serving the World's Poor, *Profitably*," Prahalad and Hammond (2003) describe innovative social agendas targeting the four billion

humans who live on less than \$2,000 per year. They posit that most firms focus on the saturated wealthy markets and middle class emergent markets, but miss serving the survival market, which they consider an untapped potential. While the two former markets rely on existing platforms, the survival market equates to new markets and requires new platforms for innovation, development, production, and sales. With a focus on aggregate rather than individual spending, products and services can target the needs of a village and can result in rapid growth (2003:12). They advocate partnering with organizations currently serving these markets (e.g., NGOs, local entrepreneurs, and women) (2003:21) to maximize current infrastructure and local knowledge. They also suggest that companies can act in their own self-interest and continue to focus on profit-making. In December 2009, a *Forbes* article quotes Prahalad, “The industrial system as we have it today cannot deal with another 4 billion people. What you see is the fairly early stages of the next industrial revolution, and the emerging markets are becoming the laboratory for that” (Bahree 2009).

While serving the world’s poor may not be of direct interest to the commercial real-estate services industry and companies such as CBRE, an expanded worldview would maximize opportunities and protect competitive advantage. Activities may include working in areas of natural disasters, aligning with developers to build communities that link home and work in order to reduce private automobile ownership, leveraging their extensive supply chain to reduce carbon emissions and dependence on fossil fuels in all countries where they do business, or by adopting a policy for employees

to use paid time for volunteerism or pools of money for micro-lending. By melding the local with the global, CBRE's *Planet Building* strategy would provide maximum benefits to the widest array of markets—and people—possible.

Harnessing Knowledge and Stakeholder Diversity. CBRE's growing strategy should include working with a more diverse and multidisciplinary set of stakeholders. This would expand their worldview as the company absorbs knowledge from a wider system of practice. Yves Doz (2001), an expert in the strategy and organization of multinational companies particularly relating to global technology and innovation, and his fellow authors advocate that firms need to prospect for knowledge outside of established comfort zones. They suggest that global firms have operated as global projectors with a teaching mentality and recommend searching for new types of knowledge and skills that may be gained from a shift toward learning from the periphery (2001:220-221). By collaborating with a wider set of external stakeholders, firms can maximize points of interconnection and unity to promote shared values (Hopkins and Reckmeyer discussion with author and CBRE team, November 2, 2007).

By combining the knowledge, skills, and needs of those in government, science and technology, academia, and non-profits, CBRE can blend public and private sector sustainability initiatives in new ways. The firm is already a leading advocate for the building management industry in working with government policy-makers to develop regulations and legislation based on data and metrics from current programs. In the future, CBRE may choose to create working partnerships with other stakeholders to share

in the higher risk and higher capital costs of developing innovative technologies and processes required for traction in the upper half of Hart and Milstein's value model (2003). CBRE has the opportunity to share what they have learned and educate others (e.g. non-profits) on what is needed to launch and embed a sustainability strategy.

Organizational Next Steps. It is important for 3BL sustainability practices to be embedded in the entire organization and culture. However, disruptive technologies and collaboration with more diverse stakeholders represent changes that are significant for most organizations. In order to facilitate this transformation, Willard (2005:159) suggests that firms create a separate sustainability profit center. This separate entity should report directly to the CEO and focus on 3BL innovation, value creation, and knowledge generation. The business model should be flexible and adaptive to accommodate markets that may differ from the core business.

Hart and Milstein (2003:65) also recommend a separate group that operates outside of the core. They highlight how start-up organizations, philanthropists, and non-profit organizations have classically provided the necessary innovation, development, products, and services for social agendas typically needed for 3BL sustainability. These authors advocate creating change by running discrete experiments with more diverse stakeholders in order to move into the upper half of the model. Further, given the necessary increase in capital to achieve the types of disruptive technologies and processes needed in concert with increased investment risk, Hart and Milstein suggest this group be

funded with a separate budget and metrics to ensure longer-term success and 21st century competitive advantage.

In *Drive*, Daniel Pink describes these emergent organizational structures as purpose-maximizers and describes new entities such as the LC3 or B-corporation (2009:24-25). The LC3, which stands for low-profit limited liability, operates as a for-profit firm with social benefits as its main goal (e.g., TOMS Shoes, discussed in chapter 1). Similarly, amending a firm's by-laws forms a B-corporation. These changes include incentives that favor long-term value and social impact rather than the more classic pure economic gains required of for-profit companies.

CBRE's early sustainability success was achieved with our small team that operated under the firm's radar and forming this high level group would ensure continued innovation, flexibility, and adaptability. Pogue's change in function is a start toward what theorists suggest, yet his role at the end of the research period had a primary focus on the United States. Going forward, CBRE will benefit by forming a global sustainability organization that reports to its CEO with a separate budget and metrics that will allow the company to prospect and collaborate with more diverse stakeholders to achieve true global transformation.

Quantifying the Business Case. For sustainability to truly take root within an organization, it must add value (Franklin 2008; Hart and Milstein 2003; Porter and Kramer 2006; Willard 2005). Without a compelling business case highlighting either hard

savings or significant PR and brand equity, the whole notion of corporate sustainability will remain a niche rather than a broad platform (Franklin 2008:5-11).

In order to understand how tenants and occupants responded to CBRE's Sensible Sustainability program, our team collaborated with the academic community. In 2009, the team collaborated with Dr. Norm Miller, professor and director at the University of San Diego's Burnham-Moores Center for Real Estate, in conducting a year-long study to determine the attitudes and experiences of tenants occupying green-retrofitted buildings. The data was amassed from surveys of occupants in 154 CBRE-managed LEED certified or Energy Star labeled buildings in ten U.S. markets and resulted in over 800 responses. As the largest research study of its kind, the results indicate "that tenants in green buildings experience increased productivity and fewer sick days, and that green buildings have lower vacancy and higher rental rates" (CBRE Press Release 2009), supporting Willard's (2005:135) findings that productivity and reduced absenteeism were outcomes of working in green buildings. In 2009, CBRE reported in a press release:

- Approximately 55% of those who responded reported an improvement in productivity, which translated into roughly \$20 per square foot of occupied space.
- Respondents reported 2.88 fewer sick days in office buildings that were upgraded to green practices, which equates to about \$5.00 per square foot of occupied space.
- Green buildings have 13% higher rental rates and vacancy rates that are 3.5% lower than non-green buildings.
- 18% of tenants are willing to pay more for green space and 71% feel that leasing green buildings is increasingly more important.

- 70% of tenants surveyed believed that offering healthy indoor environments to employees helped their image and 61% believed it aided in staff retention.

These data are important because the results quantitatively and qualitatively support the importance of retrofitting existing buildings with greener operational practices. While CBRE's no-cost and low-cost activities can be quantified through a reduction in resource costs (i.e. energy and water), these data points provide information on the softer costs revolving around social values and the public perception of sustainability in general. Furthermore, these points provide markers for scenario planning to envision a future of more transformational sustainability activities.

Implications of the CBRE Case Study

This case study of CBRE's sustainability initiatives has significant implications. In distilling what was learned and where to go next, I find ample examples of how this study provides competitive advantage for CBRE and the building management industry, for corporate sustainability itself, and for society in general.

CBRE's journey into sustainability has impacted the building management industry at large. While the company was not the first-mover, its size, scale, leverage, multiplier effect, and leadership have changed the industry for the future. By starting small and with an incremental vision, CBRE's Sensible Sustainability highlights the value of collaboration between the industry, supply chain, clients, and governmental agencies in creating rapid change.

By paying attention to the interfaces between key stakeholder groups and driving toward common values (Franklin 2008; Porter and Kramer 2006; Reckmeyer 2006), our team created a platform that encompassed basic no-cost and low-cost activities with a vision of growth. Pogue realized that changes associated with climate change and energy reduction were political but chose instead to find the incentives and mechanisms to make practical changes. Through focused communication and education, the team provided incremental steps that resulted in change captured by early wins. These efforts influenced early adopters and ultimately other stakeholders who questioned the validity of sustainability in general or who were unsure where to begin.

By systematically working to strengthen the business value of sustainability, CBRE has connected and worked with a more diverse constituency outside of the building industry's business-as-usual ecosystem. These collaborations, with government institutions, consultants, academia, noted luminaries, and non-profits dedicated toward change (e.g., Al Gore, Tony Blair, and the WWF), have resulted in widening the value chain's sphere of influence. *Planet Building* systemically connects the industry with a social agenda and moves beyond the building and into deeper communities of practice or of influencing individuals.

CBRE's efforts in sustainability can be measured. At the beginning of the research period, the firm managed 1.7 billion square feet globally that has now grown to more than 2.5 billion square feet (CBRE 2010). As the firm incorporates a social focus

and drives value changes in their 3BL strategy, the industry is poised for additional competitive advantage.

CBRE's sustainability program and resulting strategy have implications for other companies or industries interested in incorporating sustainability into its business model. Its staged approach (aspiration, operation, and information) provides a starting model for other firms. By setting goals and a vision, CBRE has proven that incremental activities provide the initial change needed to convince current stakeholders both inside and outside of the company or industry of the business value in pursuing sustainable initiatives. Similarly, CBRE's focus on training and communication highlight the importance of including different constituencies to attain buy-in. The company explored the concept of sustainability and what actions would be practical during the aspiration phase and systematically delivered ever-widening programs during the operational phase. The use of data management in the informational phase has allowed the company to quantify and qualify their efforts to build the business case for sustainability. This has kept senior executives interested and brought significant attention and recognition to CBRE.

This case study also has implications for the overall importance of CSR and sustainability for 21st century competitive advantage. Our team's efforts were conducted outside of the models of Hart and Milstein (2003:60) or Willard (2005:29). At the beginning of the research period, which was the inception point for Sensible Sustainability, the primary modes of innovation were to follow the Energy Star program launched as an initiative at CBRE's 2006 World Conference. Other programs, including

BOMA's BEEP and USGBC's LEED, were quickly dovetailed into the strategy. Thus, CBRE's initial journey highlights the simplicity of filling in the lower half of Hart and Milstein's framework. Through simple blocking and tackling activities, CBRE's case study demonstrates that it is relatively simple to initiate a program.

Yet the most important implications for sustainability strategies are for society at large and even the global commons. The challenge going forward is to reduce the environmental footprints of buildings; focus on cradle-to-cradle resourcing that encompasses the entire lifecycle of resourcing, production, distribution, and disposal; and reducing the overall impact of people on planetary resources. As CBRE drives toward the upper half of the model, its efforts underscore the complex interconnections between increasingly more diverse stakeholders, the mega-trends, and society at large.

Barriers, Obstacles, and Challenges

Despite the significance and importance of sustainability strategies in corporate organizations, several challenges exist. From a broad perspective, these obstacles range from specific barriers within a corporation to broader issues that highlight a lack of understanding in executive suites regarding the benefits of sustainability. While signs are emerging that sustainability has increased traction, its implementation as a corporate strategy has not yet reached a tipping point (Willard 2005:255). Mindsets need to change.

Willard (2005:163-227) describes four primary obstacles that impede the progress of sustainability strategies. First, he suggests that sustainability is unlikely to gain traction unless supported by key management at the very minimum (2005:169). Creating true and lasting change in an organization typically begins in the executive suite and is a response to market forces that create a perception of “the push of a problem...or the pull of an attractive ‘shared vision’” (Willard 2005:87). If a CEO does not sense pressures from markets or key shareholders, he or she simply cannot see the business value of sustainability or the likelihood of success. The benefits of sustainability as a strategy are greatly reduced, if not impossible (2005:169).

However, key pressures and risks continue to emerge. For example, the U.S. Securities and Exchange Commission (SEC 2010) has initiated regulation that will require public companies to disclose greenhouse gas emissions and the associated economic risks. Similarly, the State of California will implement mandatory green building standards and codes for new buildings in 2011 (Office of the Governor 2010). As legislation and regulations for transparency increase, the need for CEO and other top executive support increases in order to manage risk at the regulation and policy table (Franklin 2008; Willard 2005). As Pogue said, “It is better to participate in developing the right regulations and legislation than have to respond to that which is imposed” (Pogue 2010).

Second, Willard suggests that CEOs and executives are often reluctant to engage due to fears of a public backlash, which are primarily associated with “green-washing”

(Willard:181). Green-washing is typically defined as dubious efforts by marketing and PR departments to use only parts of the truth to create a false impression of greening or sustainability (Franklin 2008; Willard 2005). The risk of green-washing is that other stakeholders, particularly NGOs, activists, and green consumers and shareholders, are “...experts at smelling a rat” (Willard:185). Green-washing turns CSR and sustainability efforts into a sideshow and, when done poorly, these programs can be harmful (Franklin 2008:3-4). Instead, partnering with other stakeholders on 3BL activities and discussing them through open and transparent communication strategies helps mitigate criticism and promotes sustainability platforms as supportive for business and the promotion of competitive advantage (Franklin 2008; Porter and Kramer 2003; Willard 2005).

The risk of impending legislation and the fear of a public backlash lead to the third obstacle suggested by Willard, which is the perception that sustainability’s costs outweigh its benefits (Willard 2005:195). Skeptics return to Milton Friedman’s position on the role of the corporation (1970) and eschew any corporate spending that does not directly benefit shareholders (Franklin 2008:4-5). However, with the growing risk of not participating and the emerging cost savings of simple no-cost or low-cost savings, ignoring sustainability becomes in itself a risk and suggests a lack of understanding and commitment to the value of corporate sustainability (Willard 2005:197). To fully realize the results that can be gleaned from sustainability, corporations need to integrate it into the firm’s core values, decision-making, and overall strategy (Franklin 2008; Porter and Kramer 2003; Porter and Kramer 2006; Willard 2005).

Fueling this assumption is that CSR programs take too long to implement or to provide acceptable investment returns (Willard 2005:199-203). As has been discussed, the initial investment needed to build a program in the lower half of Hart and Milstein's model can be low-cost or no-cost, and the costs associated with moving into the upper half of the model are larger and riskier (Hart and Milstein 2003). One example is that firms need to be incentivized to invest in clean, low-carbon technologies. Technologies exist, but the politics and economics of the countries that should own the bulk of the investment risk and emission cuts creates the regulatory ambiguity that results in investment and implementation delays. Governments need to step in and send signals to industries to fuel such investments (Duncan 2009a:11-12).

It is this ambiguity that supports Willard's last obstacle—that sustainability requires a shift in mindset or worldview (2005:209, 225). Figure 2 highlights the subtle shift that Willard suggests.

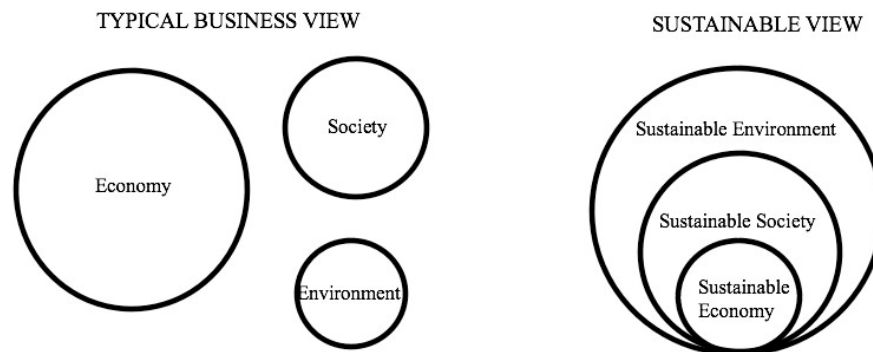


Figure 2: Two Conceptual Views of Sustainability Models⁴

This type of change is difficult and Willard suggests that organizational cultures typically respond with a 4-D defense: deny, delay, divide, and discredit (2005:225). CEOs and other executives all too easily see incorporating a social and environmental agenda into their strategies as an attack on capitalism fueled by activist or environmentalist rhetoric (2005:211). This supports the typical business view that often limits work with other stakeholders and resembles the model presented on the left side of Figure 2 rather than the integrated sustainability view presented on the right. To support that worldview, most corporate executives believe sustainability should be part of the government domain rather than relying on the corporate sphere's speed, finances, and operational efficiencies (Franklin 2008; Willard 2005). However, this is a shortsighted view, as corporations need to manage risk, shareholder mindshare, reputation, and brand at the very minimum. Willard highlights this shift in corporate mindshare: "In fact, as Milton Friedman would say, 'The business of business is business.' The business of business is staying in business" (2005:215).

Leading Forward and Facilitating Change

Despite these obstacles, CBRE has an opportunity to continue its leadership in sustainability. Launching the Sensible Sustainability program, while difficult, was aided by several internal and external factors. Leading with an incremental vision worked to

quickly fill in the lower half of Hart and Milstein's sustainable value matrix (2003:60). Going forward will be far more difficult.

CBRE's vision will organically expand under Pogue's leadership. While activities during the research phase were incremental, this method going forward may be dangerous as the company could neglect large opportunities (Hart and Milstein 1999; Hart and Milstein 2006). Instead, sustainability will need to be incorporated into the overall corporate strategy (Porter and Kramer 2006; Prahalad and Hammond 2003; Willard 2005), integrated into a cohesive building management industry strategy, and supported in the national and international political arena. The company is engaged in the political arena and CBRE's growing business case will support the argument and need for the reality of increased economic investment in sustainability.

Financing future projects will require large amounts of capital with long payback times. Research and development in implementing new clean technologies will require new kinds of partnerships and ventures that can pool resources. Typical metrics for understanding the return on investment will need to be retooled in favor of understanding and measuring value on some of the softer metrics such as social entrepreneurship and community building (Hart and Milstein 1999; Hart and Milstein 2006; Porter and Kramer 2003; Willard 2005).

With the global recession and growing tension between the global and the local, sustainability initiatives are at risk of becoming superfluous and would thus remain outside core business goals. The public has climate change fatigue (Nordhaus 2009; Pew

Research Center 2009), growing distrust of and disgust at corporations and executive greed (Andrews 2009; New York Times 2010), and boredom with the commoditization of green-washing marketing and advertising (Franklin 2008; Willard 2005). CBRE will need to find points of leverage and connection while managing through the points of disconnection. Communication activities must continue to connect with constituent's value propositions, and data are needed to support future claims. It is imperative the firm does what it says it will do and not over-promise and under-deliver. Ultimately, this means that the company will want to focus on efforts that are good for profits while promoting social welfare and environmental preservation with the disruptive methods found in Hart and Milstein's upper half (2006:60).

Next Steps for Research

While this case study provided insight into how a company designed and implemented a sustainability program, it also poses several opportunities for further research. Future researchers may find it interesting to continue to follow the business case development, cast a wider net for analyzing sustainability initiatives and strategies beyond one company in one industry, or follow the emerging industry of sustainability programs in the corporate domain.

In the area of CSR or sustainability measurement at the Triple Bottom Line—economically, socially, and environmentally—the business case remains primarily a thumb sketch, and more data are necessary to incentivize laggard CEOs. It would be

interesting to follow other companies to ascertain how the incorporation of a social agenda is achieved and measured, how it improves the lives of those at the bottom of the pyramid, and what payback metrics would be appropriate. Future research could follow how companies work together to deploy cradle-to-cradle technological innovations in reducing resource usage and emissions. Given the high cost and risk, it is important to follow successful collaborations, designs, and implementations that support a business case that leads to measured profitability and competitive advantage. Any detailed future analysis would also need to include the standards used and a statistical analysis of both hard and soft metrics.

Future research should cast a wider net to compare and contrast a larger sample of companies and industries. Finding and following companies or other organizations that have moved programs into the more strategic upper half of Hart and Milstein's model (2006:60) or into Willard's Stages Four and Five (2005:29) would further quantify the competitive advantage of sustainability programs. Understanding the leadership, vision, strategy, organizational focus, and culture of the organization would provide others with significant knowledge in building their own programs. Similarly, reviewing how these organizations cooperated and collaborated with other constituents toward success would provide clarity for others in working within different operational environments to finance and propel sustainability solutions forward.

Other research could include a global study of corporate sustainability programs to determine whether they differ in strategy between developed and developing countries.

Looking at company size or the strategies deployed by public versus private firms would further inform the success factors of corporate sustainability and the usefulness of Hart and Milstein's model. It would also be valuable to follow sustainability programs through differing supply and demand lenses (e.g., labor, markets, and access to capital) to research how certain conditions affect a firm's focus on initiatives such as sustainability. Willard suggests that sustainability may be reaching its tipping point (2005:255) and future research would be useful to determine how and when it transforms from something that differentiates corporations to a strategy that must be embedded for corporate survival.

Finally, the industry of sustainability itself needs to be tracked and understood. As diverse stakeholders incorporate sustainability, the CSR/Sustainability wave has in itself become an industry. Academic institutions now include sustainability into MBA programs or design entire centers toward the study of sustainability; the government is imposing legislation, reporting standards, and has agencies such as the EPA and the USGBC involved and designing programs and training; non-profits and other international programs are engaged, as are activists, citizen collectives, and demanding shareholders and stakeholders. As the corporate sector is engaged, it will be interesting to see how these programs evolve, what forms emerge, and who (or what entities) emerge in the space to capitalize and make money on driving this new industry—and market—forward. As posited in an article in *The Economist*: “Corporate responsibility in recent years has been driven by globalisation. If markets stay open, it will continue to spread.

But openness should not be taken for granted: ‘The day markets close, CSR is over’” (Franklin 2008:12). That would be a solid start for the next generation thesis statement.

Corporate Sustainability for Competitive Advantage

With the corporatization of the public sphere (Fried 2007) and the growing power of industry clusters, corporations are important stakeholders in shaping the 21st century for future generations. While the role of the firm has classically been rooted in only increasing shareholder profit (Friedman 1970), Willard (2005) underscores the growing need to protect reputation and brand in this era of increasing transparency. Corporate Social Responsibility (CSR) programs emerged to mitigate risk, illustrate regulatory compliance, reduce cost, and improve operational efficiencies. While these programs ensure survival, sustainability strategies take these CSR platforms to the next level and, with a focus on the 3BL, serve to protect reputation and provide differentiation.

CBRE’s *Planet Building* results substantiate the existence of a business case for sustainability strategies and highlight the firm’s increased competitive advantage through differentiation. Driven by economics (NOI), the need to respond to volatile energy resourcing and pricing, climate change concerns, pending legislation and regulations, and more demanding clients and shareholders, the company realized it needed to respond and launched its Sensible Sustainability program in 2007. Early results achieved through simple no-cost and low-cost activities equated to hard dollar savings, improved operational efficiencies, reduced cost in the supply chain, increased market share, and

added revenue for the company through increased consulting and its LEED gap analysis program.

Perhaps CBRE's most important results lie in soft dollar savings and metrics. Willard suggested these equate to the 40 percent of market capitalization that is based on reputation (2005:59). According to the 2004 World Economic Forum's "Voice of the Leaders" poll of leading CEOs, these softer metrics are more difficult to quantify, but provide the differentiation and competitive advantage necessary to boost firm growth. The results of CBRE's collaboration with the University of San Diego underscore the results of this poll. The findings intimated that tenants would pay increased rates in order to attract and retain employees based on the benefits of occupying "greener" buildings. As Sensible Sustainability took root, CBRE realized improved relationships with clients, tenants, and others within its entire ecosystem. CBRE's brand reputation increased, which was underscored by the firm's numerous awards, heightened press coverage, and expanded collaborations with more diverse stakeholders (e.g. WWF, academia, climate luminaries, and government policy brokers).

As CBRE and other companies engaged in sustainability strategies determine where to go next, Hart and Milstein's Sustainable Value Framework (2003:60) provides a roadmap. The bottom half of the model is useful in the early phases and suggests practical changes based on continuous improvement activities. CBRE's Five Pillars and 101 Tips in conjunction with the programs deployed (Energy Star, LEED, "Change a

Light, Change the World,” and BOMA training) are examples of practical implementations that resulted in cost-savings and improved stakeholder engagement.

The upper half of Hart and Milstein’s model (2003:60) provides firms with the roadmap for improved thought leadership, differentiation, and competitive advantage. Through increased collaboration and experimentation, these activities focus on the innovation needed to create the greener technologies needed for the future and to increase economic growth by building new markets that meet underserved needs. CBRE’s *Planet Building*, with its shift in focus from the building to the community, has become the company’s strategy for melding its environmental practices with a growing social agenda intended to reach beyond the two percent of the U.S. working population that move through CBRE-managed buildings on a daily basis. Pogue’s leadership and CBRE’s commitment suggest that the firm is on track toward realizing increased competitive advantage and differentiation.

As Willard suggests (2005), businesses should plan to overcome and meet the challenges in launching sustainability strategies. To ensure success and reap the most benefit from 3BL sustainability strategies, CEOs and Boards must be engaged. With increasing market pressures and more demanding shareholders and customers, CSR programs must migrate from the program level to the strategy level and become part of the overall corporate culture (Willard 2005). This means moving beyond mere marketing programs toward creating a longer-term roadmap that melds practical cost-reduction

strategies with the required shift in firm mindset that results in prospecting for innovation (Doz et.al. 2001).

Porter and Kramer suggested that sustainability platforms are an “inescapable priority for business leaders in every country” (Porter and Kramer 2006:78). Fried believes that sustainability has merged with capitalism (discussion with author, January 29, 2008). Hart and Milstein go further: “Overall, innovators and entrepreneurs will view sustainable development as one of the biggest business opportunities in the history of commerce” (Hart and Milstein 1999:25). Even with the global recession that began in late 2007, sustainability practices continue in the corporate domain. This suggests that sustainability strategies may provide firm competitive advantage in the early part of the 21st century, but may soon be a requirement for survival.

With the global complexities of the 21st century, corporations must engage as active stakeholders to improve the global mire. CBRE’s *Planet Building* and this case study are only the start. More research is required. There is a business case for sustainability. Its design and implementation will transform and change with time, but sustainability strategies are here to stay.

NOTES

PREFACE

1. In addition to this research and fieldwork, I used many forms of primary data including: participant-observation, conversations with people about the building management industry, and media generated by CBRE.

CHAPTER 1. THE IMPORTANCE OF CORPORATE SUSTAINABILITY PROGRAMS

1. Data from Bureau of Economic Analysis 2009; CIA World Fact Book 2009; Fortune 2008.

2. Treasury Direct 2010.

3. Willard 2005:27-29. Adapted to table by author.

CHAPTER 2. CASE STUDY OVERVIEW AND RESEARCH RESULTS

1. Pogue discussion with author, July 18, 2007. Adapted to table by author.

CHAPTER 3. CASE STUDY ANALYSIS AND IMPLICATIONS

1. Pseudonyms have been used to protect the privacy of team members, except for David Pogue (with permission).

2. CBRE 2009a. Adapted to table by author.

3. Reprinted with permission from Hart and Milstein 2003:60, fig. 2.

4. Modified with permission from Willard 2005:224, fig. 5.4.

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