



Better Buildings Residential Network Peer Exchange Call Series: *Voluntary Initiative on Incentives: Toolkit Training Webinar*

Call Slides and Discussion Summary

March 26, 2015

Agenda

- Call Logistics and Introductions
- Opening Poll
- Residential Network and Peer Exchange Call Overview
- Poll on Incentives Experience
- Designing Incentives Toolkit:
 - Toolkit Overview, Jonathan Cohen, U.S. DOE
- Featured Speakers:
 - Brian Kennedy, Austin Energy
 - Dana Fischer, Efficiency Maine
- Q&A and Discussion
- Closing Poll

Call Participants

- Applied Home Performance Solutions
- Arlington County, VA
- Austin Energy
- Bonneville Power Administration
- Center for Energy and Environment
- City of Takoma Park
- CLEAResult
- Community Development Department
- Community Office for Resource Efficiency
- Center for Sustainable Energy
- Efficiency Maine
- Energy Efficiency Specialists, LLC
- Environmental Design/Build
- International Center for Appropriate and Sustainable Technology
- Mass Department of Energy Resources
- Midwest Energy Efficiency Alliance
- University of Illinois
- Wisconsin Energy Conservation Corporation

Opening Poll Results

- Which of the following best describes your organization's experience with the call topic (incentives)?
 - Very experienced/familiar **54%**
 - Some experience/familiarity **23%**
 - Limited experience/familiarity **23%**
 - No experience/familiarity **0%**
 - Not applicable **0%**

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
Send Message View Groups

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

Table of Contents +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

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?
140 Share

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

Pages (15)

- Tools
- Better Buildings Network
- View
- Peer Exchange Call Schedule and Archive
- Peer Exchange Archive: Marketing and Outreach
- Peer Exchange Archive: Workforce Business Partners

CleanEdison updated an event
Entry Level Solar Photovoltaic at Cotuit, MA
September 30, 2012 to

Tools page

Where to Find the New Incentives Toolkit

5 - Home Energy Pros x

homeenergypros.lbl.gov/group/better-buildings-residential-network/page/placeholder-2

HOME ENERGY PROS

Connecting home energy professionals

Home Invite My Page Members Forum Blogs Groups Photos Videos Events Training About

← Back to Better Buildings Residential Network All Better Buildings Residential Network Pages

Tools

Table of Contents

- Case Studies
- Voluntary Initiative: Partnerships Toolkit
- Voluntary Initiative: Designing Incentives Toolkit
- Lessons Learned: Peer Exchange Calls
- Lessons Learned: Peer Exchange Calls No. 2
- Better Buildings Residential Network Program Solution Center
- Better Buildings Residential Network Reporting
- Guide for Program Benchmarking
- Energy Efficiency Cost Effectiveness Tool (Beta Version)
- FHA PowerSaver Loans

Case Studies

Better Buildings Residential Network case studies feature members to fulfill our mission to share best practices and learn from one another to increase the number of homes that are energy efficient.

- Partnerships Case Study: GTECH Strategies

Voluntary Initiative: Partnerships Toolkit

The Partnership Toolkit was developed as the first Residential Network Voluntary Initiative, which provides a forum for members to join together to address a common need or opportunity for energy efficiency programs. The toolkit contains resources to help energy efficiency organizations engage in partnerships that leverage resources and strengthen their programs.

- Voluntary Initiative: Partnerships Toolkit

Voluntary Initiative: Designing Incentives Toolkit

This toolkit marks the second Residential Network Voluntary Initiative, which provides a forum for members to address a common need or opportunity for residential energy efficiency programs. The toolkit includes explanations, templates, examples, and case studies related to incentives to help you and your fellow Better Buildings Residential Network members strengthen your programs.

- Voluntary Initiative: Designing Incentives Toolkit

Lessons Learned: Peer Exchange Calls No. 1

The Better Buildings Residential Network hosts a series of Peer Exchange Calls for members to discuss

Sign Out

- Inbox
- Alerts
- Friends - Invite
- Settings

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?

140 Share

Mary Desiva posted a blog post

How People in San Diego Are Facing The Energy Crisis

One of the biggest issues with living in large cities like San Diego is the sheer amount of energy... See More

1 hour ago

0

Jan Stensland replied to Linda Wington's discussion

Congrats Cenicerros Household! 26th Project to Officially Meet 1000 Home Challenge in the group

Main Room Members Online (5)

Peer Exchange Call Series

- Calls are held the 2nd and 4th Thursday of every month at 12:30 and 3:00 ET
- Calls cover a range of topics, including financing & revenue, data & evaluation, business partners, multifamily housing, and marketing & outreach for all stages of program development and implementation
- Upcoming calls:
 - March 26, 3:00 ET: Fostering Behavior Change in the Energy Efficiency Market
 - April 9, 12:30 ET: Residential Energy Efficiency Messaging
 - April 9, 3:00 ET: The Future is Here: Smart Home Technology
 - April 23, 12:30 ET: Community Organizing and Outreach
 - April 23, 3:00 ET: Developing State Energy Efficiency Alliances
- Send call topic ideas 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



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%

9

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. The main content area is titled "Peer Exchange Archive: Program Sustainability" and lists several call summaries with their dates and PDF links. The summaries include:

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

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.

Poll #2 Results:

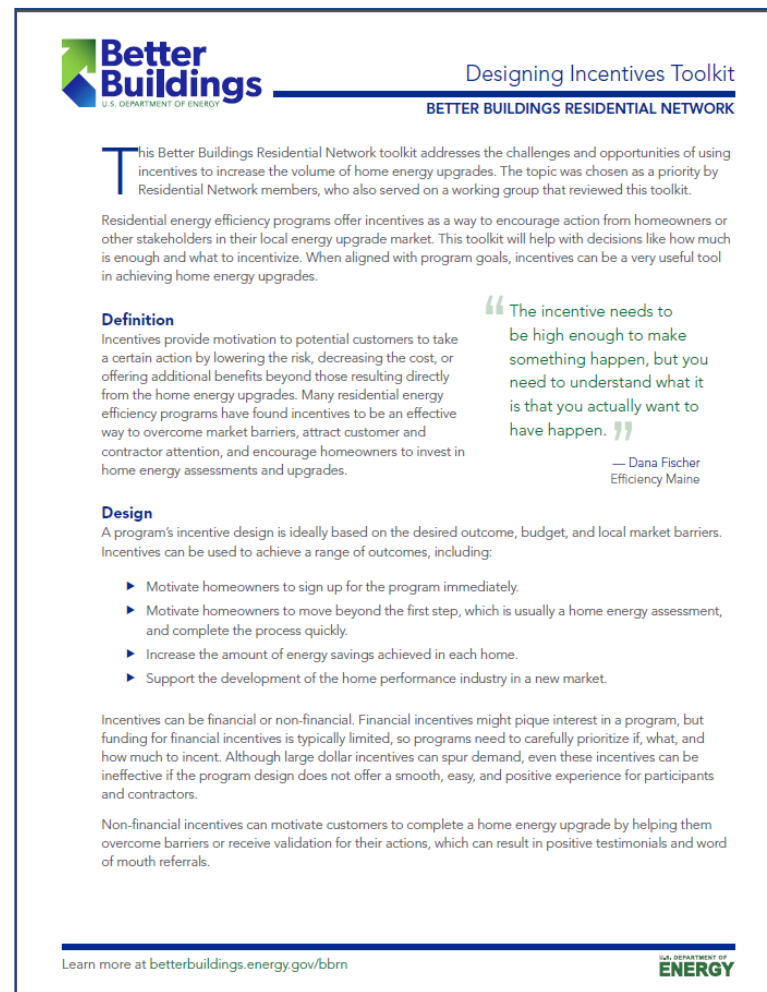
Range of Incentive Experience

- What types of incentives has your organization used?
 - Rebates or reduced cost/free offers **90%**
 - Contractor: training subsidy, equipment, productivity, etc. **90%**
 - Financial: low interest rates, credit enhancements, etc. **70%**
 - Non-financial incentives: public recognition, gifts, etc. **70%**
 - Have not used incentives **10%**

Voluntary Initiative on Incentives: Designing Incentives Toolkit Overview

Designing Incentives Toolkit – Background and Purpose

- **Definition** - Incentives provide motivation to potential customers to take a certain action by:
 - Lowering the risk,
 - Decreasing the cost, or
 - Offering additional benefits beyond those resulting directly from home energy upgrades
- **Toolkit Purpose:**
 - Address the challenges and opportunities of using incentives to increase the volume of home energy efficiency upgrades
- Residential Network members chose this topic as a priority



The thumbnail shows the cover of the 'Designing Incentives Toolkit' document. At the top left is the 'Better Buildings' logo with 'U.S. DEPARTMENT OF ENERGY' underneath. To the right, the title 'Designing Incentives Toolkit' is displayed above 'BETTER BUILDINGS RESIDENTIAL NETWORK'. The main text begins with 'This Better Buildings Residential Network toolkit addresses the challenges and opportunities of using incentives to increase the volume of home energy upgrades...' followed by a 'Definition' section and a 'Design' section. A quote from Dana Fischer of Efficiency Maine is featured on the right side. At the bottom, there is a URL 'Learn more at betterbuildings.energy.gov/bbrn' and the 'U.S. DEPARTMENT OF ENERGY' logo.

Toolkit Contributors – Thank You!

- Sean Bleything, [Vermont Energy Investment Corporation](#)
- Phillip Cameron, [Energy Conservation Works](#)
- Erendira Cruz, [Sustainable Living Center](#)
- Susan Davison, [Center for Sustainable Energy](#)
- Kathryn Eggers, [Elevate Energy](#)
- Erik Gilbert, [New York State Energy Research and Development Authority \(NYSERDA\)](#)
- Candace Gossen, [San Juan Islands Conservation District](#)
- Brian Henderson, [National Association of State Energy Officials](#)
- Barbara Hernesman, [CalCERTS, Inc.](#)
- Dawn Hjelseth, [green|spaces](#)
- Kelsey Horton, [Midwest Energy Efficiency Alliance](#)
- Zaheen Hussain, [GTECH Strategies](#)
- Ted Kidd, [Energy Efficiency Specialists](#)
- Kimberly Loewen, [Elevate Energy](#)
- Don MacOdrum, [Home Performance Guild of Oregon](#)
- John Madden, [Light House Sustainable Building Centre](#)
- Tim Miller, [Clean Energy Works](#)
- Bill Mitchell, [NYSERDA](#)
- Craig Savage, [Building Media, Inc.](#)
- Jeremy Scharfenberg, [City of Columbia, Missouri](#)
- Jerry Schechter, [City of Kansas City, Missouri](#)
- Kevin Schleith, [Building Sustainable Solutions, LLC](#)
- Scott Tess, [City of Urbana, Illinois](#)
- Toni Turnbull, [CalCERTS, Inc.](#)
- Michael Walton, [green|spaces](#)

Incentive Design

- Incentive design should consider:
 - Desired outcome
 - Budget
 - Local market barriers
- Potential outcomes:
 - Motivate homeowners to sign up for the program immediately
 - Motivate homeowners to move beyond the first step (e.g., energy assessments) and complete the process quickly
 - Increase the energy savings in each home
 - Support the development of the home performance industry in a new market

Incentives Tips (1 of 3)

- Evaluate Your Program's Market to Develop Incentive Options
 - Assess the market, target audience, and past incentive history by engaging stakeholders before setting and committing significant resources to incentives
 - Match incentives with desired outcomes
 - Tiered incentives can give more choice to consumers than a one-size-fits-all approach
 - Take into account age, type, and other characteristics of the local building stock and design incentives appropriate to these building types

Incentives Tips (2 of 3)

- Engage Partners for Assistance With Introducing Incentives
 - Align program incentives with utility and other federal, state, or local incentives and policies to leverage resources
 - Appliance rebates and recycling programs
 - Solar and energy efficiency
 - Water and energy efficiency
 - Ensure your programs are not competing with existing efforts
 - Engage contractors in incentive plans—they are essential to a successful rollout
 - Pilot incentives with a small group of potential customers before rolling them out through an entire program to work out the kinks

Tips for Incentives (3 of 3)

- Analyze the Process and Make Improvements Where Necessary
 - Create a process map of how the incentive would work that takes into account each step and staff role, which will help troubleshoot, and should be updated as the process is updated
 - Expect to revise plans based on market realities and feedback

Examples of Resources Linked in the Designing Incentives Toolkit

- **Case Studies:** Spotlight on Portland, Oregon: Use Incentives to Get Attention and Encourage Deep Savings
- **Database:** Database of State Incentives for Renewables and Efficiency (DSIRE)
- **Fact Sheets:** Ideas to Incentivize Contractors and Build a Strong Workforce
- **Interviews:** Equipment Lease Program Breaks Down Barriers for Cincinnati Contractors
- **Presentations:** Effective Incentive Structures
- **Reports:** Customer Incentives for Energy Efficiency Through Program Offerings
- **Template:** Small Town Energy Program (MD) Request for Incentives Form
- **Tips:** Motivate Action Through Financial Incentives and Limited Time Offers
- **Webcast:** Designing Effective Incentives to Drive Residential Retrofit Program Participation

And many more in the Toolkit!

Find Resources in the Incentives Toolkit and the Residential Program Solution Center

Web portal of residential EE upgrade program resources, & lessons learned to plan better, avoid reinventing the wheel.

- BB Neighborhood Program, Home Performance with ENERGY STAR Sponsors+
- Provides:
 - Step-by-step guidance
 - Examples
 - Tools
 - Templates
 - Lessons learned
 - Best practices
 - Tips
- Continually add content to support residential EE upgrade programs—member ideas wanted!



<https://bbnp.pnnl.gov/>

**Program Experience:
Brian Kennedy, Austin Energy**

Program Experience: *Austin Energy*

- Austin Energy's Clean Energy Accelerator program was part of the original ARRA-funded Better Buildings grant program.
- To begin the program the "Best Offer Ever" incentives program was rolled out quickly and with a bang (>560 upgrades in less than six months!)
 - The successful launch required comprehensive pre-planning. Austin Energy developed process flow-charts, which they paired with workload management scheduling software, to allow for efficient and nimble scheduling.
 - To meet the high and sudden demand for energy assessments, Austin Energy lined up several "overflow" BPI-certified contractors to perform assessments when the program inspectors were at capacity.
 - Even with the significant planning the program encountered unanticipated issues, such as expiring loan preapprovals, and had to quickly develop new internal processes.
 - See the Case Study for more details on the Best Offer Ever:
http://www1.eere.energy.gov/buildings/betterbuildings/neighborhoods/pdfs/cs_austin_servicedelivery.pdf
- After the initial launch, Austin Energy rolled out seasonal incentives (e.g., winter bonus) to promote a steady stream of projects throughout the year, which was important to program contractors.

**Program Experience:
Dana Fischer, Efficiency Maine**

Efficiency Maine

A Few Key Rebate Design Concepts in Practice

Dana Fischer
Residential Program Manager

3-26-15



What are we trying to accomplish with rebates?

Increase the rate of adoption of cost-effective efficiency measures and equipment upgrades as much as possible with the lowest allocation of public dollars per unit of verifiable energy savings.

“Project would not have been done but for the influence of the program.”

- Homeowner would do nothing or buy lower cost option even though the energy savings of the upgrade would more than pay for itself in the course of the measures useful life.

Key rebate principle: Avoid Free-ridership

Rebate criteria should seek to limit free-ridership as much as possible. Rebate must be large enough to solicit a change in behavior by enough participants to overcome any natural free-ridership and all program costs and then some. (2x)

- Rebates on “Energy Star” boilers when the average boiler being installed is “Energy Star.” **Not cost-effective.**
- Rebates on *Best-In-Class boilers* increases adoption of systems that are available but not frequently installed despite the fact that they pay for themselves over time.
- Rule of thumb: rebate should typically be less than the incremental cost of the “lost opportunity” upgrade unless kick-starting adoption of a new technology or service.

Program factors as important as rebate amount:

Program design and rebate dollar values must be tied to a number of factors including the total and incremental cost of projects or measure, lifetime energy savings, the behavior that needs to be overcome, consumer energy education, market inertia, purchase decision psychology, and program budget availability. And it changes over time.

LED and CFL Lightbulb Example: Buying lightbulbs is an impulse buy. Bring the shelf cost of CFL's and LED's close to the price of incandescent bulbs and they fly. No marketing needed.

Ever moving, ever requiring tuning.

Can be turned on and off. ;))



Designing for Value Assurance and Momentum:

Rebate criteria should seek to align the interests of consumers, contractors and the program.



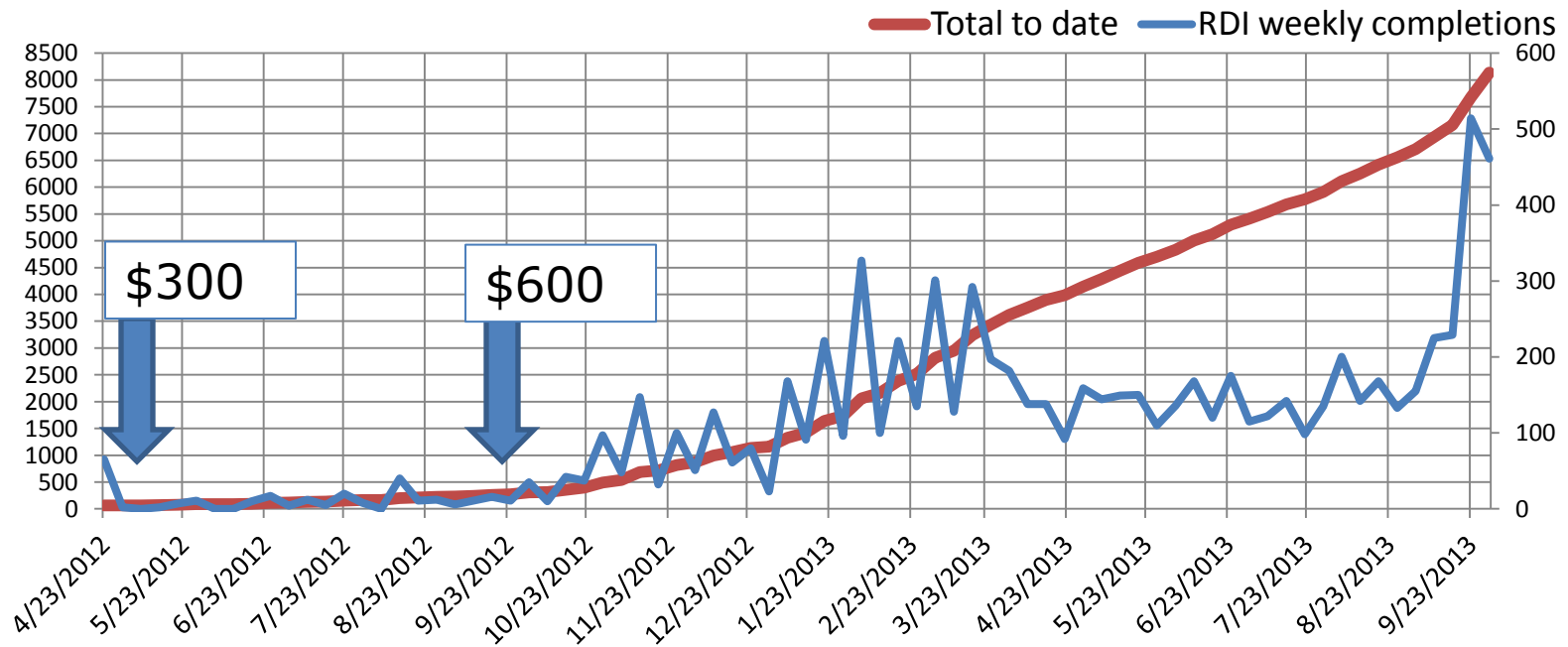
Rebates on BPI Assessment and Basic Air-sealing

- Low risk of free-riders with combination
- Rebate needs to be high enough to overcome perceived value of service verses cost to the consumer.
- Must provide a reasonable avenue for contractors to sell projects and make a profit and/or develop leads on larger jobs.
- Measure minimums must be flexible for all manner of circumstances, yet on average generate sufficient demonstrable energy savings to justify job cost and rebate.
- Customer needs to have enough skin in the game to care about results and seek value from contractor.

Assessment and Air Sealing Promotion

For an 18 month period from April 2012 to September 2013, a rebate was offered on completion of an energy assessment by a BPI auditor combined with a minimum of 6 hours of basic air sealing.

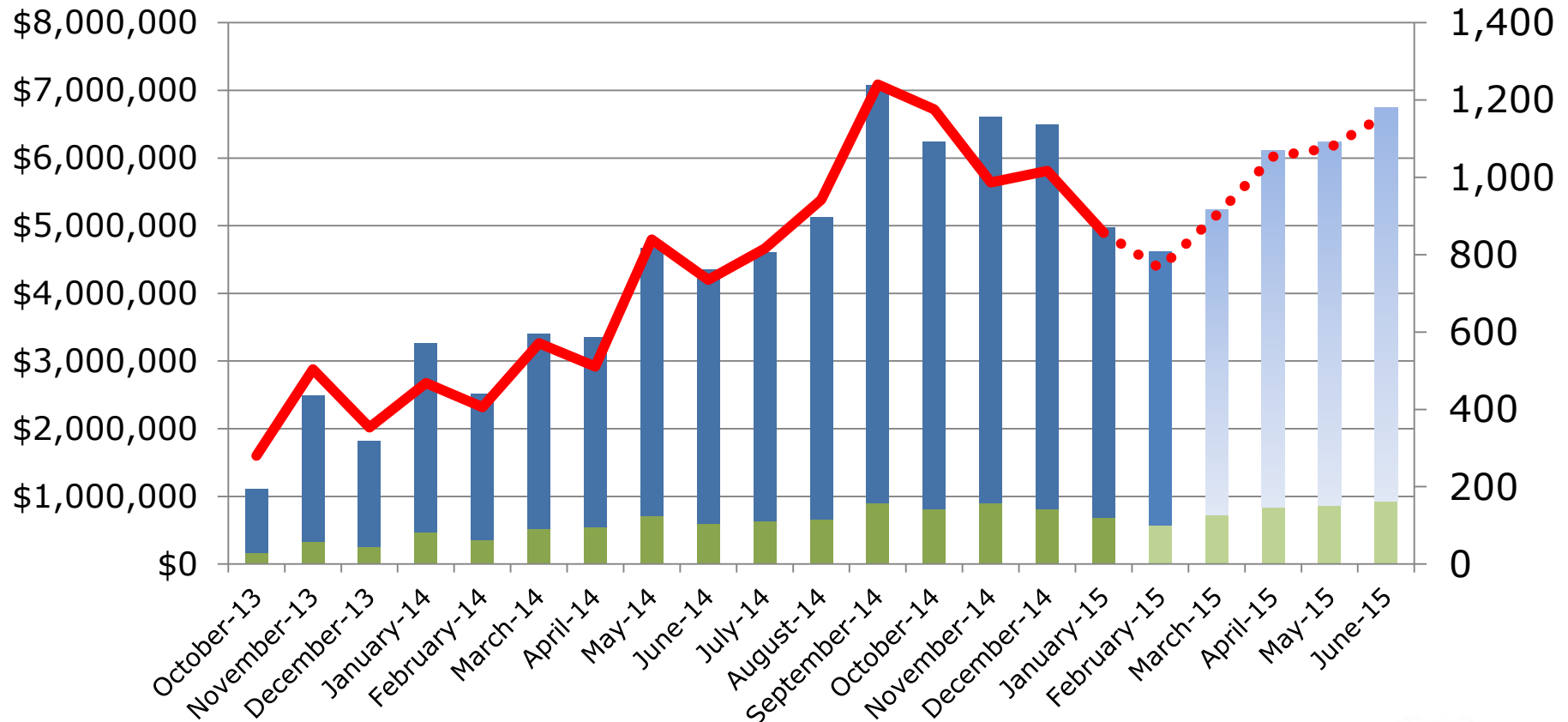
Average reduction in CFM50: 517 CFM50 reduction or 17% or ~70 gallons of oil.



Home Energy Savings Program Project Activity and Investment

Monthly Total Project Value

Projects



Homeowner Investment

ESP Rebates

Projects

Projected Homeowner Investment

Projected Rebates

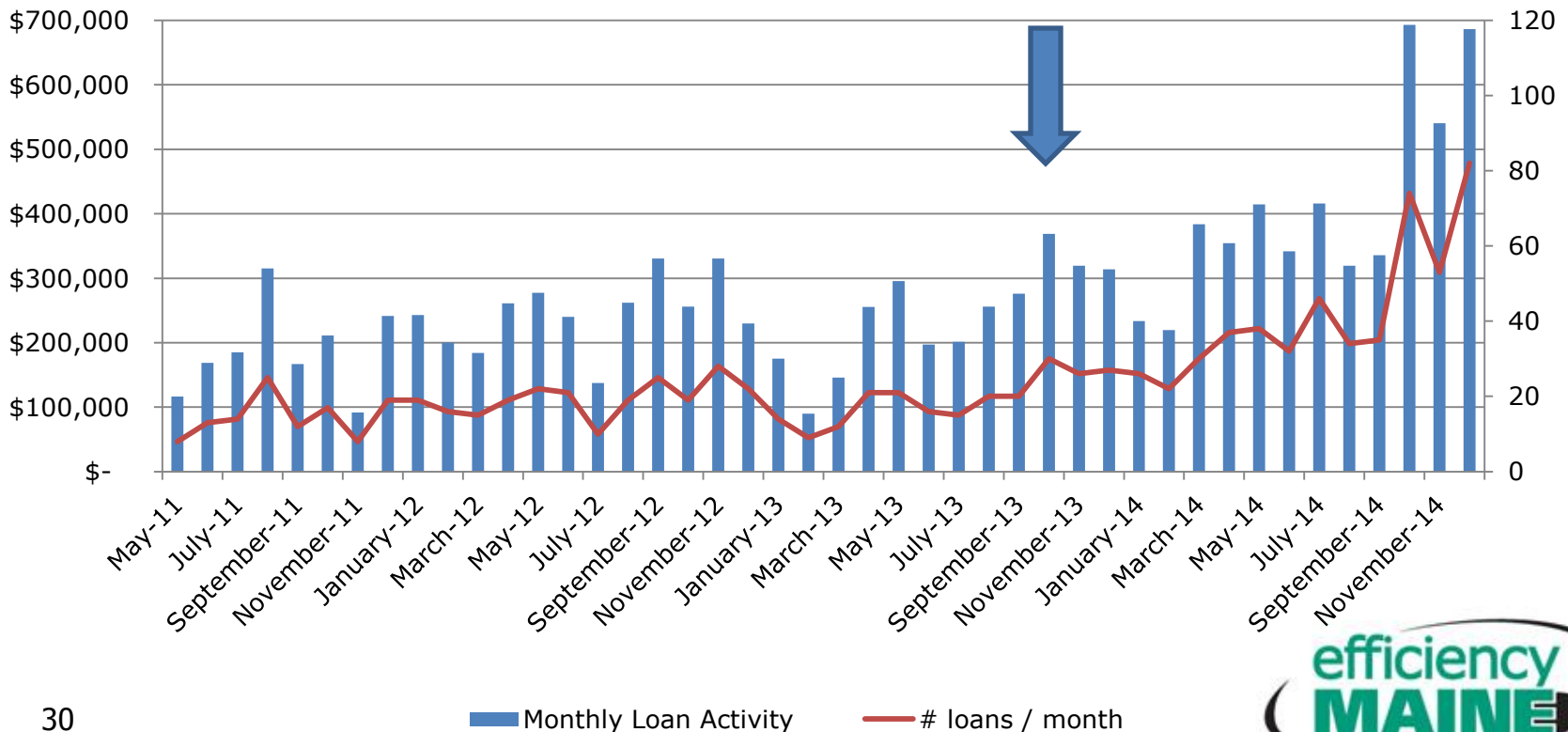
Projected projects



HESP Loan Program Activity

\$13 M has been provided to finance projects on more than 1100 homes including \$3.7 M to date in FY15 fiscal year.

Change in monthly loan volume occurs in line with uptake of rebates for more comprehensive projects.



Rebates are an important part of a balanced program

- Rebates are not effective in a vacuum but are demonstrated to be cost-effective to overcome market barriers when applied thoughtfully.
- The “Balance of System” cannot be underestimated or ignored. Build it, Fly it, Maintain it.
- Seek out and eliminate uncertainty to help the market.

Dana Fischer
Residential Program Manager
efficiencymaine.com



Program Experience:

Lessons Learned from Efficiency Maine

- Incentives are not a silver bullet – all of the necessary pieces to run a successful program need to be in place for incentives to work.
- Programs need to be good stewards – public dollars for conservation are precious and need to be expended carefully to ensure that policy makers & utilities will continue to invest.
- Rebates should not promote free-ridership – do not incentivize activities that would happen anyway.
- Incentives need to be designed to the programmatic goals – identify what measures need to be promoted, and incentivize those.
- There is an incentive tipping point – Incentives need to be high enough to motivate customer behavior, but not too high as to limit their cost effectiveness. The tipping point is related to how much homeowners are willing to pay for the measures themselves.

Discussion Questions

- What types of residential energy efficiency incentives has your organization tried or considered?
 - What incentive approaches have worked well for helping achieve your desired outcomes? What incentives have not worked well?
- What types of incentives work best for motivating homeowners to act? Are different types of incentives needed at different stages of the process (e.g., initial sign up vs. upgrade)?
- Has your program used contractor incentives? If so, for what purposes and how effective have they been?
- What challenges or barriers have you had with designing or implementing incentives for residential energy efficiency? How have you addressed those challenges?

Discussion Highlights:

Program Experience with Incentive Levels

- In Austin, which has a growing rental-dominated housing market, programs must incentivize upgrades more heavily. Some multi-family projects paid 25%-30% of the total cost, and others only paid in 10%.
 - However, even in this environment, it's important for the building owner to be involved and be invested. Investment can include administrative time, groundskeeper time, resident outreach, etc. Austin Energy also provided marketing incentives for multifamily building owners.
- In Maine, incentives paid for 20-50% of project costs: lower for the replacement of broken equipment and incremental costs, and higher for whole-house retrofits, where equipment is not broken.
- To determine incentive levels for equipment, compare the standard market costs between less efficient equipment and best-in-class energy efficient equipment, and provide an incentive to help cover the difference.

Discussion Highlights:

Successful incentive and marketing methods

- Examples of successful referral incentives:
 - Homeowners who referred other homeowners to an energy efficiency program received a free, high-value LED light bulb (no audit purchase necessary). (Wisconsin)
 - Homeowners who referred other homeowners to a ductless heat pump (DHP) program received \$50 for the referral, and \$50 off their own DHP installation. (Maine)
- Targeted, digital marketing (e.g., Google Ads, etc.) can be a highly effective marketing method.

Closing Poll Results

- After today's call, what will you do?
 - Seek out additional information on one or more of the ideas **57%**
 - Make no changes to your current approach **29%**
 - Other (please explain) **14%**
 - Consider implementing one or more of the ideas discussed **0%**

LET'S ALL MEET IN MAY!

REGISTER TODAY for the BETTER BUILDINGS SUMMIT

Washington, DC · May 27-29, 2015

SAVE YOUR SPOT NOW:

<http://www1.eere.energy.gov/buildings/betterbuildings/summit/>

This Summit will bring together Better Buildings partners and stakeholders to exchange best practices and discuss future opportunities for greater energy efficiency in America's homes and buildings.

There will be time set aside for a specific Residential Network discussion and meet-up!

Thank you!

Please send any follow-up questions or future call topic ideas to:
peerexchange@rossstrategic.com