The Bees who Make the Hive Thrive: An Examination of Educating for Business Sustainability

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ABSTRACT

The impact of human behavior on energy use in commercial buildings is largely underestimated by existing energy education and energy efficiency programs that focus on buildings, equipment, and process improvements and fail to focus on the people, the true energy users in a building. Additionally, these current programs and related pedagogy fall short of considering energy within the greater context of sustainability - the environmental, social and economic value sought by organizations. The current state therefore undermines the potential for long-term energy savings, and ultimately, business sustainability.

This paper examines the market barriers that limit the scope of energy programs and education, and describes an innovative utility-administered program called the Business Sustainability Challenge (BSC), which attempts to address the identified barriers. The BSC assists Connecticut businesses in making strategic energy, resource, waste and carbon emissions management integral parts of their business practices, corporate culture, and business strategy. These objectives are accomplished by educating existing organizational personnel on the fundamentals of business sustainability, encouraging continuous improvement, and providing the resources to assist participants in setting goals, developing plans, assessing progress and communicating results.

Approaching energy education within the context of sustainability produces a more knowledgeable, and sustainability-focused society of people who make decisions in and on behalf of their businesses, communities, and homes. Comprehensive sustainability education has opportunity to improve the breadth and depth of consumer knowledge, concurrently creating a robustly trained workforce to supply, and the market demand for, the products and services of a clean energy economy.

Introduction

As energy efficiency becomes more widely accepted as the “first fuel", our collective efforts to build a clean energy economy and culture must include a comprehensive focus on educating and training energy efficient people whose behaviors and decisions will ultimately determine our society’s capacity to achieve a sustainable, low-energy future. Historically, the impact of human behavior on energy use in commercial buildings has been largely underestimated by energy efficiency programs that focus primarily on buildings, equipment, and process improvements. Consequently, our current energy education has had a similar myopic focus and largely dismisses or even ignores the operational patterns created by the people, policies and practices that comprise the virtual assets of a business. In the context of our current economy, the failure to educate and train employees and tenants, the true energy users in most

commercial buildings, undermines the potential for long-term, sustainable energy savings, a culture of continuous improvement, and ultimately, the financial, environmental, and social sustainability of the business.

This paper explores how our current energy education can evolve to address energy within the greater context of business sustainability and educate individuals who could have the most impact on an organization's financial, environmental and social bottom line – the existing employees of existing businesses. This paradigm shift is important because it connects the organization not only to profits (financial capital), but also to the environment (natural capital), and the people (social capital), who are ultimately the foundation of any business. These current issues and required paradigm shift are addressed by The Business Sustainability Challenge (BSC), a pilot program of the Connecticut Energy Efficiency Fund (CEEF), which provides the resources, tools and structure to help organizations integrate sustainability into the fabric of their organization.

In this customer-driven program, utility personnel partner closely with the program participants and empower them to make strategic energy and carbon management integral parts of their unique business practices, corporate culture and business strategy. This pilot program is the result of unprecedented collaboration among The Connecticut Light & Power Company (CL&P) and The United Illuminating Company (UI), who develop and administer the CEEF programs, Connecticut's business and industry advocates and state regulators. CL&P is the state's major electric transmission and distribution utility, serving 1.2 million customers in 149 towns in Connecticut, and UI is the electric transmission and distribution utility representing the Greater New Haven area, which services over 324,000 customers in seventeen Connecticut towns.

Defining the Term and Context of "Sustainability"

Before discussing the market barriers that our program is designed to address, it is important to first share the definitions upon which the BSC program was developed. The commonly accepted definition of sustainable development was articulated by the Brundtland Commission of the United Nations in 1987, as that which "meets the present needs of society without compromising the ability of future generations to meet their own needs"[1]. For purposes of this program **"Business Sustainability" is considered to be a proactive approach to ensure the long-term viability and integrity of the business by optimizing resource needs, reducing environmental, energy and social impacts, and managing resources without compromising profitability.**

The premise under which the program has been developed and implemented is that in order for businesses to survive, they can no longer simply comply with laws and regulations, but must do business in financially, socially and environmentally responsible ways that stretch beyond measures of compliance and typical risk management, and strive for long-term sustainability. Although there is no set formula for achieving business sustainability, the recent market has seen, as indicated by several global stock indexes including the Dow Jones

[1] Bruntland, G. (ed.), (1987), "Our common future: The World Commission on Environment and Development", Oxford, Oxford University Press.

Sustainability Index, that companies who are able to link social and environmental responsibility to strategic and financial goals are able to bring increased value to their shareholders and also display superior stock performance[2].

How the BSC Addresses Current Market Barriers

Barrier #1: Current Context and Content of Energy Education

Current energy education offered by business and industry associations, utilities, or other academic and training institutions has historically focused on energy efficiency in buildings, efficient technologies installed in those buildings, or the various types of renewable energy generation technologies. As our national policies, funding, and hopes turn toward the future of our clean energy economy, we have focused on supporting the introduction of, and training related to these sustainable energy technologies and the new "green-collar" jobs they create .We argue, however, that this narrow vision misses the opportunity to teach energy education within the more global, comprehensive context of sustainability.

Addressing energy and energy efficiency as a stand-alone topic may be a dangerously short-sighted approach to training and workforce development. Connections are currently made between energy, operating costs and an organization's financial bottom line; but a broader connection can still be made. By highlighting the connection between energy, climate change and an organization's social, environmental and financial sustainability, a new context within which to educate now opens up. The scope of the education message must expand to teach about all energy sources and all energy uses. Also, beyond energy, there are many other resources, like water, which we as a society of consumers and businesses must realize the limits and costs of both now and in the future. This examination of education content highlights that what is currently lacking is training or guidance that combines "Business 101", with "Strategic Management", and the basic principles of sustainability.

[2] (2006) Savitz, Andrew W. ***The Triple Bottom Line***. San Francisco: Jossey-Bass.

BSC Response: Sustainability Curriculum

As the economic, environmental and social viability of sustainability has taken root and gathered consensus and interest in the business community, there is no shortage of research about sustainability; however, there is little out there that guides businesses on how to "get it done". The numerous books, articles and conference that explore the successes of sustainable businesses usually demonstrate the power behind the practice through case studies of large, resource-rich, "first-mover" companies. While these examples can serve to *inspire* businesses to address sustainability in their own organization, it does not provide the education and skills that may be required to make that happen. Furthermore, given that current education programs often focus on training individuals, but fall short of doing so for organizations, training can be a key element of implementing a sustainability action plan. The focus thus becomes "training the trainer", who can then become the vehicles that deliver further training and transfer knowledge throughout their organization. As a part of the Business Sustainability Challenge, curriculum has been developed to address the knowledge gaps and skill needs in various areas, all within a broader context of sustainability.

The Business Sustainability Challenge curriculum was developed to help any business, regardless of their size, sector, location, or previous exposure to sustainability, realize sustained benefits through energy and carbon management, continuous operational improvement, systemic behavioral change, and a sustainability strategy that will help drive the social, environmental and financial performance of their business. This curriculum was built on the premise that there are certain commonalities that businesses share, that can serve as a foundation for addressing business sustainability. Each course is four hours long, facilitated by utility program administrators, taught by one or more subject-matter-experts, and delivered to an audience of employees representing those companies participating in the Business Sustainability Challenge program.

The Business Sustainability Challenge Curriculum

Course	Course Topic	Course Description
BSC 101	The ROI of Investing in the Triple Bottom Line	Business decisions for People, Planet & Profit
BSC 102	Sizing up your Footprint: Connecting Energy and Carbon	Metrics that matter to your business
BSC 103	The Playbook: Green Teams, Goals, Plans, and Budgets	The building blocks for actionable initiatives
BSC 104	Waste Not, Want Not: Greening Your Lean	Zero waste? Reduce & reuse…and recycle!
BSC 105	Resource Conservation: What goes in must come out!	The holistically efficient building and business
BSC 106	Greening the Stream: Sustainable Supply Chains	Partnering to banish wasted resources
BSC 107	Sustainability O&M: Power of Continuous Improvement	Taking on sustainability, and keeping it up
BSC 108	Communicating Sustainability: Inspiring Culture Change	Sharing good news with all stakeholders

Connecticut Light & Power, 2010 Business Sustainability Challenge Curriculum

This curriculum was developed to provide a structured path that a group of students can travel together, and throughout the process help one another evolve, and create their own collection of experiences, strategies, and "best practices". This group learning experience builds a base of knowledgeable sustainability "ambassadors", and creates a network of relationship and resources that connect and evolve both during and after their participation in the BSC program. As entire sectors of our economy are struggling, the BSC encourages businesses to help other businesses and share information. This support may be the difference between keeping their doors open, keeping people employed and keeping the supply chain in tact. The BSC therefore, helps not only preserve jobs, but provide new context for those jobs to be an integral part of the new, sustainable, clean and green energy economy.

Barrier #2: Limited Scope of Who Is Currently Being Educated

The youth and promise of the Clean Energy industry and the corresponding "Green Collar" jobs have created incredible buzz about and interest in the technology and training for these "sustainability" jobs. While much attention is being focused on creating these new, "green jobs" as they relate to renewable or energy-efficient technologies, little attention is being paid to educating existing building occupants. The energy education available through existing professional accreditation programs provide those in the building design, construction and service industry the opportunity to learn about the science, theory, technology, policy and standards for sustainable buildings, and therefore better assist their clients. For example, the United States Green Building Council (USGBC), their local chapters as well as a growing number of professional development and training companies, deliver Leadership in Energy and Environmental Design (LEED) courses that prepare individuals (architects, engineers, designers, consultants, contractors, etc.) to take the exam to become a LEED accredited professional (AP), either as a generalist "Green Associate" or LEED AP in either Operations & Maintenance, Homes, Building and New Construction, Interior Design, or Communities specialist or general AP. The LEED accreditation programs have educated thousands of professionals and made a huge impact in training our workforce, however we cannot stop there.

Educating individuals in a certification-based format creates a learning dynamic in which the required knowledge, resides with the person, and may or may not be shared accurately, fully, or effectively with the rest of the organization. This deficiency has created ample opportunity for energy, environmental, and management consulting firms of all sizes and locations to help businesses connect the dots and mobilize action toward business sustainability. This point illustrates that although this shift in the economy is an opportunity to create new jobs to service current and anticipated demand, there is a huge missed opportunity to *save* existing jobs by helping businesses not only survive, but thrive. If we can transfer knowledge and understanding about energy to existing building occupants and business managers within the framework of environmental, social and financial value, not only will we be broadening the scope of existing jobs, but we will also be creating a new, more knowledgeable workforce *and* consumer. Sustainability training could be offered to or within a business as a means to achieve a level of cultural competency that breeds continuous improvement and that behavior and culture change ideally can then spread beyond the boundaries of an organization, into its supply chain and ultimately into individuals' daily lives and choices, thereby creating a demand for green, renewable and other sustainable technologies.

BSC Response: Participant Recruiting

Initial recruiting focused on engaging small and medium-sized Connecticut businesses, predominantly in the industrial and manufacturing sector; businesses that were willing to stretch beyond compliance and commit to continuous improvement by developing a sustainability strategy and implementing sustainability initiatives within the operations of the business. Connecticut has a long and rich industrial history, and many manufacturing jobs and activity have recently been threatened, if not eliminated by the evolving climate of economic stress and global competition for manufacturing work. The original group of companies were recruited for the BSC through participation in the Connecticut Energy Efficiency Fund's (CEEF) other programs for commercial and industrial customers, namely the Lean Manufacturing program PRIME (Process Reengineering for Increased Manufacturing Efficiency), and the existing building and equipment retrofit program, Energy Opportunities.

These companies had expressed or demonstrated their willingness to work on the potential efficiency opportunities in their operational and management practices; those that lie beneath the surface of upgrades to "hardware", and reside in the "software" of the business. In the case of the PRIME program, participating companies were laying the "Triple Bottom Line" foundation of sustainable business practices through their work with Lean techniques. By engaging their employees in Kaizen events, businesses had already begun embracing a philosophy of continuous improvement, and they were increasing the productivity of their processes and therefore minimizing the financial and environmental costs of energy used per unit produced. These organizations were ripe for the opportunity to go beyond the building and equipment energy efficiency upgrades available through the traditional CEEF incentive programs and enthusiastically volunteered to take on the challenge of addressing business sustainability through systemic management of their financial, environmental, and human capital.

With the goal of permeating the corporate culture, we recruited businesses as a whole, and not just individual participants. These businesses committed to have at least one and at most three employee(s) attend each of the eight half-day (4 hour) BSC workshops, which were held once a month for 8 months. Although continuity was welcomed and encouraged, the same individuals did not have to attend multiple workshops, however all were to work with internal teams on homework assignments and projects in between classes. To facilitate comprehensive knowledge transfer, team building, and innovation, the BSC utilized social learning structures to address the barriers created by educating one individual at a time. In addition, the BSC requires participating companies to create sustainability infrastructure in the form of teams, goals, plans, and communications that engage all functional areas of the business.

Barrier #3: The Challenge of "Institutionalizing" Sustainability

We are learning that there are market barriers that are preventing businesses from "embedding" or "institutionalizing" economic, environmental, and social sustainability within the fabric and culture of their organization. A fundamental and reoccurring barrier we have encountered is the challenge of shifting from an energy focus to a more comprehensive sustainability focus. This shift entails a departure from the traditional focus on improving building systems or facilities to instead focus on the comprehensive and continuous evaluation of the entire business system as a whole. This, in turn, encompasses the patterns and movement of the people, materials, and information through a business. "Institutionalizing" sustainability

requires a much broader conceptual understanding of sustainability, and how sustainability can be incorporated into a business's mission, vision and goals, and specifically how a particular business can gain a strategic advantage by becoming and marketing itself as "sustainable".

In a related sense, a pillar of this barrier is the understanding of what "sustainability" actually means to a particular business. Everyone is talking about it, but few people can concretely agree on what it means. There are several definitions of sustainability, including those that attempt to define sustainability in a business context. But essentially, there is no precedent or standard method for "creating" sustainability, predominantly because it is unique for each organization. Thus, it is not surprising that there is confusion related to this term, its use, and specifically how it translates into sustainability for a particular organization. Creating and embracing an understanding of what this term does, can and will mean for a particular organization is the keystone to incorporating sustainability into a business strategy.

Getting an organization to *commit* to sustainability is another challenge. After sustainability is defined within the framework of that organization's corporate culture, company-wide commitment to sustainability is most successful when it is embraced and communicated from the executive level of the organization. Larger companies that have seen results from incorporating sustainability attribute their success to engraving and communicating their mission, vision and strategy for sustainability to their employees, customers, suppliers, and all other pertinent internal and external channels. Many larger companies, like Wal-Mart, General Electric, United Technologies Corporation, have been successful in finding a "sweet spot", to borrow Andrew Savitz's term, where their product or service offerings are nested snuggly within the intersecting framework of social, environmental and economic benefits[3]. When this message is driven from the top-down, and fueled by employee interest that is percolating from the bottom-up, there is fertile ground for sustainability to take root in the corporate culture of the organization.

We are also finding that organizations often struggle with how to measure and track meaningful operational data, such as energy, water, and waste, as they relate to sustainability. But taking this a step further, how does one really measure something as amorphous as "sustainability"? How does a company understand its own baseline performance related to sustainability? Where does the organization fall along the sustainability curve as compared to its potential, and even the sustainability of other organizations? What tools or metrics can be used to help an organization gauge its own sustainability efforts? We determined that both the availability and use of measurement and tracking tools has been a barrier in the market to understanding and embracing sustainability. Also, the data necessary to track and monitor metrics related to energy, waste and water often require data input which may be accompanied by extra administrative and technology cost and effort. The tools, data and metrics must be readily available, easy to use, and applicable to the people entering, accessing, and using them in order to manage what is being measured. The ownership of sustainability thus comes with a commitment to create, evaluate, implement and re-evaluate plans based on the metrics.

Finally, a lack of appropriately-executed internal and external communication can prevent any organization from fully institutionalizing sustainability. The internal communication barrier can occur in one of three ways. First, there may be a lack of communication from the top. A top down commitment goes nowhere if the employees responsible for "getting things done" are not aware of the goals, mission, vision and commitment. Second, there may be cross-functional communication barriers. Divisions or departments within an organization may

[3] (2006) Savitz, Andrew W. ***The Triple Bottom Line***. San Francisco: Jossey-Bass

operate in functional silos where the right hand does not know what the left hand is doing. In this scenario the flow of information, goals, visions, best practices and successes is often stifled. When achievements are not recognized, both internally and externally, communication, and thereby progress misses the boat. All too often we have seen organizations who have accomplished great operational efficiencies or environmental improvements, but nobody – including employees within the organization – knows about them. To achieve the highest level of value and benefits from "doing the right thing" we believe achievements should be appropriately recognized internally and promoted externally to the public as well. The completion of the feedback loop is critical to employees feeling like their contributions are heard, acted on, and results are reported. This creates a "two-way street" in which employees are encouraged to think big, take ownership and fulfill their potential to be the best renewable source of energy that *sustains* the company's *sustainability*.

BSC Response: The Business Sustainability Challenge Philosophy

The philosophy and process of our BSC program addresses the third barrier of institutionalizing sustainability. As with many things, sustainability is a journey, not a destination, which requires a commitment to continuous improvement. The BSC subscribes to this philosophy, and encourages our participants to as well. When talking about the operations of a business, no two are alike. Even a company with two identical building sites, performing the same function for the company with the same equipment, will tell you that their operational performance is not identical. Why is this? The difference is the people. The habits and behaviors of the people and how they interact with one another, the building, and the processes that happen inside the building, all affect how they collectively operate. No consultant, sustainability expert, regulator, or utility knows a business like the people that work on the inside. And even then, no one person within that business can know and understand the entirety of how it functions. Multiple perspectives are necessary to establish an accurate assessment of the base case, not to mention how best to move forward and improve.

It is also critical to recognize that businesses are dynamic entities that are constantly evolving, and this is the key to understanding the challenge and opportunity of continuous improvement focused on sustainability. This is an approach, and a strategy, and a culture that needs to be imbedded into the minds and eyes of all people who interact with a building. If these practices are framed, evaluated, and communicated in a way that is integrated with the strategic goals of the organization and embedded into the expectations and culture of a businesses, then sustainability has the chance to be "sustained". The BSC program attempts to integrate energy, carbon and sustainability into the current management practices of an organization by following this simple cyclical methodology which includes the following steps:

Energy Management Guidelines

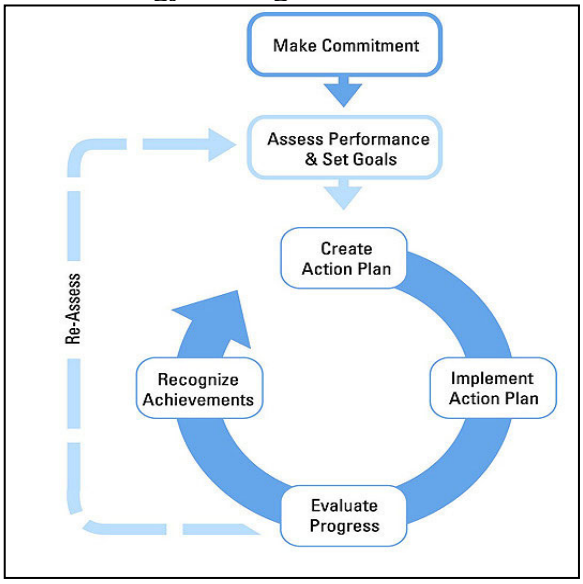

Figure source: Environmental Protection Agency, ENERGY STAR, Energy Management Guidelines

The above graphic displays a process that is utilized within the BSC model to overcome the barriers of fully embedding sustainability within and organization. Each phase of this process is supported by the provision of guidance, training, tools and resources to help organizations surmount the barriers that may prevent them from incorporating energy and sustainability management practices into a broader vision and strategy. The process thereby encourages businesses to stretch beyond compliance, and strive for "continuous improvement" to achieve deeper and longer-lasting value through operational improvement, training and behavioral changes.

Make commitment. Before commitment can be made, it is critical that businesses understand not only what the BSC program entails but fundamentally what is meant by "business sustainability. Initial meetings and training sessions focus on introducing the participating company to definitions of sustainability and how it may apply to their specific organization. This introduction to sustainability lays the foundation for the challenge by introducing the language, framework, definitions, and drivers of sustainability in general, and then invites participants to further explore and develop their own business case for investing in the Triple Bottom Line of people, planet and profit. Education on the fundamental concepts of business sustainability, complete with case study examples of other businesses that have committed and succeeded through this model, enables a business to see not just the business case for sustainability, but their business case for sustainability. When a business can evolve to utilize systemic thinking in their decision-making, investments can then be considered through the tri-focal lens of economic, environmental and social costs and benefits, and business sustainability is possible.

To participate in the BSC, organizations are expected to fully commit to the process and embrace the challenge to integrate sustainability into its business strategy, practices and culture. Each participating company is asked to sign a Memorandum of Understanding or Pledge of Participation which commits the organization to work within the framework of our BSC program, set aggressive yet attainable goals, and develop and implement an energy, carbon and

sustainability strategy, and work closely with program administrators throughout the entire process. We ask that a Champion and "Green Team", with at least one executive sponsor, represent the organization participating in the Challenge and also stand for the challenge of sustainability within the organization. It is not the role of the program administrators to determine what teams, goals, plans, or budgets are appropriate for a business, nor is there a one-size-fits-all sustainability playbook. Therefore any attempt to develop and mandate one would run contrary to the program's philosophy of empowering businesses to own their sustainability initiatives and commit to continuous improvement. However, there are certain general structural elements that we invite participating companies to implement in an effort to assign and align internal resources.

Assess performance and set goals. The BSC introduces formal tools and resources to assist the participant in assessing its baseline performance with regards to energy and carbon management, and holistic business sustainability. One approach to measuring sustainability is the SCORE® (Sustainability Competency & Opportunity Rating & Evaluation) assessment framework, which was created by Darcy Hitchcock and Marsha Willard to help organizations evaluate how well they are doing on their path toward sustainability and understand what next steps they need to take. This assessment explores sustainability across each functional area within an organization, including facilities, human resources, office operations, purchasing, environmental affairs, marketing and public relations and finance and accounting. Through a one day interview-based assessment with individuals across these functional areas, a qualitative summary of sustainability is created, benchmarking the organization against others who have performed the SCORE® assessment and providing a comprehensive overview of where the organization falls along the "Sustainability Continuum".

Among the indicators of sustainability, energy management and carbon reduction often rise to the top of the priority list, therefore the tools that help organizations assess their baseline energy use and carbon emissions will help them track and develop strategies for reduction. Some of the tools employed for energy management assessment purposes are Envinta "One-2-Five", Envinta "Energy Achiever", the ENERGY STAR® Energy Management Assessment Matrix, and The Carbon Trust's tool, "Energy Management Priorities – A self assessment tool". We also facilitate the use of The Climate Registry's General Reporting Protocol for calculating organization's carbon footprint, which can enable the organization to identify functions or processes that are the most significant contributors to its carbon footprint, and then prioritize what actions they can take to reduce their footprint over time.

Once a baseline is understood, organizations are faced with the challenge of developing metrics that matter to their specific organization, thereby allowing them to measure and track their energy, carbon reduction and sustainability effort over time. These metrics not only will vary from sector to sector, but from organization to organization – Manufacturer A might want to track energy use per widget produced , while Hospital B may find it more valuable to track waste generated per patient, or Organization C, may want to track its water use per facility occupant. Each of these tools will help an organization understand "the good news" – for example, what it is currently doing well - and also what areas need attention. Recommended action items and next steps are also identified. Ultimately, these action items and next steps become integral parts of the Energy Management and Sustainability plan the participant develops as part of the BSC program.

Creating and implementing action plan. In line with the classic business concepts of risk management, the implications of acting now versus acting later could position an organization to either proactively or reactively respond to regulatory compliance, availability of resources, consumer and supplier demands, and ultimately their potential competitive advantage. The BSC program provides tools and resources to help participants create and implement their own customized action plan in response to these drivers. Within the BSC process, results of the aforementioned assessments are holistically examined and common themes are identified to inform the creation of a sustainability action plan. The plan is specific to each own organization, its needs and (possibly new) visions for a sustainable strategy which may encompass both short term and long term goals to address carbon emissions, energy reduction, water use and waste. This formalized, structured action plan may include low cost operations and maintenance practices or changes, higher cost capital improvements, and employees training, coupled with goals, metrics and budgets. The plan may also integrate other CEEF programs and allied programs such those by through the Connecticut Clean Energy Fund, ENERGY STAR®, LEED® and other green building rating systems. Program administrators and the "Green Team" work together from this platform on a short term and long term basis to achieve the goals set by the organization.

Evaluating progress. The BSC program introduces tools to participants that can track data and results of initiatives, and inform the need to reassess goals, plans and actions. The tools originally used to assess baseline performance and set sustainability goals can not only benchmark against similar organizations, but can be re-used and will allow organizations to benchmark against themselves over time, re-assess goals and measure progress. Examples of these tools include ENERGY STAR Portfolio Manager for organizations' using 60% or more of their energy from lighting and HVAC end-uses. Through a partnership with EPA's ENERGY STAR® program, we are also using the new ENERGY STAR Energy Tracker Tool, specifically designed for industrial companies. This tool has specifically been designed to help industrial customers normalize energy use metrics for production. To complement the quantitative data that is measured and tracked to evaluate progress, the BSC program also encourages participating companies to record the qualitative and even anecdotal indicators of their progress. The impact of stories can have significant, yet sometimes hard-to-measure influence on the trajectory and momentum of their initiatives.

Communications and recognizing achievements. We have found that strong internal and external communication about the sustainability commitment, mission and vision are most effective when continuously repeated and reinforced by all levels of management throughout an organization. "Recognizing Achievements" - sharing the good news or the small "wins" achieved on the sustainability journey - is an important vehicle for inspiring culture change. Messages begin to spread by word of mouth, and through organizational channels or employee behavior change, the culture begins to shift, and the philosophy goes viral. Employees begin to feel empowered knowing that they are making a difference in their organization and its impact on the environment and community. As individuals and teams are recognized and commended for their achievements and held up as examples, others tend to follow suit. Furthermore, outside the borders of the company, the community likes to hear good news. External communication through website or marketing efforts can provide significant public relations value for organizations.

The BSC encourages participating companies to disseminate positive communication, both internally and externally. Sharing the company's energy management and sustainability plan and goals internally to insure that objectives are understood and aligned throughout the organization, and communicating the on-going list of initiatives, projected timelines and associated projected benefits can foster a culture of accountability. Through quarterly updates from the team, we encourage progress toward implementing the listed initiatives, and communicating the achievements internally. A formal Progress Report is delivered on an annual basis and is intended to be used to generate excitement about the organization's accomplishments, and to provide information that the organization can publicize externally if desired. It is intended to be shared as a vehicle for creating excitement about the significant strides the organization is making. Through case studies, press releases and awards both the BSC and the participating organizations can share their successes with their industry peers, customer and other stakeholders.

Conclusion

This paper explored how our current energy education can evolve to address energy within the greater context of business sustainability, and educate individuals who can have profound impacts on an organization's financial, environmental and social bottom line – the existing employees of existing businesses. This paradigm shift is important because it connects the organization not only to profits, but also to the environment and the people who are the foundation of the business.

Lessons Learned

The first year of the BSC pilot program has been an education in education. We have learned that the process of behavior and culture change takes a long time, and to compound the complexity of this challenge, striving for business sustainability is not a destination or result but rather a philosophical commitment and ensuing journey. By connecting the dots between energy, carbon emissions and ultimate business sustainability, we realized that they can be seen as issues, drivers, all of which are intimately intertwined. We learned that the behavioral aspects of energy use get right to the heart of sustainability, and that focusing on only the *building*, rather than holistically on the *business*, failed to result in the long-term, sustained benefits for organizations.

As utility company administrators of traditional energy efficiency, demand-side management programs, The Connecticut Energy Efficiency Fund is taking a bold and progressive stand for business; by supporting this pilot program, and the opportunities in the "softer side" of energy savings and sustainability. We are learning that the way to make energy management and sustainability "sustainable" is to teach our customers to embrace the philosophy and methodology, use the tools, and create their own unique path – in essence we must "teach them to fish", but not "fish for them". If we are truly successful in providing guidance in the areas of conceptual understanding, commitment, measurement and tracking tools, training and communications, we, as administrators and our business customers, should be able to avoid the "sand pit" of consultant dependency.

Program Vision

As we look to the future, the potential for creating a sustainable, clean energy economy will depend on innovation and synergy. Since its inception, the BSC has been a catalyst for collaboration, inspiration and progressive action in Connecticut, and perhaps it can be for other states and business beyond our borders. As sustainability tools, resources, leaders, and issues continue to evolve, it is critical that our collective 'sustainability conscience' remain connected, and that we constantly learn from and improve on the programs we offer. Our vision is to create a great network of Connecticut organization that find that "doing the right thing" has also been good for business, and that this new network of ambassadors is willing to be leaders in their industry, in their community, and spread the good news. In this way, we envision our efforts truly "going viral". We recognize that the development of the program is itself an effort toward continuous improvement, and we continuously strive to find, develop and use tools that will assist our participants strive toward sustainability. Collaboration among all stakeholders, across political lines and state boundaries, can create better programs, resources and knowledge to propel us forward as interconnected economy, sharing one planet, and improving the health and well-being of all humans.

"The great aim of education is not knowledge but action."
Herbert Spencer