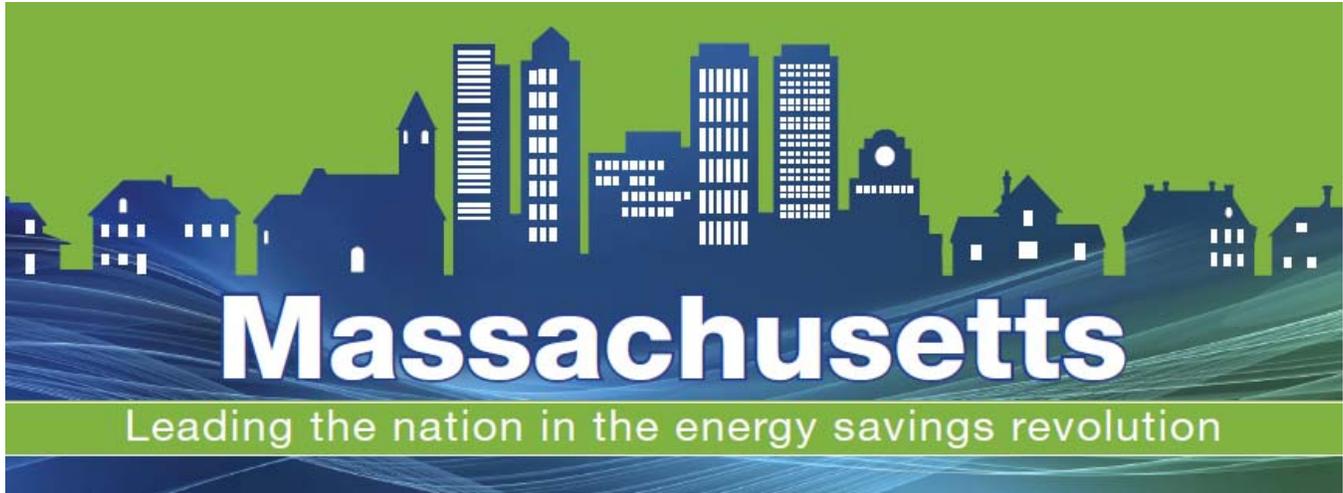


Massachusetts: Leading the Nation in the Energy Savings Revolution

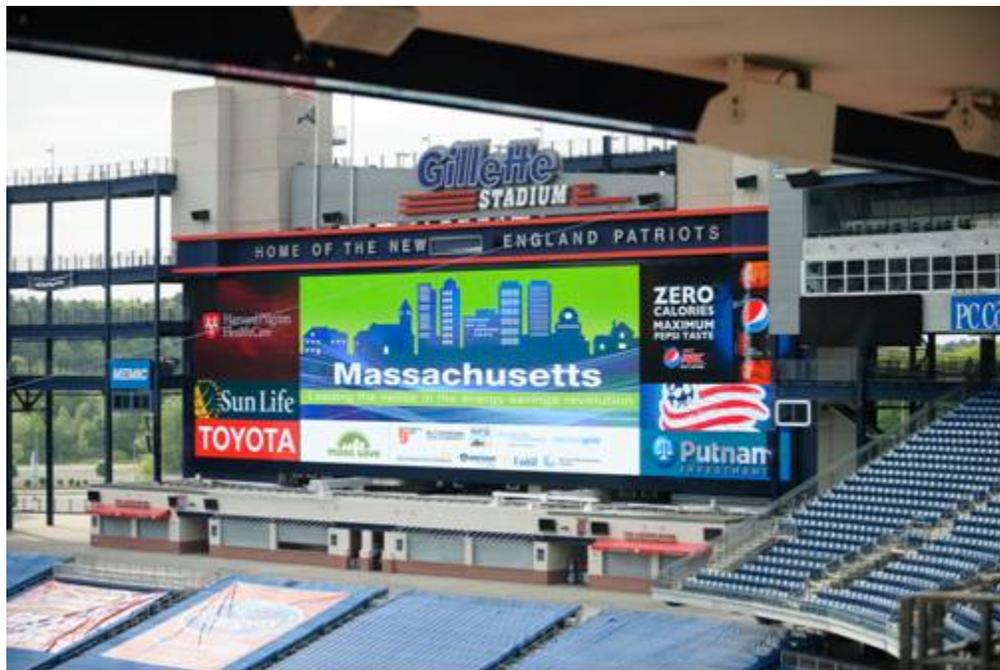
Gillette Stadium, Foxborough, Massachusetts, May 15-16, 2012



Massachusetts: Leading the Nation in the Energy Savings Revolution

An Appreciative Inquiry Summit
May 15-16, 2012

Final Report



For further information,
please visit www.MAEESSUMMIT.com

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Preface

We, the Massachusetts' Energy Efficiency Program Administrators were pleased to welcome a tremendously diverse group of over 250 business and civic leaders, policy makers, advocates, and residents who participated in "Massachusetts: Leading the Nation in the Energy Savings Revolution - Building a Better Tomorrow Through Energy Efficiency Today", an Appreciative Inquiry (AI) Summit held on May 15-16 at Gillette Stadium in Foxborough, MA. Massachusetts Governor Deval Patrick and Mr. John Fish, Chairman and CEO, of Suffolk Construction served as Keynote Speakers.

Specific goals for the Summit included:

- Solicit input, thoughts and ideas to shape Massachusetts' energy efficiency plan for 2013 - 2015 and beyond.
- Identify best practices and experiences and place 2013 - 2015 plans in the context of longer term aspirations and the vision of leading the nation in the energy savings revolution.
- Ensure access to energy efficiency programs for all and enhance the customer experience.
- Build stakeholder relationships and beginning a call to action for 2015 and beyond.

To accomplish these goals, the Summit was designed based on the simple notion that when it comes to system-wide innovation and integration, there is nothing that brings out the best – faster, more consistently and more effectively – than the power of "the whole".

Participants, chosen to participate because of their valuable contributions to the community, skills, expertise and experience, came together in this highly interactive session to generate ideas for shaping the next 3-year Energy Efficiency Plan, as well as longer-term plans, that will ultimately form a roadmap for Massachusetts' energy efficiency future.

This report is a summary of the wide-ranging discussions and debates that took place at the Summit and captures the special collaborative spirit that permeated the many sessions that took place over the course of two days.



Steering Committee

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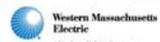
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of Massachusetts
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nationalgrid

New England Gas Company



Introduction

Today in Massachusetts we lead the nation in energy efficiency. We have made efficiency our “first fuel” to meet energy needs. The Green Communities Act made a fundamental change by requiring our utilities



to “buy” energy efficiency whenever that is cheaper than building more power plants. Today, we are investing about five times more in energy efficiency annually than we were in 2008. As a result, the American Council for an Energy Efficient Economy ranked Massachusetts first in the nation for energy efficiency, the first time any state has surpassed the state of California in the rankings.

For the \$2 billion in energy efficiency investments we are making over three years, we are generating \$6 billion in benefits for industrial, commercial, and residential energy consumers. The challenge remaining is how to get every business and household to take advantage of these opportunities to reduce consumption, protect the environment, save money, become more sustainably competitive and live more comfortably.

Investments we make in energy efficiency lead to dollars being spent right here in Massachusetts which supports job creation. Jobs in energy efficiency grew by nearly 10% in 2011. Not only does energy efficiency improve the environment and help meet state goals for reducing greenhouse gas emissions by 25%, it’s a big part of the reason why Massachusetts has rebounded from the global recession faster and stronger than our competitor states.



In order to maintain our leadership role in improving the efficiency of businesses and residences, the full spectrum of stakeholders will need to continually re-examine and improve upon existing approaches while remaining steadfast in our collective commitment to lead the energy savings revolution.

Summary

Over the course of the Summit, participants discussed an incredible array of issues related to energy efficiency. Working in small, highly interactive groups, participants progressed through a series of exercises encompassing the 4-D appreciative inquiry cycle of Discovery-Dream-Design-Deploy.

Beginning with a Discovery phase, participants explored individual expectations and experiences and identified sources of innovation and success both in Massachusetts and beyond. Subsequent Discovery challenged participants, organized in stakeholder-specific subgroups, to identify and share with the broader group the strengths, motivations and capabilities that have supported the success of efficiency efforts to date and will serve as important underpinnings for the future.



On day two, the focus turned to Dreaming about the future – an exercise designed to stretch imaginations and expectations of what the world could look like in ten years and what changes would need to take place to make that future a reality. With visions of the future fresh in their minds, participants broke into small stakeholder-centric groups

focused on the Design of the Future -- what has been done well and why, what could a better plan look like, and what deeper insights have surfaced as a result of sharing diverse perspectives and experiences.



“The implementation and execution of the Green Communities Act, as everybody in this room is familiar with, has been a game changer.”
-- Massachusetts Governor, Deval Patrick

At the culmination of these sessions, the groups turned to Deployment, creating and sharing aspiration statements specific to each stakeholder subgroup. These aspiration statements created a unified sense of long-term focus and act as the “stretch” goals of the group.

Ultimately, participants left the Summit with a sense of pride in past accomplishments and a renewed determination to build upon those successes to continue leading the nation, and perhaps the world, in the energy savings revolution.

Aspirations

Participants, organized in small, stakeholder specific groups were asked to consider what the future could hold if we were able to make our hopes a reality – what are the highest aspirations, what is the value, nature and quality of execution, the end result and impact, and the sense of purpose embodied in the aspiration. The following are the statements of aspirations developed by Summit participants – their *vision of the future*.

1. Education

Energy efficiency education in Massachusetts is universal and effects all ages and segments. Through innovative curriculum implementation Massachusetts has developed an energy literate society. Energy education is forever. And everyone needs to know.



2. Sustainability Culture

Sustainability is essential to the health of our earth, the economy, our communities, our businesses, our households, our wallets and each of us. We are stewards for future generations. Massachusetts is a leader in energy efficiency and exports its ideas around the world and invests in energy efficiency leaders. Massachusetts is implementing a broad reaching educational curriculum that is being adopted throughout the U.S. and abroad. Massachusetts is engaged in ongoing efforts to foster sustainability utilizing partnerships of diverse parties such as vendors, academics, business leaders, community groups, government and local representatives. We have created jobs, opportunities, increased participation, reduced energy costs, and successfully engaged communities to make Massachusetts the most efficient state in the nation and a worldwide model of sustainability.

“The best way to predict the future is to create the future.”

-- Peter Drucker

3. Marketing & Outreach

Massachusetts will transform how its citizens, businesses and organizations and government talk about and use energy. The value in efficiency opportunities available are universally understood where every customer will be involved by 2015. Energy efficiency is what we do, how we think, act and share. It is an integral part of our lives, our schools, our communities and our work places. Customers learn about efficiency services and incentives through their networks, where they live and where they work and play from the people they trust. Massachusetts residents are part of

the clean energy revolution regardless of income, race or neighborhood. Massachusetts continues to lead the way delivering programs, jobs and environmental value that is the envy of the world.

4. Residential Retrofit

Participating homes will be saving an average of forty percent of their energy usage. Of said participants, five percent will be participating in deep energy retrofit. In addition, we will have a five hundred percent increase in the number of customers implementing deeper savings measures across all fuel categories. We will also be optimizing the incentive structure for maximum participation from all customers including hard to reach and hard to serve segments. We will be emphasizing whole building savings and projects. Moreover, the feedback from our customers will be that our program is simple and easy to navigate and worthy of investing their time and money. The next time we hold this Summit no one will comment that nobody has heard of our program. Finally, we will remove all barriers and disincentives to reducing oil consumption.

5. Residential New Construction

Massachusetts new homes and properties are built to be energy efficient. These are the most desirable homes in the state and nation. They have plentiful fresh air and inhabitants are healthy. Materials inside and out in new homes are durable, and sustainable and affordable. Inefficient modes are not accepted industry standards. And, these homes are smart and inexpensive.



6. Low Income

Comprehensive, all fuels, energy efficiency measures are installed in all low income housing units and agencies serving low income customers including health and safety, pre-weatherization measures at no cost to participants. Additionally, there are demonstration projects of innovative energy technologies in low income settings throughout the Commonwealth.

7. Multi-Family

Massachusetts has implemented the “yes we can” multifamily program. One hundred percent of multifamily new construction in the Commonwealth is enrolled. Multifamily building owners and tenants are engaged and participate in a single point of contact, fuel blind, flexible, and comprehensive program. The needs of renters and owners are being exceeded. Renters can now

see their energy rating on the Mass Save website. And they can use those ratings to select their property. Other states in the U.S. are looking to us for guidance.

8. Small Business

We have empowered our small business customers to be technically savvy energy users. They understand the value of continuously improving conservation and take responsibility for proactively continuing to control energy use in their businesses by staying engaged in energy efficiency education opportunities offered by their Program Administrators in conjunction with local business organizations and making use of their easily accessible real time data. Overall, this class of customers has reduced its energy usage significantly. Massachusetts small businesses now are recognized for their participation with large “I did my share” stickers which can be predominantly placed in their windows.

“Labor was to the Industrial Revolution just as energy is to the Innovative Revolution.”

-- Mr. John Fish, Chairman and CEO, of Suffolk Construction

9. Large Business

Large business energy efficiency programs have created a customer driven culture of energy awareness that is driving sustained energy savings. Program success consistently occurs by taking all continuous improvement actions to achieve complete implementation and demonstrate proven, sustainable results. A streamlined approach continuously creates awareness and engagement that transform the paradigm from a utility driven program to a customer driven program. A fifty percent market penetration of customers is realizing a twenty percent reduction in energy intensity.



10. Health Care

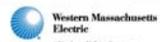
Massachusetts has continued its best in the world healthcare programs lowering sector energy consumption by an average of twenty five percent statewide while improving patient outcomes and increasing staff satisfaction and safety. Key elements of this accomplishment include a focus on data availability, quality and management, targeting the right technologies at the right time and providing a broad sector wide focus on education and knowledge sharing. The Massachusetts healthcare industry looks forward to sharing their experience nationwide to both improve the



national landscape of healthcare and leverage the connection between energy efficiency and health in all sectors to improve overall health outcomes.

11. Finance

Massachusetts is back on the front cover of *Time* magazine, again, for the 5-5-15-50 plan. And we didn't mention financing because financing is no longer seen as a barrier to energy efficiency investments. But to explain the 5-5-15-50 plan, that's 5 billion a year going into funding 5 percent of the building stock, achieving on average of 50 percent energy savings in 2015. That change is driven by whole building performance based loans and also by record heat loan investments that have made it a national model. Pre-weatherization is also not really mentioned because it's either covered by upfront incentives or rolled into the heat loan. And, energy labels are standard for any building participating in any of the programs. But, various companies such as Google, Facebook and others are competing for market share on who has your energy tracking data for your home energy use.



Participant Recommendations

In order to make strides toward achieving their aspirations, participants contributed to the development of the following specific recommendations regarding efforts that should be undertaken. These recommendations have been assigned to the appropriate stakeholder groups and have been woven into the 3 Year Energy Efficiency Plan being developed by the Program Administrators.

1. Education

Explore & implement a standardized K-12 energy education program, meeting Massachusetts Comprehensive Assessment System (MCAS) criteria, encompassing both the science and economics of energy generally and energy efficiency specifically.

2. Professional Development & Training

Explore and implement a curriculum or specific training and development programs designed to expand the number of qualified energy professionals/engineers capable of expertly servicing efficiency customers on a fuel blind basis.



3. Community Initiatives

Explore releasing Request for Proposals (RFP) or Request for Information (RFI) to

organizations that can assist in engaging hard to reach/hard to serve populations.

4. Multi-Family / Commercial Office

Determine the best methodology to resolve and overcome the most commonly faced challenges facing multi-family and commercial office customers.

5. Marketing

Evaluate and determine how to improve awareness of availability and value of energy efficiency offerings.

“We would literally astonish ourselves if we did everything we are capable of doing.”

-- Thomas Edison

6. Tenant / Landlord – Commercial & Industrial

Research and evaluate successful tenant/landlord programs for potential adoption in Massachusetts for master-metered buildings.

7. Tenant / Landlord – Residential

Research and evaluate successful tenant/landlord programs for potential adoption in Massachusetts for individually metered buildings.

8. Process Improvements

Conduct process review of programs to identify opportunities for streamlining and simplifying the customer experience.

9. Residential

Consider revised incentive structure or alternative program designs to increase accessibility to programs by low to moderate income customers and research incentive cap for other customers.

10. Low Income

Determine if incentive cap should be raised or waived in certain circumstances for Low Income customers.

11. Large, Corporate Campus Complexes

Evaluate challenges and complexities and develop strategies to comprehensively serve customers with large campus based facilities.

12. Financing

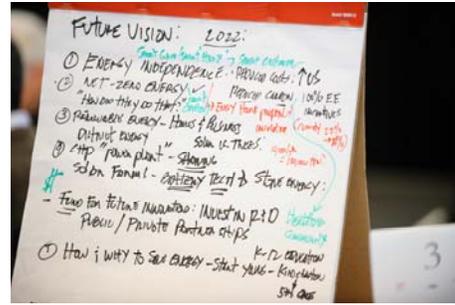
Investigate developing a mechanism for those that don't currently qualify for a loan.



13. "Train the Trainers"

Develop and implement a plan to engage All Summit participants in an outreach communication and education campaign.

14. Small Commercial & Industrial



Develop a one-stop shopping program for all gas and electric technologies.

15. Health Care

Determine if energy efficient medical equipment exists and explore collaborative marketing opportunities.

16. Smart Grid

Determine feasibility and benefits of integrating Smart Grid enabled measures into energy efficiency programs.

17. Large Commercial & Industrial - ENERGY STAR® Benchmarking

Review ENERGY STAR® benchmarking as a possible statewide building labeling approach and coordinate where appropriate with the Massachusetts Dept. of Energy Resources.

Conclusions

At its conclusion, the business and civic leaders, policy makers, advocates, and residents who came together in historic ways at the Summit, addressed common challenges and found common solutions and were able to produce a range of insights, recommendations and commitments to action that will form the foundation of the roadmap for Massachusetts' energy efficiency future.

With a deeper understanding of our collective venture, Summit participants came to broad consensus and reinvigorated commitments were made on a number of critical fronts. Major thematic recommendations related to:

- *Fostering Education* – Whether it relates to school aged children across the Commonwealth or working professionals, participants recognized that in order to meet our collective aspirations, both in the near- and long-term, it is critically important that we actively support the continued development of knowledgeable consumers and capable and competent service providers.
- *Improving the Customer Experience* – By increasing awareness, simplifying and streamlining processes, or providing offerings more specifically relevant to individual segments of customers, improving the customer experience was recognized widely as a key to expanding involvement by businesses, institutions, and residents in the various efficiency programs made available under the auspices of the Green Communities Act.
- *Creating a Culture of Sustainability* – Participants felt very strongly that truly making energy efficiency our 'first fuel' will require a fundamental shift from what to date has largely been the reactive involvement of a select minority of highly progressive and forward thinking stakeholders transforms into proactive involvement by a vast majority of all stakeholders.
- *Building Awareness through Marketing & Outreach* – Achieving widespread awareness of the availability and benefits of energy efficiency across the Commonwealth, using best in class marketing and communications practices, was considered by participants to be an essential precursor to significantly greater involvement by business and residents in making their buildings and homes more energy efficient.

Already, work has begun in each of these areas and the Massachusetts energy efficiency Program Administrators are codifying their commitments in the 2013-2015 Statewide Energy Efficiency Plan being developed in close collaboration with the full spectrum of stakeholders.



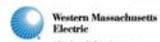
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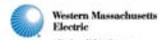


The opportunity to build a sustainably competitive future has never been greater. However, to reach our collective potential, we must intensify our efforts and remain steadfast in our commitment to the efficient use of energy in buildings and industry and homes, fostering economic development and innovation in the energy efficiency services and technology industries, saving money for consumers, and spurring growth in all sectors of our economy.

Much has been achieved, but much more needs yet to be done. In many important respects, the journey to capture all available cost-effective energy efficiency has just begun. Our collective experience since the passage of the Green Communities Act has shown conclusively that tremendous progress can produce tremendous benefits to the full spectrum of stakeholders in the Commonwealth. In order to continue and expand upon this progress, we must all – government, businesses, individuals – redouble our efforts to ensure Massachusetts continues to lead the energy savings revolution.

*“Massachusetts may lead the nation, but leading the world is where we can be
and where we ought to be.”*

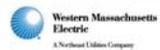
-- Massachusetts Governor, Deval Patrick



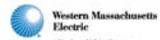
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- Baker Engineering & Controls, Inc.
- Barr Foundation
- Bell's Power Coating
- Berkshire Gas Company
- Best Buy Co., Inc.
- Bluestone Energy Services, LLC
- Boston Light Source
- Boston Medical Center
- Brandeis International Business School
- Brickstone Properties
- C3 Energy
- Cadmus Group
- Cambridge Energy Alliance
- Cape Air
- Cape Cod Insulation, Inc.
- Cape Cod Regional Technical High School
- Cape Light Compact
- Case Western Reserve University
- CBRE
- Cedar Mediterranean Foods
- Center for EcoTechnology
- Childrens Hospital Boston
- Citizens Bank
- Citizens for Citizens
- City of Boston
- City of Fall River
- City of Marlborough
- City of Medford
- City of Northampton
- City of Pittsfield
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- Community Action
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- Conservation Law Foundation
- Conservation Services Group
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- Dave Legg Energy Associates
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- Democracy and Regulation
- DNV KEMA Inc.
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- E Source
- e" inc."
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- Homeowners Rehab Inc
- HomeWorks Energy
- Honeywell
- Horizon Energy Services
- Horizon Solutions



- ICF International
- Independent consultant
- J&R Industrial Wiring/Plimoth Bay Controls, LLC
- Kelliher Samets Volk
- Livermore Energy Associates
- Local Initiatives Support Corporation
- Lockheed Martin
- Low-Income Energy Affordability Network
- Marion Institute
- Massachusetts Committee on Telecommunications, Utilities and Energy
- Massachusetts Department of Environmental Protection
- Massachusetts Department of Housing and Community Development
- Massachusetts Department of Public Utilities
- Massachusetts Division of Capital Asset Management (DCAM)
- Massachusetts Energy Consumers Alliance
- Massachusetts House of Representatives
- Massachusetts Institute of Technology
- Massachusetts Maritime Academy
- Massachusetts Office of the Attorney General
- McEachern Insulation Inc.
- McLaughlin Weatherization
- Meister Consultants Group, Inc.
- MOCA Systems
- Mount Holyoke College
- National Consumer Law Center
- National Grid
- Negawatt Systems LLC
- New Ecology, Inc
- New England Gas Company
- New England Patriots
- New England Patriots Stadium
- New Jersey Institute of Technology
- NiSource
- Northeast Energy Efficiency Partnerships
- Northern Energy Services
- NSTAR
- Ogden Martin Systems
- Omnilite
- Onyx Specialty Paper, Inc.
- Opower
- Optimal Energy
- Partners Healthcare
- Peabody Properties
- Portland Energy Conservation, Inc. (PECI)
- People Organizing for Wealth & Ecological Restoration
- Peregrine Energy Group
- Philips
- Power Options, Inc.
- PRISM Consulting, Inc.
- Prism Energy Services
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- South Middlesex Opportunity Council
- South Mountain Company, Inc.
- Springfield College
- Structure Tone
- Sustainability Inspired
- Symmes Maini & McKee Associates
- TD Insurance
- The Kraft Group
- Town of Falmouth
- Town of Weymouth
- Tufts University
- UGL Services - Unicco Division
- UMassMemorial Health Care
- Utilil Service Corporation
- Upper Cape Cod Regional Technical School
- US Green Building Council MA
- Veolia ES Technical Solutions
- Western Massachusetts Electric Company
- Winn Development
- Worcester Community Action Council
- Worcester Energy Barnraisers
- WSP Flack + Kurtz
- Yale University
- Yankee Candle Company



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