Green Business Challenge Programs Energy Efficiency Strategy Webinar Series

MIT CoLab

Green Economic Development Initiative

June 10 2013

The webinar will begin shortly. Please remain on the line.



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Next Webinar...

Local Development Finance Tools to Stimulate Energy Efficiency

Monday June 24, 3:30-5pm EST

- Toby Rittner President & CEO, Council of Development Finance Agencies
 - David Gabrielson
 – Executive Director, PACENow
 - TBD

Register: http://bit.ly/13xxjM8



Agenda

- Megan Ramey A Better City Boston.
- Sarah Zaleski US DOE EERE Weatherization & Intergovernmental Programs.
- Scott Wood EDF Climate Corps.
- Sheila Miller BOMA Greater Minneapolis;
 Sue Goldstein Xcel Energy
- Questions.



GREEN BUSINESS PROGRAMS METWORK BASED MARKETING AROUND ENFROY AND SUSTAMARHUTY

Megan Ramey
Sustainability Programs Coordinator



ABOUT ABC

- Business membership nonprofit
- 3 organizational focuses: land development, environment and transportation
- Mission to improve Boston's city vitality, economy and quality of life



CHALLENGE FOR SUSTAINABILITY

- Business and commercial real estate engagement program
- Holistic sustainability
- "Weight watchers for business"
- Network best practice sharing
- Online scorecard for benchmarking
- 100 facility members in 4th year of program



CHALLENGE STORIES

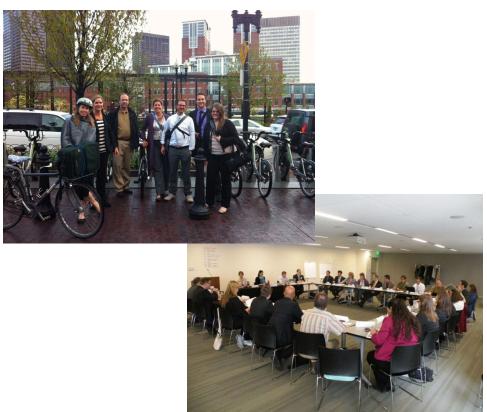
GREENOVATE BOSTON -STORIES FROM MEMBERS CHALLENGE FOR SUSTAINABILITY - MICRO DOCUMENTARIES





SUMMIT FOR GREEN BUSINESS ENGAGEMENT PROGRAMS

- First ever in person best practice sharing between programs
- 38 attendees representing
 14 regions and 18 programs
- Topics discussed included evaluation, data analysis, communications, recognition, scorecards, utility partnerships, behavior strategy, funding and programming
- Group wants to establish formal association



TASK FORCE FOR NATIONAL ASSOCIATION

- Preliminary task force to establish a formal association
- Potential work plan includes quarterly best practice sharing calls and standardizing reporting data across programs





PROGRAM DIRECTORY

- A-Z directory of 33 programs
- Contact & website info
- Staff, funding and reductions
- Summary of funding approaches
 & utility partnerships



TYPES OF PROGRAMS

- Green Business Certification
 - Smaller, locally owned businesses
 - Marketing value proposition
- Green Business Recognition
 - Large business and commercial real estate
 - Efficiency, employee retention and peer recognition value proposition
- Competition
 - Buildings compete over energy, water or waste reduction
 - Cost reduction and recognition
- Business Improvement District
 - Commercial Buildings
 - Efficiency, economic development and tenant retention

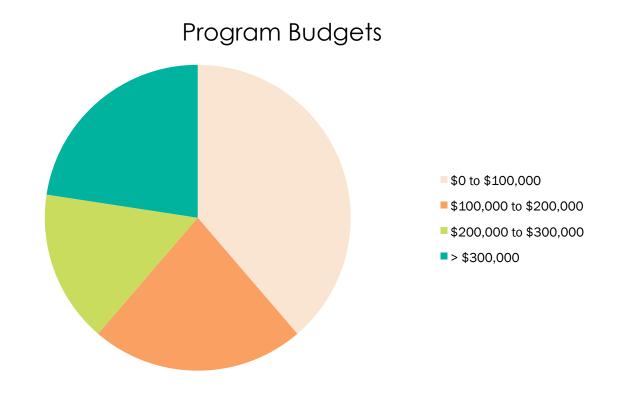






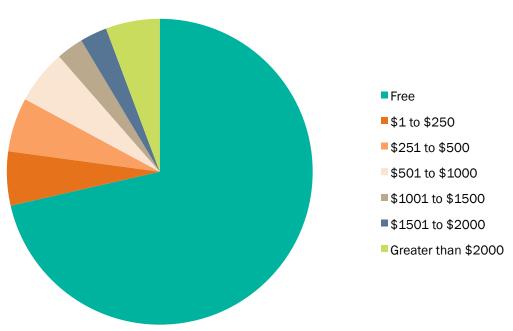


PROGRAM CHARACTERISTICS



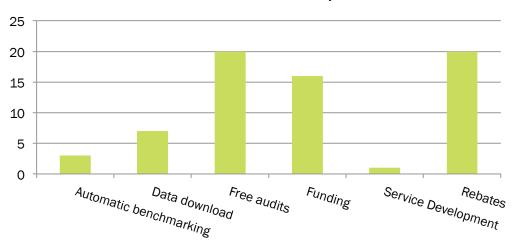
PROGRAM CHARACTERISTICS





PROGRAM CHARACTERISTICS

Services Provided by Utilities



How satisfied are you with your Utility Partnership?



KEY FINDINGS & LESSONS LEARNED

A Better City currently developing a white paper due out by end of summer

Early Findings

- Staff Requirements:
- 2 or greater
- Time spent on community engagement, marketing, technical knowledge, research, programming and events
- 2,200 member businesses of programs
- 80% of all programs are free for businesses
- Two-Fifths of the programs operate on annual budgets of less than \$100,000
- Utilities are the largest single source of funding, providing support to just over 41% of programs
- Only 14% of the programs receive state or federal funding
- 13 programs that reported reductions have helped businesses cut 644 gWh of electricity usage



OTHER TURN KEY RESOURCES

- <u>Toolkit for Sustainable Business</u>, Challenge for Sustainability
- Better Bricks, Northwest Energy Efficiency Alliance
- Local utility energy efficiency or water efficiency incentives for businesses
- Financial Resources local foundations, utility or business improvement district
- Existing multi-city networks:
 - ICLEI Green Business Challenge
 - 2030
 - Eco District
 - California Green Business Challenge
 - Kilowatt Crackdown (BOMA)

CONTACT INFORMATION

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617-502-6247

Challenge for Sustainability

www.challengeforsustainability.org

Better Buildings Challenge and Local Business Engagement

June 2013



Better Buildings Initiative

Make municipal, commercial, and industrial buildings 20% more efficient by 2020; save more than \$40 billion annually for US organizations; create American jobs

- Demonstrate market leadership through high level partnership with DOE
- Overcome persistent obstacles with replicable solutions
- Showcase real solutions; provide models for others to follow
- Celebrate leadership with recognition
- Better understand policy and technical opportunities
- Measure success

Better Buildings Challenge

National leadership program that leverages transparency, solutions, and real results to demonstrate what is possible in commercial and industrial energy efficiency.

Partner Agrees to:

Commit

- Entire public building portfolio
- Engage private sector in energy saving

Take Action

- Outreach to commercial sector
- Showcase retrofit project

Report Results

- Share portfolio-wide energy data
- Share playbooks and solutions
- Quarterly updates on progress

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DOE Agrees to:

Assist

- Technical assistance
- Development of playbooks

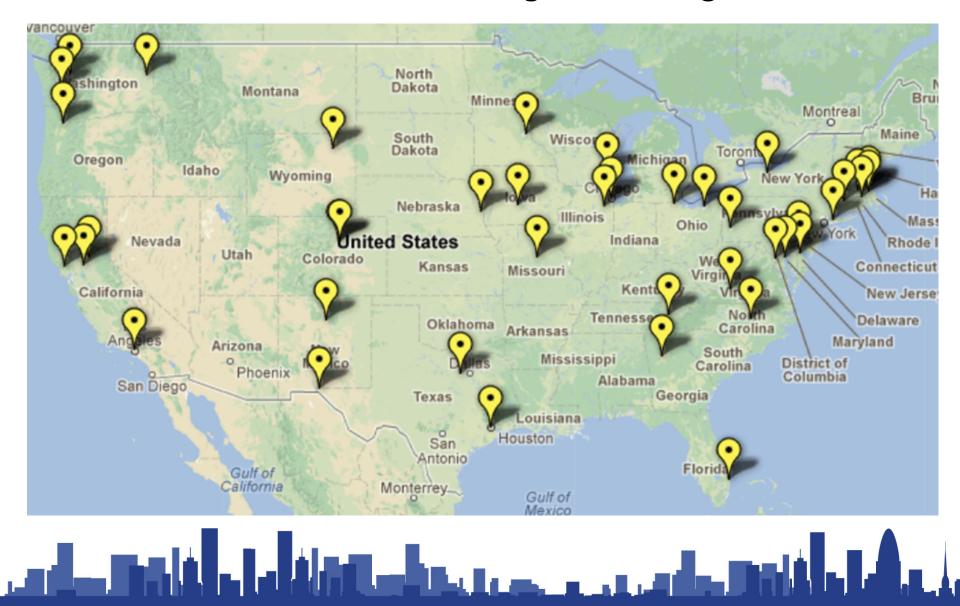
Connect

- Opportunities through Financial Allies
- Peer exchange forums

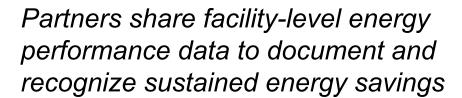
Recognize

- National and local recognition
- Showcase and highlight Partners who develop and share innovative and cost effective marketplace solutions

Current Public Better Buildings Challenge Partners



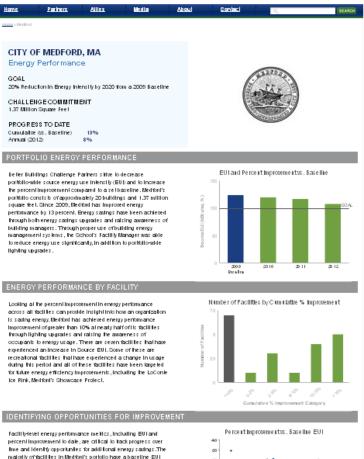




- Energy consumption tracked in Portfolio Manager easily shared with DOE
- Metrics averaged over last 12 months for:
 - Current site energy use/ sq.ft.
 - Change from baseline
 - Weather normalized energy intensity
 - Energy intensity adjusted for space attributes/operating characteristics



between 100 and 200 kB Auto, if, and show improvement between 0 and 20%. Facilities with high baseline EU values and toweringy improvement present good opportunities for savings. One facility is not included in this charidue to a large change in actify and usage since the baseline time period.

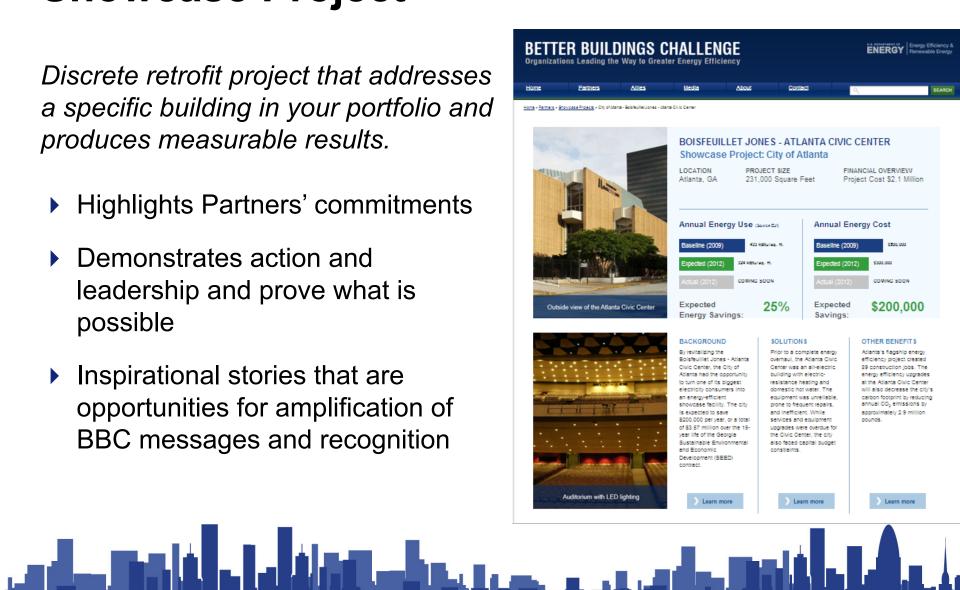




Showcase Project

Discrete retrofit project that addresses a specific building in your portfolio and produces measurable results.

- Highlights Partners' commitments
- Demonstrates action and leadership and prove what is possible
- Inspirational stories that are opportunities for amplification of BBC messages and recognition



Implementation Models (Playbook)

Replicable process used to achieve its energy reduction goals

- Replicable solutions from leaders in the marketplace
- Provides specific strategies and actionable tools that other organizations can adopt
- Can feature process, policy, program, financing strategy, etc

Pittsburgh's Playbook



Policies

Process

Commission

In 2008, the City of Pittsburgh created the Pittsburgh Climate Action Plan, Version 1.0, which recommended actions the municipal, community, business, and education sectors could take to help achieve the City's goal of reducing greenhouse gas emissions by 20% from 2003 levels by 2023. One of the recommendations of the Plan was to create a Sustainability Office within City government to be funded by the Mayor's Office.

Suggestions for potential projects to be funded by the GITF stem from

recommendations of the Climate Action Plan and suggestions made by

the Energy & Utilities Manager and other members of the Sustainability





Learn More 🕕

Pittsburg i City Council Resolution

Commission 🖺

 Press Release: Mayor Creates Green TrustFunder*

Announcement Brent Coverage 27



Tools & Resources

The success of GITF is largely dependent on the varied funding mechanisms and streams that continue to build on the initial source of funding. The City seeded the GITF with an initial deposit of \$100,000. Additional deposits are made based on the energy cost savings compared to City-wide costs in the baseline year, 2007, as realized through reduced utility rates, audits of energy accounts, and energy efficiency projects.







Measuring Success

Pittsburgh's Climate Action Plan Version 2.0 provided an opportunity for the City to report on progress made on Version 1.0's recommendations. Version 2.0 addressed each of the recommended measures the previous version offered throughout four sectors - government, business, community, and higher education. Updates included status reports (complete, in progress, or not yet addressed) and details of the measures taken.



As of November, 2012 the GITF has funded the following projects:

Toolbox

Download the Playbook

Policies:

 Pittsburgh Climate Action Plan Version 1.0

Pittsburgh Climate Action Plan Version

 Pittsburg i City Council Resolution 2008-0540 to Circate the Gircen Inflathre

2009–1908 to Circate the Sustainability

Tools & Resources:

 Presentation on the Western Pennsylvania Energy Consortium 🖺

Example: Atlanta

- ▶ Currently engaging: 70 Buildings or 50 million sq.ft.
- ▶ **Goal:** To engage the local community in reducing energy and water consumption in more than 40 million square feet of buildings by at least 20% by 2020 and become one of the country's 10 most sustainable cities
- ▶ **Approach:** Leveraged a public-private partnership to create a new initiative that provides access to project financing, free building assessments, education and training, and public recognition.



▶ Initiative Launched: November 2011



Example: Los Angeles

- ► Engagement Goal: 30 million sq.ft.
- ▶ **Goal:** To achieve 20% energy savings across 30 million square feet of existing buildings by 2020 and become the greenest most economically-competitive large city in America
- Approach: Built a network of partners that bring complementary resources and programs to augment the Los Angeles Better Buildings Challenge's City-funded offerings and become a "one-stop-shop" for energy efficiency in Los Angeles



Initiative Launched: July 2012



BETTER BUILDINGS CHALLENGE

Partners and Allies:

As of 6/19/12

























SEATTLE

DISTRICT



























UNIVERSITY

























SAMAS CAPITAL







ROANOKE







SOUTHERN CALIFORNIA



BLUE HILL

















SCHOOL DISTRICT OF

























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Thank you!

For more information on the Better Buildings Challenge, please send questions to:

BetterBuildingsChallenge@ee.doe.gov

Sarah Zaleski

Sarah.Zaleski@ee.doe.gov



Better Buildings Alliance

- Opportunity for local governments to work collaboratively with DOE to access technical assistance and advance their clean energy goals
- Helps members sustain success of ARRA funded work
- Leverages DOE expertise and provides forum to engage with peers around actionable steps
- Project Teams focus on strategic target areas:
 - Community energy strategic planning
 - Data collection, analysis, communication
 - Financing
 - ESPC implementation
 - Technical areas (lighting, HVAC, plug loads, data centers, etc.)



Alliance Members Agree to:

Commit

- Assign a company representative
- Share organization-wide energy savings goals, encouraged to be a multi-year goal saving 2% of energy annually

Act

- Work to achieve goals and monitor progress through publicly available tools
- Participate in at least one BBA Project Team or activity

Share

- Share your successes and help other BBA members replicate your results
- Provide annual updates on energy savings and progress toward meeting goals



DOE Agrees To:

Assist

- Provide information and energy efficiency implementation models to help BBA members improve the energy performance of their building portfolios
- Work with BBA members to create new resources to help them overcome efficiency challenges and increase the availability of highly efficient products and technologies

Connect

- Provide a neutral, third-party platform for sector peers to address common challenges
- Connect members with financial allies for financing solutions

Inform

- Keep members informed through regular BBA communications and webinar series
- Provide access to DOE and trusted third-party information and technical resources



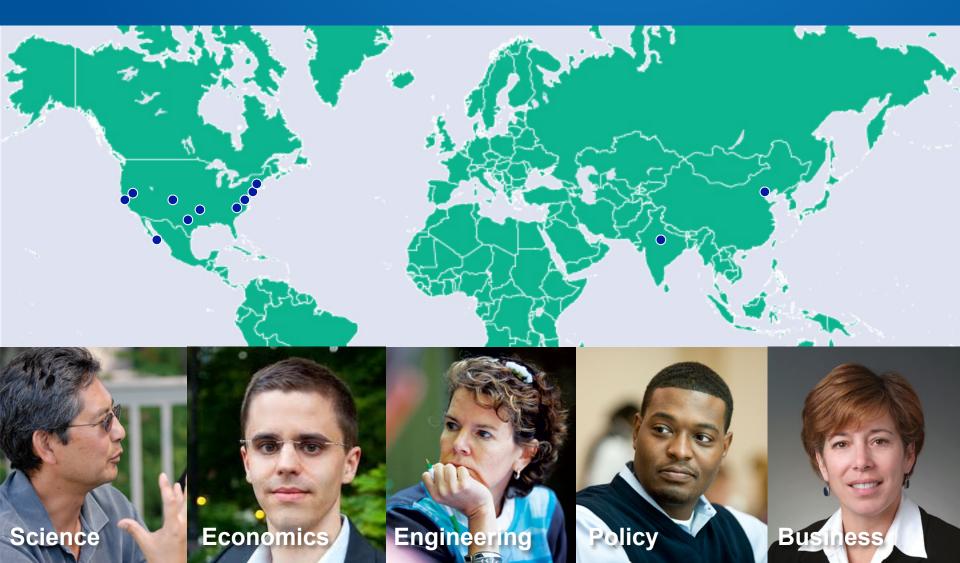
EDF Climate Corps

Scott Wood, Project Manager Environmental Defense Fund

June 10, 2013



More than **450** dedicated staff carry out the work of **Environmental Defense Fund** across the world.





Organizational Barriers

...prevent good decision-making.



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EDF CLIMATE CORPS





EDF CLIMATE CORPS

400 Fellows since 2008

\$1.2 Billion in NPV identified

On average, \$1 Million identified per organization

Enough to avoid 1.1 Million Metric Tons of CO2/yr

Equivalent of taking 200,000 cars off the road

EDF CLIMATE CORPS



Host Requirements:

- Pay fellow salary and travel
 ~\$15,000 total
- Provide high-level sponsor and day-to-day supervisor
- Access to relevant data
- Implement fellow's recommendations where feasible
- Report progress to EDF

Details and Application at www.edfclimatecorps.org

THANK YOU

Scott Wood <u>swood@edf.org</u> <u>www.edfclimatecorps.org</u>















Sue Goldstein
Key Account Manager
Xcel Energy



BOMA International Board of Governors endorsed

EPA's Energy Star Buildings program,

a voluntary energy efficiency initiative for U.S. commercial and industrial buildings that seeks to highlight building areas where owners and managers can utilize proven conservation technology to increase building profitability.



BOMA International awarded its first Earth Award to honor and recognize the positive environmental operations building management teams achieve in preserving the internal and external environments of their properties.



BOMA International launches BEEP BOMA Energy Efficiency Program

Six 90-minute online classes to teach property owners, managers, and operators strategies for improving energy performance.



BOMA International launches BEEP BOMA Energy Efficiency Program

BOMA International was named a 2007 ENERGY STAR Partner of the Year by the U.S. Environmental Protection Agency (EPA) for BEEP.



BOMA International launches



Participating companies were challenged to:

- decrease energy consumption by 30 percent across portfolios;
- benchmark energy performance and water usage through ENERGY STAR®;
- provide sustainability education to engineers, owners and operators;
- perform energy audits to implement low-risk and low-cost strategies.



BOMA International published a commercial lease guide: Guide to Sustainable and Energy Efficient Leasing

 Model lease terms to maintain energy efficient and sustainable building operations.



BOMA International launches BOMA 360.



Mark of excellence evaluating building practices including:

- Energy Star benchmarking
- Energy Star products for building and tenants
- Building energy management
- Energy Audit/Re-commissioning
- Waste management/recycling

- Indoor Air Quality
- Green Cleaning
- Exterior maintenance mgmt.
- Water management
- Traffic reduction strategies









BOMA Seattle-King County in association with the Northwest Energy Efficiency Alliance kicked off the first Kilowatt Crackdown.

"Energy consumption is the number one operating expense of a commercial building. The value of commercial real estate is down, the occupancy is down, rates are down. And about the only way you can bring value to that building right now is to reduce operating expenses."

— Rod Kauffman, BOMA Seattle King County



http://climatesolutions.org/ solution-stories/kilowattcrackdown



Sue brought Kilowatt Crackdown to BOMA Minneapolis. Goals:

- Raise **awareness** of energy efficiency
- Educate BOMA members on energy efficiency and available resources
- Call to **action** implementing energy efficiency improvements
 - Xcel Energy conservation programs
 - St. Paul Port Authority Trillion BTU Program
 - City of Minneapolis incentives

- Contest involves three tiers of participation:
 Small Buildings, Medium Buildings and Large Buildings (defined by square footage).
- Plus Most Valuable Tenant Award
- Initially had 1st, 2nd, and 3rd prizes in each category. (LESSON LEARNED)

 Xcel Energy provides assistance by helping building managers determine a list of suggested improvements and locating stimulus funding and rebates to help offset the cost of improvements.



- 87 buildings participated in 2011.
- 74 buildings participated in 2012. (LESSON LEARNED)
- 115 buildings participating in 2013.



 We don't release list of participants to the public. (LESSON LEARNED)



 First year, winners were measured by scores in the E.P.A. Energy Star Benchmarking Program. (LESSON LEARNED)



- Participants implemented changes such as retrofitting lighting, upgrading motors and variable frequency drives, buying higher efficiency heating or cooling equipment and conducting building tune-ups.
- Xcel Energy distributed roughly \$1 million in rebates.

• In 2012... Savings of more than 9 million kilowatt-hours of electricity. Using the EPA's equivalency tool, the savings equate to a reduction of 6,350 metric tons of carbon dioxide, or taking 1,325 vehicles off the road. It's also enough electricity to power more than 715 homes for a year.



• Awards are presented at a special breakfast gathering to which city leaders are invited . . . and some are asked to emcee. Last year Senator Franken sent a video congratulations.



Keeping Buildings Engaged

- BOMA newsletter articles and email reminders
- Prompting from Xcel Energy account reps
- 2013 They're automatically signed up unless they opt out.
- Looking forward to implementing some ideas learned from A Better City conference in Boston in May.



Value to Participants . . .

- Free advertising/recognition for winners through media releases.
- Free consultation from Xcel to increase energy efficiency.
- Knowledge about how to find and utilize stimulus dollars, city funding, and Xcel Energy rebates to get projects completed.



Resources required to maintain the program are minimal.

- BOMA staff to make sure it's frequently in announcements.
- Xcel Energy staff to promote and track projects/rebates.
- Media consultant to provide and shepherd media releases.

