



**Better Buildings Residential Network
Program Sustainability Peer Exchange Call
Series: *Coordinating Energy Efficiency with
Water Conservation Services*
*Call Slides and Discussion Summary***

September 11, 2014

Better Buildings Residential Network

- **Better Buildings Residential Network**: Connects energy efficiency programs and partners to share best practices to increase the number of American homes that are energy efficient.
 - Membership: 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 bbresidentialnetwork@ee.doe.gov.

- **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



Better Buildings Residential Network

Created by Better Buildings Support

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Information



The Better Buildings Residential Network connects energy efficiency programs and partners to share best practices and learn from one another to increase the number of American homes that are energy efficient.

Website: <http://betterbuildings.energy.gov/bbm>

Latest Activity: 8 hours ago

Join the conversation in the discussion forum below. You can use the "Follow" link at the bottom of the forum to receive an email whenever a new discussion is posted.

Open the table of contents below and follow the links to access topical materials and resources.

Helpful Links

- Table of Contents
- Better Buildings Residential Network
- Better Buildings Neighborhood Program Website
- Home Performance with ENERGY STAR
- Home Energy Score



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+New Discussion



Peer Exchange Call Archive



Better Buildings Network View



Tools



Related Events

Discussion Forum



Attend Today's Peer Exchange Calls on Program Sustainability and on Workforce

Don't miss today's calls. "Collaborating with Utilities on Residential Energy Efficiency" begins at 12:30 p.m. Eastern and "Engaging Efficiency First Chapters and Other Trade Associations in Energy Efficiency Programs" begins at 3:00 p.m. Eastern.

Continue

Tags: Peer Exchange Calls

Started by Better Buildings Support 8 hours ago.



Register for Upcoming DOE Webinar About On-Bill Financing

Sign up to attend the DOE State and Local Energy Efficiency Action Network (SEE Action) webinar, "Case Studies: Financing Energy Improvements on Utility Bills," taking place June 11, 2014, from 2:00 to 3:30 p.m. Eastern. To learn more on this topic, read

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- Peer Exchange Archive: Workforce Business Partners

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Home Energy Pros

Home Energy Pros was founded by the developers of Home Energy Saver Pro (sponsored by the U.S. Department of Energy,) and brought to you in partnership with Home Energy magazine.

Latest Activity

[What brings you here?](#)

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Tucker Henne commented on David Byrne's blog post Does Aereoseal work? An auditors review

"I would like to begin with a disclaimer that I am an Aereoseal contractor. One of the reasons I..."

16 minutes ago

TJ Alexander posted a blog post

So many homes have fiberglass insulation that is poorly installed in New Hampshire and elsewhere

Doing testing of existing homes it is typical to see mottled patterns of surface temperatures with...

See More

1 hour ago

0

CleanEdison updated an event



Entry Level Solar Photovoltaic at Cotuit, MA

September 30, 2012 to

Peer Exchange Call Series

- There are currently 6 Peer Exchange call series:
 - Data & Evaluation
 - Financing & Revenue
 - Marketing & Outreach
 - Multifamily/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:
 - Oct 9, 12:30 ET: Program Sustainability: Incorporating Energy Efficiency into Disaster Recovery Efforts
 - Oct 9, 3:00 ET: Data & Evaluation: Making Evaluations Work for Your Program: Tips for Success
 - Oct 23, 12:30 ET: Finance & Revenue: Crowd Funding: Enabling Small Investors to Help Fund Business Loans for E3 Upgrades
- Send call topic ideas or requests to be added to additional call series distribution lists to peerexchange@rossstrategic.com

Peer Exchange Call Summaries

Discussion: Challenges and Solutions

- Overcoming Challenges - Solutions:
 - Access trusted, local messengers
 - Engage your satisfied customers as champions to turn them into "lifetime customers"
 - Invite people to make a pledge with a few simple EE activities they can take
 - Connect with the right local partners (Connecticut conducted "community asset mapping")
 - Directly involve the homeowner through DIY work or as energy efficiency demonstration homes to help them feel engaged (San Diego demonstration homes)
 - Minimize paperwork to make it easier to participate

20



Poll Results

Participant Poll: Which of the following best describes your program's experience with energy efficiency behavior change efforts?

- Currently implementing: 31%
- Planning to implement: 31%
- Thinking about it: 19%
- Haven't thought about it: 0%
- Not applicable: 19%

The screenshot shows the Home Energy Pros website interface. At the top, it says "HOME ENERGY PROS" with the tagline "Connecting home energy professionals". Below this is a navigation menu with links for Home, Invite, My Page, Members, Forum, Blogs, Groups, Photos, Videos, and Events. A breadcrumb trail reads "Back to Better Buildings Residential Network" and "All Better Buildings Residential Network Pages". The main heading is "Peer Exchange Archive: Program Sustainability". Below this, there are several entries, each with a title, date, and a link to a PDF summary:

- Incorporating Behavior Change Efforts into Energy Efficiency Programs**
July 10, 2014
[Presentation and Discussion Summary \(PDF\)](#)
- Collaborating with Utilities on Residential Energy Efficiency**
June 12, 2014
[Presentation and Discussion Summary \(PDF\)](#)
- BBRN Voluntary Initiative: Partnering to Enhance Program Capacity**
May 8, 2014
[Presentation and Discussion Summary \(PDF\)](#)
- Complementary Energy and Health Strategies**
April 10, 2014
[Presentation and Discussion Summary \(PDF\)](#)
- Mastermind: Jim Mikel, Spirit Foundation**
March 13, 2014
[Presentation and Discussion Summary \(PDF\)](#)

How do you eat an elephant? One bite at a time. A slight shift in perspective goes a long way.

Understanding how EE can solve a financial, public relation, or customer service problem for the utility is the right place to start.

Agenda

- Call Logistics and Introductions
- Opening Poll
- Featured Speakers
 - Kristin Riott, Bridging the Gap
 - Brian Kennedy, Austin Energy
- Discussion
 - What are the benefits of combining energy and water conservation services?
 - What institutions or partners need to be involved and what are effective collaboration strategies?
 - What specific services and/or products have been most effective?
- Future Call Topics Poll

Call Participants

- American Council for an Energy Efficient Economy (ACEEE)
- Arlington County, VA
- Austin Energy
- Bridging the Gap
- Build it Green
- The California Housing Partnership Corporation
- City of Bellevue, WA
- City of Bellingham Public Works
- City of Greensboro
- City of Kansas City, MO
- City of Roanoke, VA
- City of Winter Park, FL
- Civic Works, Inc.
- Clean Energy Works
- Efficiency Maine
- Elevate Energy (Energy Impact Illinois)
- Energy Coalition
- EnergySmart Colorado
- UNC Environmental Finance Center
- Historic Chicago Bungalow Association
- Midwest Energy Efficiency Alliance (MEEA)
- MPower Oregon
- PECI
- Sustainable Connections
- UNM Southwest Environmental Finance Center

Opening Poll Results

- **Which of the following best describes your experience combining energy efficiency and water conservation services?**
 - Currently doing it—**41%**
 - Thinking about it—**19%**
 - Not applicable—**19%**
 - Planning to do it—**15%**
 - Just learning about it today—**7%**

Coordinating Energy Efficiency with Water Conservation Services

Lessons Learned:

Kristin Riott, Executive Director
Bridging the Gap
Kansas City, MO

Blue is the New
Green

Bridging The Gap



The City's Electric Bill

Over a third of Kansas City's total electricity use goes to pump and treat water and wastewater.

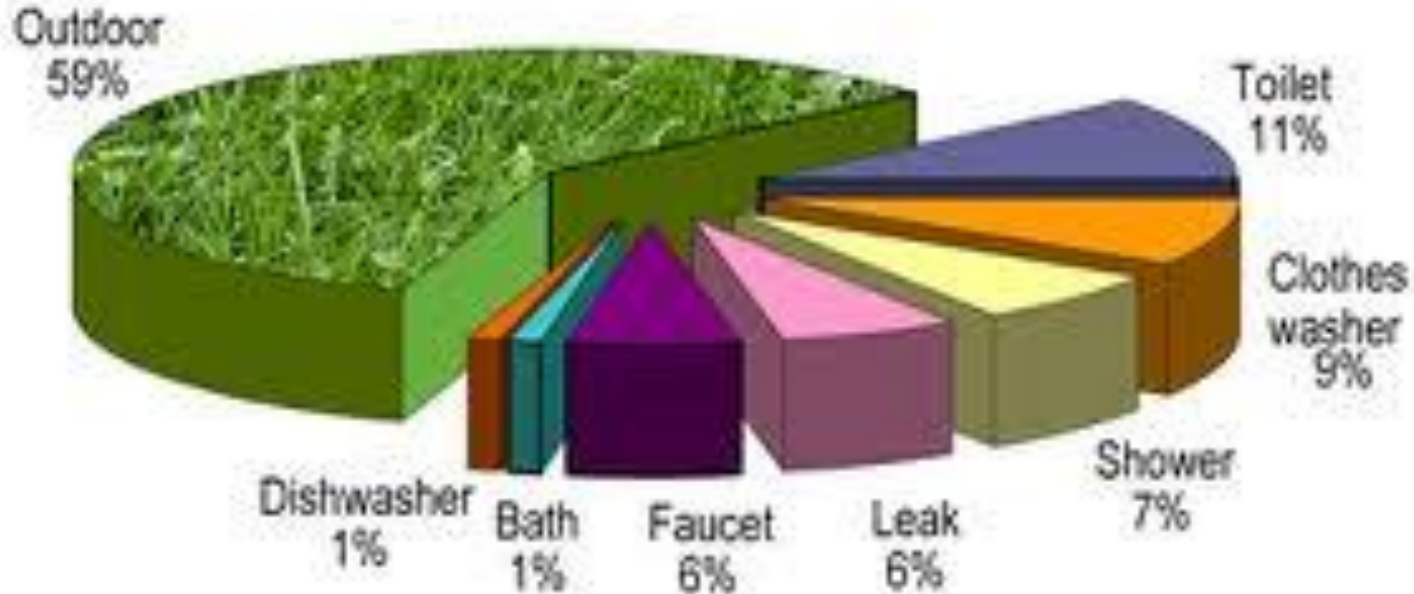


Gallons Conserved per Dollar

	<u>Ann. Gall.</u>	<u>Cost (direct)</u>	<u>Gall/\$</u>
Showerhead/aerator/Tank Bank Kit			
DIY	15,000	\$ 9	1,666
Prof. Install	15,000	\$ 104	144
Downspout Disconnect	11,000	\$ 69	159
High effic. toilets	6,000	\$ 200	30
Rainbarrel DIY	220	\$ 30	7
Rain gardens (120 sq ft.)	1,600	\$1,600	1

Lawns, toilets are big users

Residential Average Water Use



Source: American Water Works Association Research Foundation, End Uses of Water

7,000 Eco-kits, 1,400 new toilets



WaterWorks!

375 rain barrel/
downspout
disconnects



19 Model Rain Gardens



Keep Kansas City Beautiful

Lessons Learned

Piggyback on existing events

Be eye-catching & fun

Give something for free

Minimize steps and paperwork

Hire the right people



Program Highlights: Bridging the Gap

- Distributed 7,000 kits to low-income families in Kansas City.
 - Averted 15-20k gallons/year of water use
 - Families saved an average of \$10-15/month on their utility bill
 - The installation paid for itself in the first month of use; it offered higher savings than lighting efficiency measures to residents
- In terms of gallons saved per dollar spent, the program found the most cost-effective way to reduce water consumption was to install aerated showerheads.
- Also did a toilet replacement project funded by WaterWorks; administered rebates on water saving toilets.
 - Project was most successful in multifamily properties where the program could, for example, interact with one owner and replace 90 toilets.

Lessons Learned: Bridging the Gap

- **Outreach and Distribution:** Provided kits at local utility offices; people having trouble paying their bills could take one home for free. Also provided them at City Hall and large community events.
 - Better to piggyback on large community events than create a following for own events.
- **Program Challenge:** Difficult to prove if the water conservation kits were actually installed once taken home by residents.
- **Solutions:**
 - Bridging the Gap collected addresses in exchange for free kits to track where in the municipality the kits were installed.
 - Considered incentive programs or prizes for residents to somehow show—such as through a photo—that they had installed their kit.
 - Have plumbers or energy auditors install kits onsite.
- **The key to a successful program:** Eliminate as many steps as possible. Allow people to obtain what they need to save water and install the measures quickly and easily.

Coordinating Energy Efficiency with Water Conservation Services

Lessons Learned:

Brian Kennedy, Product Development Coordinator
Austin Energy
Austin, TX

Lessons Learned: Austin Energy

- Water conservation program began by having EE contractors install low-flow showerheads and aerators when installing new water heaters.
- Had the most success targeting multifamily properties, which often had older, less efficient water devices.
 - Providing the devices for free helped adoption, especially in the multifamily sector.
 - Property owners don't have an incentive to install devices if water costs are paid directly by tenants.
 - In multifamily properties, make sure the device is installed correctly, so there is less need to take it out

Lessons Learned: Austin Energy (Cont.)

- Distribute quality products.
 - The amount you spend up front on devices is likely related to the amount of time they will be installed and working properly.
 - Cheap devices will break, or people will uninstall them if they are dissatisfied.
- In single family homes, installations are more difficult to track; hard to measure how many devices are still in use.
- Had to create the conversation between the water utility and energy utility; coordination wasn't happening before.
- Installing water saving measures offer several benefits to the city:
 - Reduced water consumption
 - Reduced waste water
 - Reduced electricity use

Discussion: Coordinating Energy Efficiency with Water Conservation Services

- What are the benefits of combining energy and water conservation services?
- What institutions or partners need to be involved and what are effective collaboration strategies?
- What specific services and/or products have been most effective?

Discussion: Working with Water Utilities

- Some water utilities are concerned that water conservation efforts will lower their income.
- Form close, positive relationships with the water utility; you may have to persuade them of the wisdom of combining EE and water conservation.
- Local weather and climate affects how interested local water utilities may be.
 - Combined sewer overflow events create a strong motivator for the water utility to reduce water consumption and wastewater volumes.
 - Drought-prone areas are more concerned with conservation.
- Engage the water utility in outreach events; this spreads the perception that water and energy savings should go hand in hand.
- Water utilities are not always interested in residential interventions; some are more focused on outdoor water usage.
- Water utilities are often not as centralized as energy utilities.

Discussion: Water Conservation and EE Branding and Outreach

- EE can help market water conservation.
 - The marketing message behind energy efficiency is to create a comfortable, safe, more efficient home. Water conservation doesn't carry that message alone, but it can when packaged with EE installations and outreach.
 - People are deterred by “low flow” language of water conservation measures; negative perception that low flow means poor water pressure. The EE message helps re-brand water conservation.
- Water conservation measures offer another effective component to the EE ‘quick fix’ or direct install package that can persuade residents to pursue other installations and improvements.
- Coordinate outreach so contractors and property owners start thinking of EE and water as connected.

Discussion: Targeting Water Conservation and EE in the Multifamily Sector

- Packaging EE and water conservation together can solve the split incentive dynamic in multifamily buildings.
 - In multifamily buildings, water usage is often not sub-metered at individual units but electricity is often sub-metered. The cost of water is increasing, and property owners can't control how much water tenants use.
 - Water measures benefit the owner directly, whereas EE measures benefit the tenant.
- People aren't aware of the cost per gallon of their water use.
- Partner with the water utility when working with multifamily properties to get devices for free.
- Make sure devices get installed; otherwise it is difficult to measure program effectiveness.

Future Program Sustainability Call Topics

- Incorporating Energy Efficiency into Disaster Recovery Efforts (October 9)
- Also look for calls on November 13 and December 11—topics to be announced!

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