

Better Buildings Residential Network Marketing & Outreach Peer Exchange Call Series: Working with Schools

Call Slides and Summary April 24, 2014



## Agenda

- Call Logistics and Introductions
- BBRN and Peer Exchange Call Overview
- Featured Speakers
  - Crystal McDonald, DOE Lead for Better Buildings K-12 Education Sector
  - Tim Leroux, Director of Operations for LEAP Virginia (BBRN Member)
- Discussion
- Future Call Topics Poll





## Participating Programs and Organizations

- BlocPower
- Center for Energy and The Environment
- City of Cambridge, MA
- City and County of Denver (Denver Energy Challenge)
- City of Holland, MI
- Commission on Energy and Environmental Sustainability
- EnergyFit Nevada
- Energy Systems Group
- Energy Wise Alliance (NOLA WISE)
- Green Coast Enterprises
- Island Stewards

- Local Energy Alliance Program -Virginia (LEAP VA)
- Monroe County, ID
- New Power Tour, Inc.
- South Burlington Energy Committee
- Spirit Foundation
- Sustainable Connections
- SustainableWorks
- West Michigan Environmental Action Council
- Wisconsin Energy Conservation Corporation





# **Better Buildings Residential Network**

- <u>Better Buildings Residential Network</u>: Connects energy efficiency programs and partners to share best practices to increase the number of American homes that are energy efficient.
  - <u>Membership</u>: Open to organizations committed to accelerating the pace of existing residential upgrades. Commit to providing DOE with annual number of residential upgrades, and information about benefits associated with them.
  - Benefits:
    - Peer Exchange Calls
    - Tools, templates, & resources
    - Newsletter updates on trends

- Recognition: Media, materials
- Optional benchmarking
- Residential Solution Center

#### For more information & to join, email <u>bbresidentialnetwork@ee.doe.gov</u>.

- Better Buildings Residential Network Group on Home Energy Pros Join to access:
  - Peer exchange call summaries and calendar
  - Discussion threads with energy efficiency programs and partners
  - Resources and documents for energy efficiency programs and partners

#### http://homeenergypros.lbl.gov/group/better-buildings-residential-network





# Better Buildings Residential Network Group on Home Energy Pros Website







Buildinas

5

# Peer Exchange Call Series

#### There are currently 6 Peer Exchange call series:

- Data & Evaluation
- Financing & Revenue
- Marketing & Outreach
- Multi-Family/ Low Income Housing
- Program Sustainability
- Workforce/ Business Partners
- Calls are held the 2nd and 4th Thursday of every month at 12:30 and 3:00 ET
- Upcoming calls:
  - May 8: Program Sustainability BBRN Voluntary Initiative: Partnering to Enhance Program Capacity
  - May 8: Multi-Family/ Marketing & Outreach Outreach to Multi-Family Landlords and Tenants
  - May 22: Data & Evaluation BBRN Member Reporting
  - May 22: Financing Project Performance Relative to Loan Performance
- Send call topic ideas or requests to be added to additional call series distribution lists to <u>peerexchange@rossstrategic.com</u>.





## Lessons Learned: Department of Energy Better Buildings K-12 Education Sector





# How K-12's Continue Engagement with the Energy Department

April 2014



Policy and Technical Assistance Team

**Crystal McDonald** 

## WIP and the K-12 Sector

- Indirectly engaged the K-12 market though the State Energy Program and Energy Efficiency and Conservation Block Grant Program.
- Financial assistance flowed down from states and local municipalities to school projects.
- Post-ARRA, we are building on those relationships and directly engaging the K-12 administrators through programs like Better Buildings and the Technical Assistance Program.
- The team supports K-12 school districts by developing resources and tools for clean energy projects, hosting project teams and training opportunities, and coordinating informational webinars.



## **Overcoming Persistent Barriers**

- Developing Innovative, Replicable Solutions with Market Leaders
- Making Energy Efficiency Investment Easier through Better Information
- Improving Effectiveness of Federal Incentives
- Developing a Skilled Clean Energy Workforce
- Federal Leadership by Example





### Better Buildings Program for the Public Sector K-12 SCHOOL DISTRICTS

Pillars Key communication concepts

Innovation

Leadership

Technical Excellence



#### **BBC K-12 Showcase Project**



Front Entrance of Benson High School B

#### BENSON POLYTECHNIC HIGH SCHOOL Showcase Project: Portland Public Schools

LOCATION Portland, OR

PROJECT SIZE 389,450 Square Feet FINANCIAL OVERVIEW Project Cost \$436,000

#### Annual Energy Use (Source EUI)



#### Annual Energy Cost





#### BACKGROUND

Originally constructed in 1916, Benson Polytechnic High School has historically been one of Portland Public Schools' largest energy users. There have been at least six major additions to the campus since it was originally constructed. Much of the mechanical and electrical

#### SOLUTIONS

Portland Public Schools has utilized funds from its Recovery Zone Program to oversee the implementation of mechanical upgrades and improvements to energy efficiency at Benson. Through the renovation process, Portland Public Schools estimates an energy savings of 144,033 kWh and

#### OTHER BENEFITS

In addition to the energy and cost savings resulting from the renovations of Benson, Portland also anticipates additional benefits, including: improvements to infrastructure and building comfort, decreases in maintenance, and remote building automation control.



Energy Efficiency & Renewable Energy



## **EERE State and Local Resources**

- State Energy Program (SEP)
- Best Practices
- Implementation Models
- Better Buildings Initiative (Challenge, Accelerators, Summit)
- Technical Assistance Program
- Local Government Stakeholders
- Illustrative Assistance:
  - Bring together motivated school districts
  - Identify and jointly address common barriers
  - Obtain savings targets
  - Convene key stakeholders to establish enabling policy/tariff framework
  - Facilitate use of appropriate financial mechanisms



## **Other DOE Resources for K-12 Clean Energy Initiatives**

- <u>Solutions Center</u> The Solution Center is the home for U.S. Department of Energy Technical Assistance Program (TAP), which provides state, local, and tribal officials with resources to advance successful, high impact, and long lasting clean energy policies, programs, and projects
- <u>TAP Webcasts</u> The Technical Assistance Program hosts an interactive page that will help you quickly find live or on-demand webcasts and pre-recorded training presentations to view at your convenience
- <u>DOE Energy Education and Workforce Development</u>: This program office provides a wealth of information about energy K-12 curriculum, workforce development, and STEM activities. For example, take a look at the <u>Energy Literacy Guide</u>, <u>Renewable Energy Competency Model</u>, and <u>Green Job Fact Sheets.</u>
- <u>Financing Clean Energy Projects in Schools</u> Released April 2013



## **Energy Literacy for K to Gray**

#### A Framework for Energy Education for Learners of All Ages



#### **Workforce Development and Education Activities**



Energy Efficiency & Renewable Energy

## Model Program: LivingWise Program in Jonesboro, AK

#### Students to get a lesson in conserving energy

Posted: Oct 28, 2011 4:59 PM EDT

JONESBORO, AR (KAIT) - Some Region 8 students will soon be getting a lesson in conserving energy from the people who know about it.

A joint project between the city of Jonesboro and City, Water, and Light will soon be educating seventh graders in the area.

In 2009, the city of Jonesboro applied for a grant from the Department of Energy and was awarded it. Part of that money is being used to fund the "Living Wise" project. This will use a variety of products to promote and educate energy conservation.

Heather Clements is the Jonesboro Grants Administrator and said they really want to educate the seventh graders on the importance of energy efficiency and give them the tools to practice it. "We hope they take this knowledge through these kits and the Living Wise Program to their families and educate their families," said Clements.

There will be nine activities total that will be implemented into the community.

Copyright 2011 KAIT. All rights reserved.





Energy Efficiency & Renewable Energy

## Impact

- K-12 schools spend around \$6-8 billion on energy annually, making energy the second-highest operating expenditure for schools after personnel costs – more money than is spent on textbooks and computers combined. Well-designed energy efficiency and renewable energy improvements can stabilize or reduce these operating costs – in fact, the most efficient schools use three times less energy than the least efficient schools.
- EERE can facilitate local and regional efforts to help local governments realize energy and cost savings which can be used for the expansion of additional energy efficiency projects or other municipal expenses.
- EERE has been supportive of the education sector and can now stimulate the demand for use of the technology with proven economic, energy, and environmental benefits.



#### **Crystal McDonald**

DOE Lead for BBC K-12 Education

Visit our <u>State and Local Solution Center</u> for state, local, tribal, and K-12 school district leaders working to unlock a clean energy economy.





# Discussion: DOE Better Buildings K-12 Education Sector Lessons Learned

- Schools spend \$6-8 billion on energy annually—just imagine what schools could do if at least a portion was funneled into activities within the classroom.
- Connect the educational curriculum to energy efficiency activities.
- Identify an energy champion in the school or school district.
  - Look for existing energy alliances in the town or school.
  - Look for people who self-identify as an energy champion.
- DOE offers several resources and technical assistance programs for schools.





19

## Lessons Learned: Local Energy Alliance Program (LEAP) – Virginia *(BBRN Member)*



# **Discussion: LEAP Lessons Learned**

#### College Outreach

- University professors often look for real-world applications for student assignments; opportunity for energy efficiency programs to propose projects.
- Energy efficiency programs could target student university housing.
- Outreach is also important in community colleges and technical/vocational schools.
- Timing is critical advertise internship opportunities in February or March.





21

# Discussion: LEAP Lessons Learned (cont.)

- High School Outreach
  - Community service requirements are common at high schools, presenting an opportunity for students to work on energy efficiency projects.
  - Transferring energy efficiency information to parents is more difficult at the high school level as students are often unreliable.
  - Private schools often have more flexibility to incorporate energy efficiency in the curriculum.

#### Elementary School Outreach

- Partnered with a Parent Teacher Organization (PTO) to donate \$10 from every energy audit (\$35) to the PTO.
- Fall is the best time to engage a PTO.





# **Discussion Questions**

- Have others been working with schools, and if so, in what capacity?
- Which type/level of school has been easiest to work with (e.g., elementary, middle, high; public, private; community colleges, universities)?
- What outreach mechanisms with schools has proved most effective (e.g., partnering with PTA/PTOs, providing "take-home" materials to students, distributing branded items)?
- Do you have any ideas for partnering with schools you have not yet tried, but think could be effective at getting the word out?
- Are there any other questions related to working with schools?





# Discussion: Tips for Successful Outreach to Schools/ How to "Get In"

- Identify an energy efficiency champion to run the program internally in a school or district (Principal, STEM coordinator, teacher).
- Partner with the PTA (through the national state office) or PTO.
- Target STEM (Science, Technology, Engineering, Mathematics) programs at schools to reach out to teachers.
- Email teachers directly.
- Send program information home with students to pass on to parents.
- Give decision making to the teachers and students as much as possible.
- Provide branding materials to students (i.e., coloring books, fun toys, t-shirts, etc.).





# **Discussion: Example Activities at Schools**

- Create a demonstration project to display in a school that is a community hub to gain traction for your program.
  - Example: A kiosk that tracks energy (or alternative energy) usage/ saved over time.
- Community Energy Fair where students teach about energy efficiency
- Energy efficiency challenges against other schools, within the neighborhood, or the schools against other government buildings.
  - Example: Denver Energy Challenge <u>http://www.denverenergy.org/schoolchallenge</u>
- Energy Efficiency video challenge and movie showcase night.
- Engage students in weatherization and energy efficiency upgrades in low-income or elderly homes.





25

# **Discussion: Tracking Effectiveness**

- Tracking effectiveness of outreach via schools is a challenge.
- Providing branding materials to students and sending information home to parents are especially difficult to track.
- The best (only) measure of success is the number of parents signing up to participate in the energy efficiency program (e.g., receive an energy audit).
- School or neighborhood challenges require schools to track participation and energy usage as part of the competition.
- Champions can help track the spread of information in schools.





26

# Future Call Topics Poll Results

- Which of the following topics, if any, are of interest for future Marketing & Outreach calls? Pick all that apply.
  - Residential energy efficiency messaging: 83%
  - Outreach to houses of worship: **58%**
  - Leveraging service calls and emergency repairs: 33%
  - Leveraging life events (e.g., birth of a child): 25%
  - Extending service territories: 0%

If you would like to share your experiences on a call or have other ideas for a call topic, contact <u>peerexchange@rossstrategic.com</u>.



