

Business Sustainability Challenge Solid Waste Advisory Committee September 23, 2014

Introduction

- An Energize Connecticut initiative to make businesses more competitive and resilient
- Provides the resources needed to tackle common business issues like utility costs, waste, and employee engagement
- Makes sustainability:
 - Accessible
 - Achievable
 - Profitable



Who Needs the BSC?

- Expands sustainability from large businesses to small and medium sized enterprises (SMEs)
- SMEs created the majority of jobs in the past 20 years, but as much as 70% of industrial pollution
- SMEs implementing comprehensive sustainability can increase profitability 66% compared to 38% at large businesses



BSC Relevance

- BSC is a program that includes waste reduction, recycling, and employee engagement in addition to energy efficiency
- Ratepayer funded program to assist all businesses in becoming more responsible and energy efficient through competitive and profitable measures
- Businesses are entitled to capitalize on the resources that the BSC offers



BSC Program Goals

- Improve competitiveness
- 2. Reduce energy consumption
- 3. Manage resources responsibly
- 4. Encourage renewable energy production

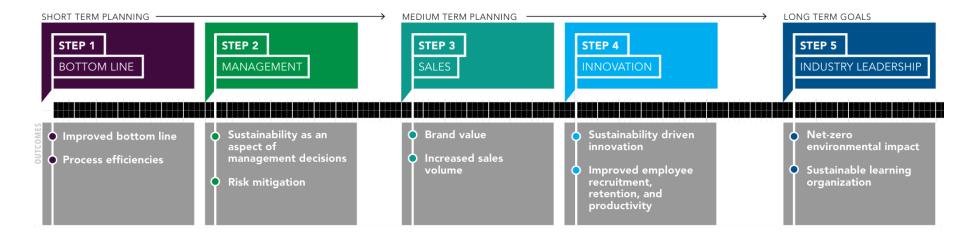


BSC Expectations and Milestones

- Companies progress at their own pace
- Businesses vary greatly in size and sector
- Universal milestones for development and monitoring of metrics and indicators for key areas such as:
 - Energy/Carbon
 - Waste
 - Stakeholder Engagement



BSC Program Design





BSC Materials Management

- There are many challenges in moving toward a sustainable materials economy, but there is an enormous opportunity in doing the basics well:
 - Commodities and raw materials are now more expensive in real terms than they have been since World War I
 - An estimated \$32 billion is lost annually in the US when easily recyclable materials such as paper, cardboard, PET, glass, and steel are thrown out



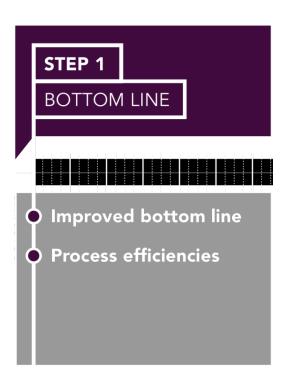
BSC Materials Management

- Circular Economy: circles are great, but they are two dimensional and theoretical
- We need a third dimension to make it real the "how" beyond the big vision
- The BSC provides the structure, resources, and action steps to make sustainability accessible to mainstream industry



Step One

- Strategic energy management
- Improve a company's bottom line through energy efficiency and waste reduction





Step Two

- Integrate sustainability throughout a company
- Include sustainability as an aspect of its decision-making





Step Three

- Grow sales through engagement with customers
- Create new sales opportunities
- Integrate sustainability as an aspect of quality





Step Four

- Build a culture of innovation around sustainability
- Evaluate and redesign value proposition
- Improve employee commitment and customer loyalty





Step Five

- Vision for world- class industry
- Net-zero energy and zero waste – as driven by major brands such as Walmart
- People and processes that thrive in an unpredictable future





BSC Materials Management

	Step One	Step Two	Step Three	Step Four	Step Five
Expected Outcomes	> Improved bottom line > Process efficiencies	> Sustainability as an aspect of management decisions > Risk mitigation	 > Brand value > Increased sales volume potential > Sustainability as an aspect of management and quality > Community support 	innovation	> Net-zero environmental impact > Sustainable learning organization
Actions	> Waste reduction > Waste stream analysis	> Performance indicators > Materials selection and efficiency > Share best practices	 Supply chain and purchasing Source reduction Product certification Collaborate with peers and stakeholders 	 Value proposition redesign Life cycle assessment informs decisions Cradle to cradle management Industrial symbiosis and by product trading 	Zero wasteNet-zero energyClosed loopmanufacturing systems



Networks and Roundtables

- We organize and facilitate networks for companies to share information and resources to improve performance and sustainability
- Three networks already in progress and more in the planning phase - such as health care facilities, hospitals, and nursing homes in collaboration with DEEP



Manufacturing Roundtable

- Quarterly meetings at rotating facilities to discuss different topics of interest such as:
 - Recycling and waste
 - Employee engagement
 - Building energy management systems
 - Product certification



CLASU

- Brings together colleges and universities
- Facilitates collaboration and knowledge sharing
- Supports mutually beneficial collaborations:
 - Campus sustainability
 - Organic waste management
 - Links together sustainability and training opportunities to support CT industry



Wastewater Treatment Plants

- Newly forming group
- Facilities conduct audits of their current performance and work with UI engineers to create energy strategies that save money
- Participate in ongoing peer assistance events to share best practices, resources, and case studies



- We are working with a UI customer on addressing waste and recycling
- They found us by attending the HWAC Forum in February and filling out a contact card



- Conducted initial meetings to understand the issues and priorities at the company and identified an ambitious scope of work
- Began the project with a comprehensive walk through of the operations, collection locations, and dumpsters

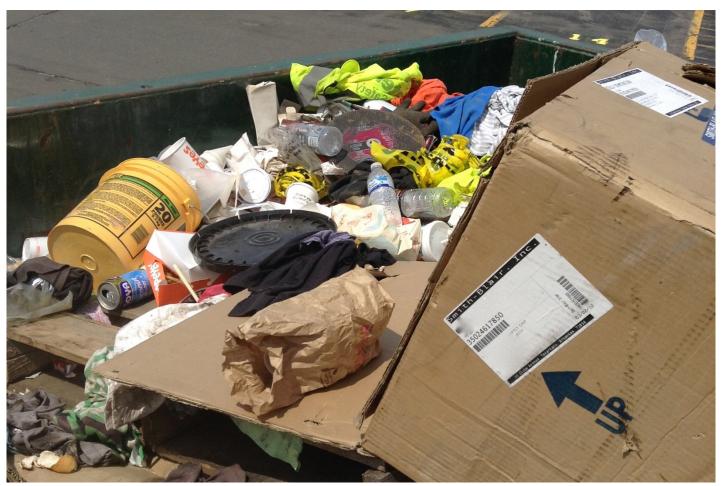


- Collected survey results from every department about the types of wastes produced, availability of recycling, current behaviors, and barriers to improvement
- Began an "adopt a dumpster" approach with multiple observations of collection sites and dumpsters per week and written records of the results











- The survey and the adopt a dumpster brought up two fundamental issues:
 - Staff were not taking recycling seriously because they thought that the janitors were just throwing everything into the trash at the end of the day
 - The hauler was not interested in cooperating either by providing basic data or information about materials handling
- Takeaway: the company needed to deal with fundamentals before making progress



- Initial actions:
 - Work with janitorial and hauling vendors to change their behavior
 - Clean up dumpsters and collection areas and create basic signage











- Next up:
 - Recycling ambassadors
 - Mini Kaizen for recycling and waste
 - New hauler RFP at the end of the current contract
 - Strategic plan



What You Can Do Today

- Complete the BSC opportunity card
- Our team will follow up with you to schedule an initial meeting to plan how to best take advantage of the EnergizeCT programs such as the Business Sustainability Challenge, Strategic Energy Management, and PRIME



Thank You!

Please contact Amy McLean-Salls with questions: amy.mclean-salls@uinet.com

