



## **Better Buildings Residential Network Peer Exchange Call Series: *Swipe Left, Power Down: Using Interactive Media to Instill Behavior Change (301)***

*June 9, 2016*

*Call Slides and Discussion Summary*

# Call Attendee Locations



# Agenda

- Agenda Review and Ground Rules
- Opening Poll
- Brief Residential Network Overview
- Featured Speakers
  - **Amena Ali**, Senior VP and General Manager, WeatherBug Home
  - **Raj Shukla**, Director of Programs, Cool Choices (*Network Member*)
- Discussion
  - What are other examples of energy programs using technology to engage their customers?
  - What are the benefits of using interactive media to reach the residential energy market?
  - What strategies are there for growing an energy program's interactive media presence?
  - Are there challenges with integrating technology into current program offerings?
  - Other questions/issues related to the relationship between energy and technology?
- Closing Poll and Upcoming Call Schedule

# Call Attendees: Network Members (1 of 2)

- American Council for an Energy-Efficient Economy
- Austin Energy
- Bridging The Gap
- Brooklyn Green Home Solutions
- Boulder County EnergySmart
- Build It Green
- Center for Energy and Environment
- Center for Sustainable Energy
- City and County of Denver
- City of Aspen Utilities and Environmental Initiatives
- City of Bellevue
- City of Cambridge
- City of Fort Collins
- City of Fremont
- City of Plano
- City of Sunnyvale
- Civic Works
- Clean Efficient Energy Company, LLC
- CLEAResult
- Cleveland Public Power
- Cool Choices
- Efficiency Nova Scotia
- Elevate Energy
- Energy Efficiency Specialists
- Focus on Energy
- Greater Cincinnati Energy Alliance

# Call Attendees: Network Members (2 of 2)

- Group14 Engineering Inc.
- Home Energy Analytics, Inc.
- Institute for Market Transformation (IMT)
- National Grid
- NYSERDA
- Performance Systems Development (PSD)
- Southface
- Stewards of Affordable Housing for the Future
- The Oberlin Project
- TRC Energy Services
- Yolo County Housing

# Call Attendees: Non-Members (1 of 4)

- ABC Energy Savings, LLC
- Accelerated Innovations
- Addison Homes
- Association for Energy Affordability
- Applied Energy Group
- AHV 317 Board
- AppleBlossom Energy
- Architectural Nexus
- Ballarat Consulting
- BKi
- Blue Ridge EMC
- Brand Cool
- BRANZ
- C+C
- C40 Cities
- Canadian Home Builders' Association (CHBA)
- Cascade Natural Gas
- City of Bloomington
- City of Deerfield Beach
- City of Mesa, AZ
- City of Minneapolis - Sustainability Office
- City of Orlando
- Clallam County PUD
- Clark County
- CMBA Architects
- Collaborative Efficiency
- Competitive Advantage Consulting

# Call Attendees: Non-Members (2 of 4)

- Conservation Connection Consulting
- City of Philadelphia Office of Sustainability
- California Public Utilities Commission
- CSRA
- Dynamix Energy Services
- Energy Metering Technology Ltd
- Energy Analytics
- Energy Branch
- Energy Coordinating Agency
- Energy Design Update
- Energy Outreach Colorado
- EnergyBill
- EnergyLogic
- EnerScore Inc.
- Environmental Design / Build
- Erie County, NY
- Flathead Electric Cooperative
- FMC Facility Management Consultores
- Franklin Energy
- GeoPraxis
- Glumac
- Golisano Institute for Sustainability
- Green Money Search
- Groundswell
- Home Performance Strategies
- ICustom
- ICast



# Call Attendees: Non-Members (3 of 4)

- ICF International
- Idaho Division of Building Safety
- John Wesley Miller Companies
- Lawrence Berkeley National Laboratory
- Louisville Gas & Electric
- LINC Housing
- Massachusetts Department of Public Utilities
- MBTA
- Michaels Energy
- MPower Oregon
- NANA
- Navigant
- Northeast Energy Efficiency Partnerships
- New Jersey Natural Gas
- NORESKO
- North Star Green Alliance
- Nova Consulting Group
- NRECA
- O'Brien and Company
- Off The Grid Renovations
- Okaloosa Gas District
- PA Public Utility Commission
- Plant Vogtle Units 3 & 4
- Pacific Northwest National Laboratory
- PUSH Green
- Redwood Energy
- Rheem
- Rocky Mountain Institute



# Call Attendees: Non-Members (4 of 4)

- RUPCO Inc.
- Salcido Solutions
- Seattle City Light
- Shaw
- Smith & Boucher Engineers
- Studio Jack Rees
- Sustainable Connections
- Tennessee Valley Authority
- The Durst Organization
- University of Colorado
- UpGrade Ohio
- Utah Governor's Office of Energy Development
- VCEnergy.org
- VHR+a
- VOCA Off Grid
- Wausau Supply
- WDP & Associates Consulting Engineers
- Western Electricity Coordinating Council
- Woods Bagot
- WSP Canada

# Opening Poll

- Which of the following best describes your organization's experience with the call topic?
  - Some experience/familiarity – **49%**
  - Limited experience/familiarity – **27%**
  - Very experienced/familiar – **10%**
  - No experience/familiarity – **10%**
  - Not applicable – **4%**

# Better Buildings Residential Network

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

**Membership:** Open to organizations committed to accelerating the pace of home energy upgrades.

## **Benefits:**

- Peer Exchange Calls 4x/month
- Tools, templates, & resources
- Recognition in media, materials
- Speaking opportunities
- Updates on latest trends
- Voluntary member initiatives
- Residential Program Solution Center guided tours

**Commitment:** Provide DOE with annual number of residential upgrades, and information about associated benefits.

*For more information or to join, [energy.gov/eere/better-buildings-residential-network/join](https://energy.gov/eere/better-buildings-residential-network/join)*

# Best Practices: WeatherBug Home



# DOE Peer Exchange: Better Buildings Residential Network

*Amena Ali, SVP & GM, WeatherBug Home Unit of Earth Networks*

*June 9, 2016*

[www.weatherbughome.com](http://www.weatherbughome.com)

# Earth Networks: WeatherBug Products

*Unmatched data intelligence from IoT sensors to ensure safety, comfort, efficiency & savings*

## Large IoT Sensor Network

Global weather observations & danger alerting sensors,  
Connected home devices & sensors

## Rapidly expanding IoT partner ecosystem

Device manufactures and service providers

## Unique data collection & signal processing capabilities

“Clear signals in the noise of big data”

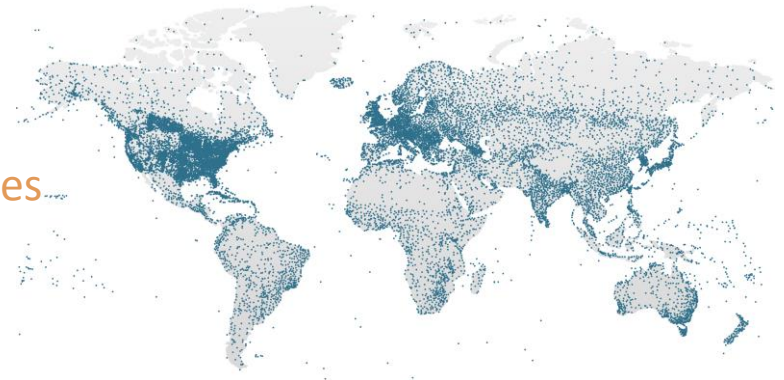
## Big data processing

25+ terabytes real-time data daily

## Loyal WeatherBug Consumer Base

20+ million monthly users

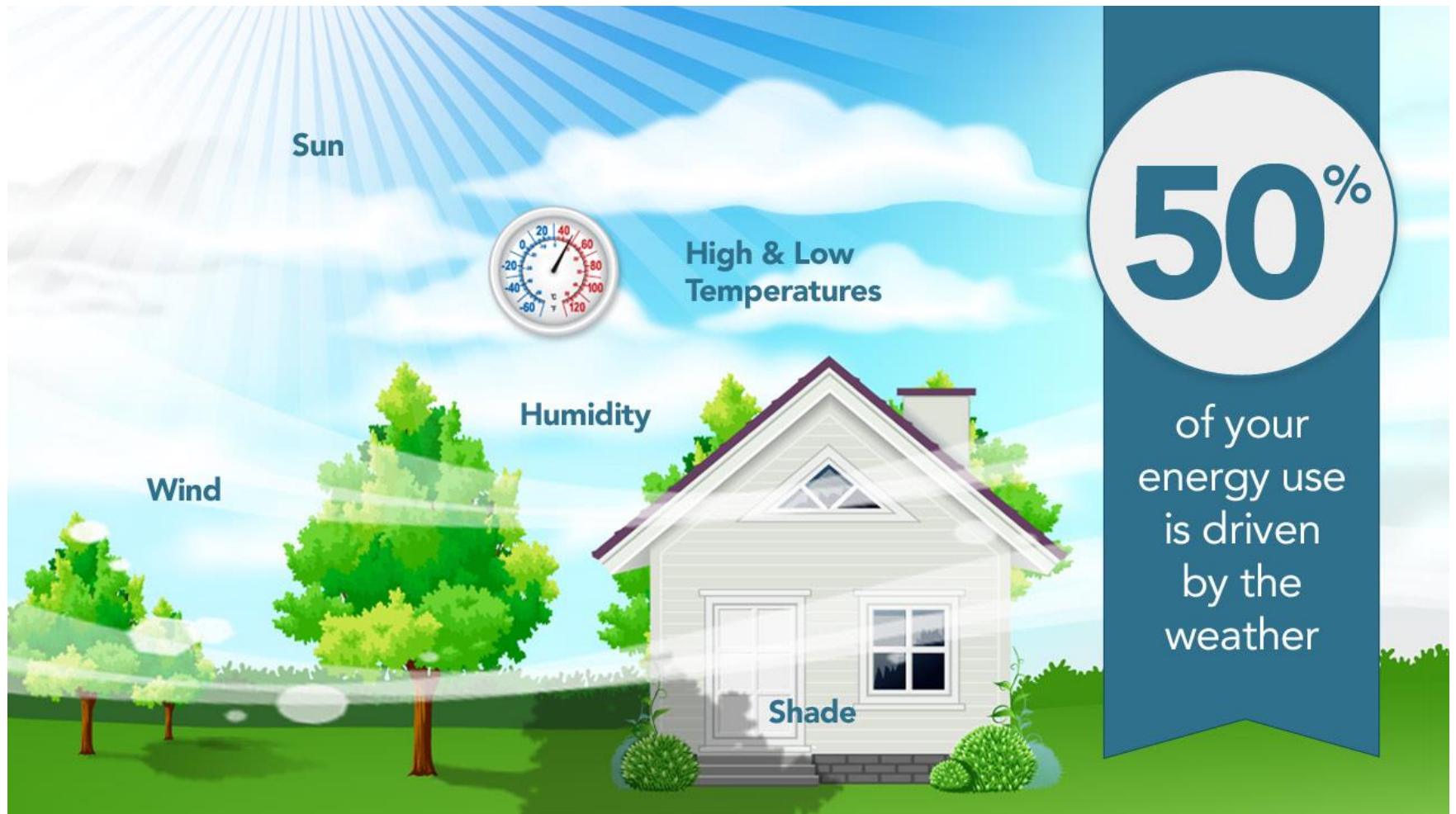
Daily consumer engagement



Washington DC . New York . San Jose

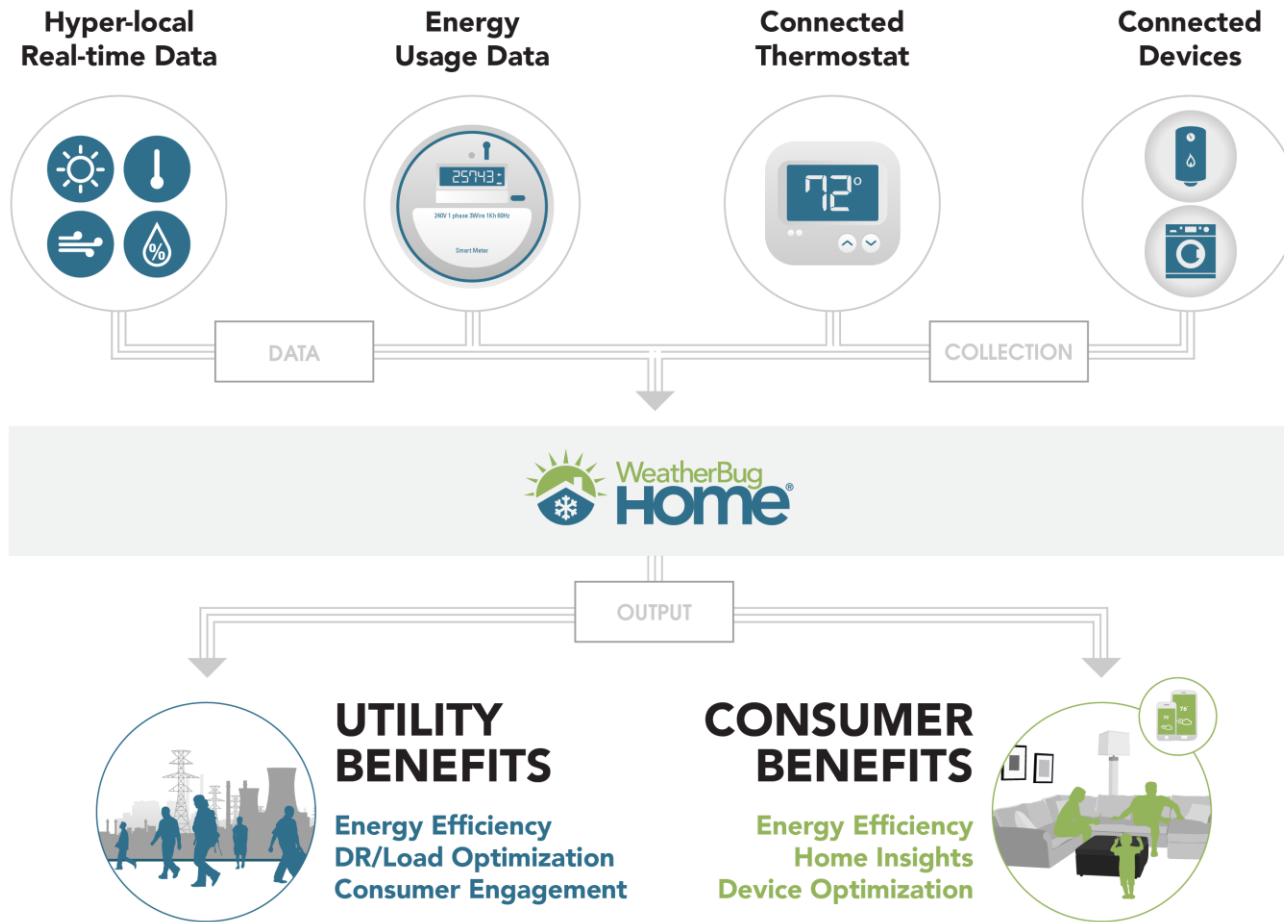


# Weather Matters: Weather is the Biggest Driver of Home Energy Use





# WeatherBug Home Benefits



# WeatherBug Home Solutions & Results

## ENERGY EFFICIENCY

### Intelligent Device Optimization



Automation

**16%**

Average HVAC Savings per Home

(National Grid, MA)

### ScoreCards & Mobile App



Consumer Engagement

Behavioral

**2%**

Average Whole Home Energy Savings

(ScoreCards)

## DEMAND RESPONSE

### Intelligent Demand Response



Automation

**1.76** kW

Average Capacity Per Home

(CenterPoint, TX)

### WeatherBug Mobile App



Consumer Engagement

Behavioral

**67%**

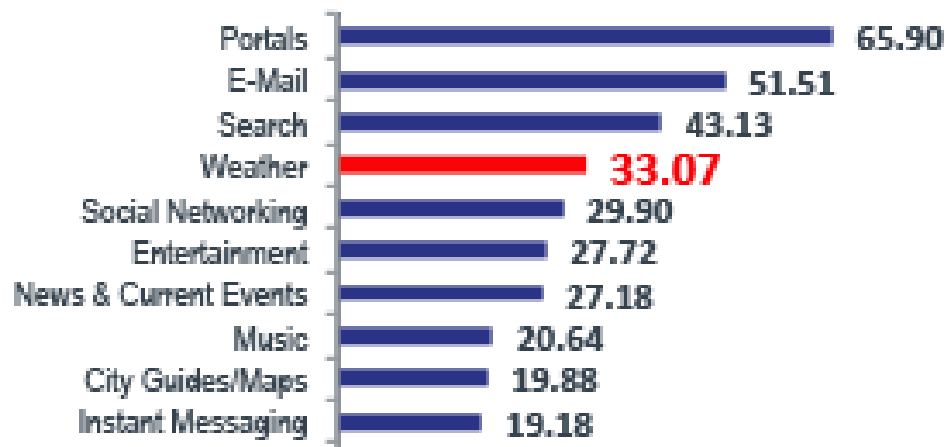
WBH App Page View Lift During Bad Weather

(Charleston, SC)

## Intelligent Demand Side Management

# Consumer Engagement with Weather & WeatherBug

## Weather is the #1 Mobile Content Category



**Utility Bill**  
Engagement



**<1**  
Minute Per Month

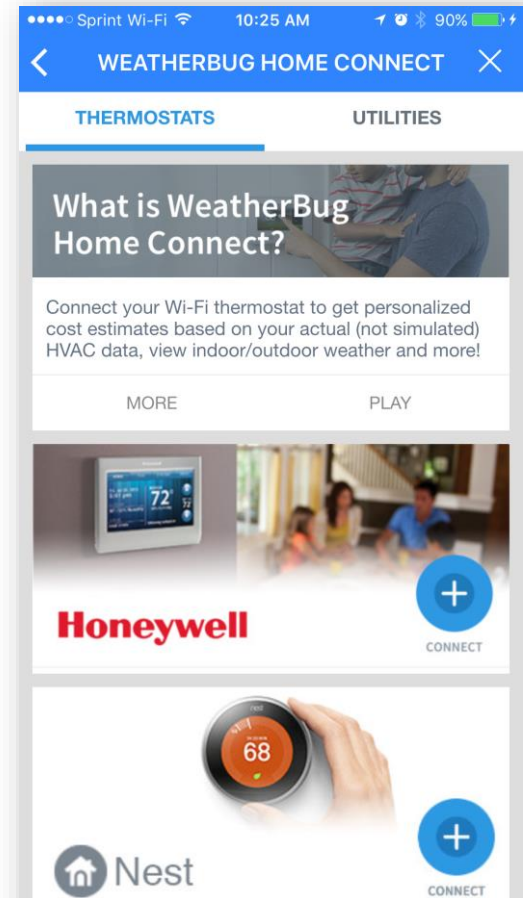
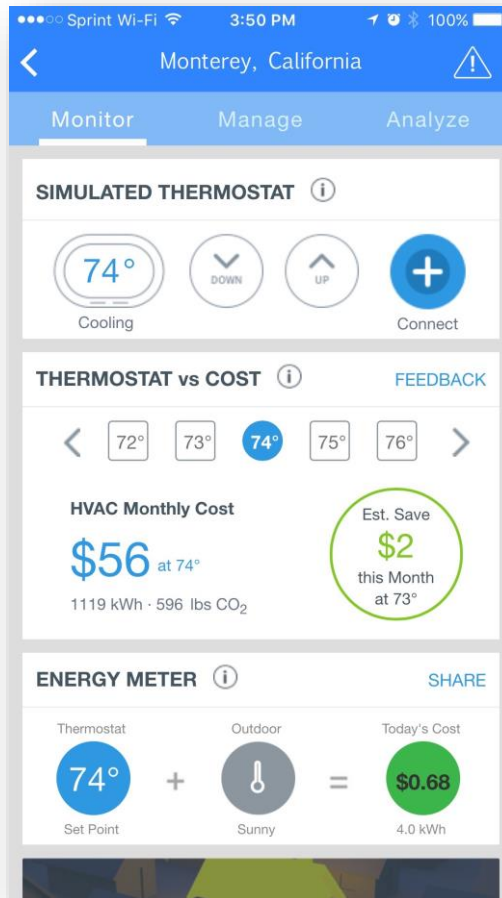
**Weather**  
Engagement



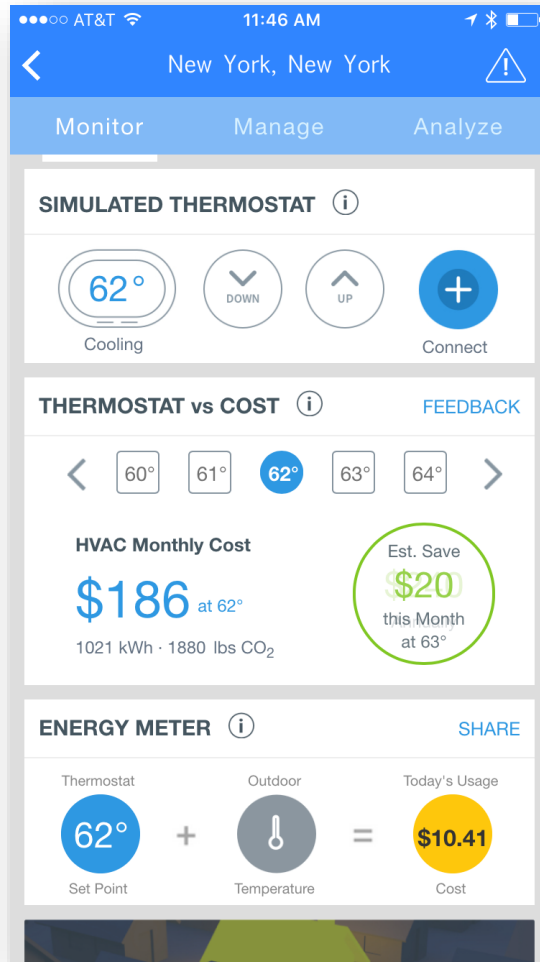
**40–100**  
Minutes Per Month

Mobile Subscriber Penetration (%) among content sites

# What if We Engage Consumers for Energy When They Come for Weather?



# 5.78M Consumers Engaged with WeatherBug Home (April 2015 - May 2016)



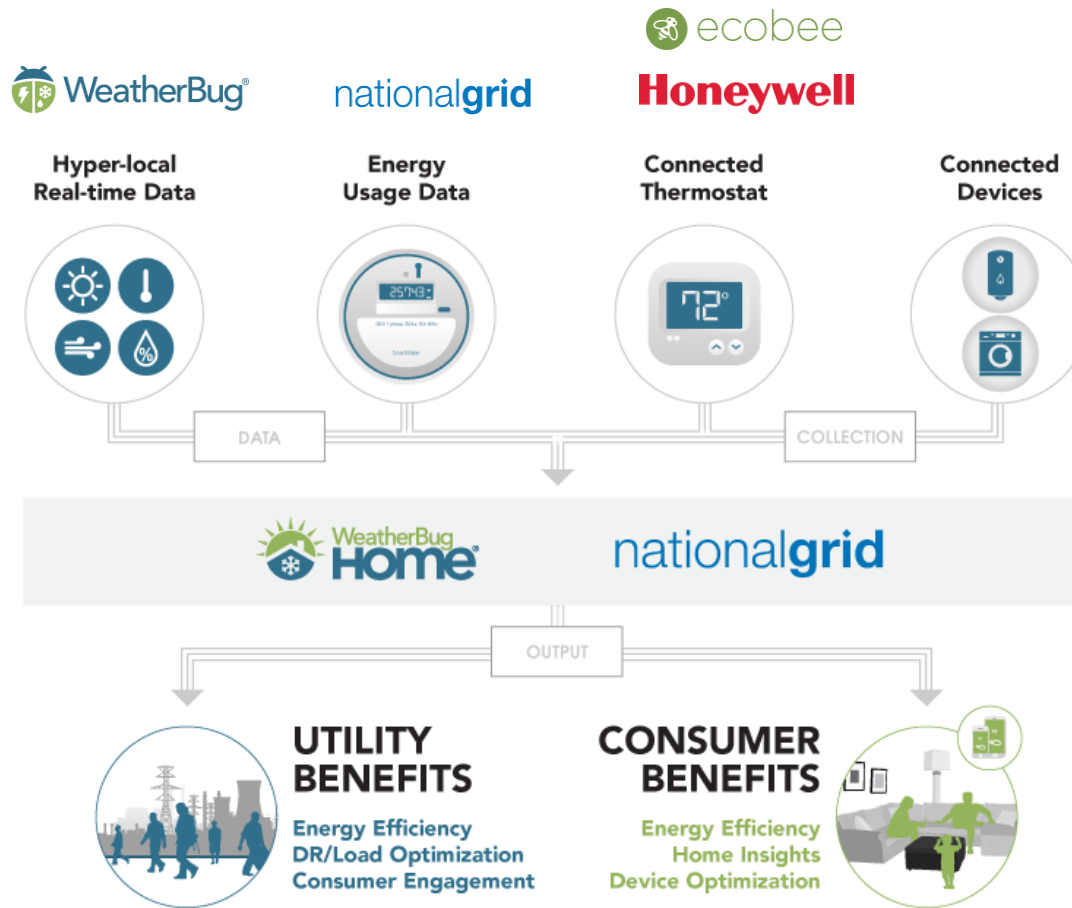
## Energy Monitor (engaged users)

- 16.5M page views to date
- 80% new user vs. 20% returning user
- Returning users account for 31% of all Energy Monitor page views!

## Energy Monitor Settings (most engaged users)

- 467K users went into settings to customize home attributes to date
- 654K page views to date
- 73% new user vs. 27% returning user
- Returning users account for 32% of all Settings page views!

# National Grid Connected Solutions Program



# ConnectedSolutions Portal – National Grid

- 1** Register with WeatherBug
- 2** Learn more & link your National Grid account
- 3** Connect your smart devices
- 4** Enjoy WeatherBug & ConnectedSolutions on-the-go!

**nationalgrid** | **WeatherBug Home**  
HERE WITH YOU. HERE FOR YOU.



# ConnectedSolutions Portal – National Grid

## MULTIPLE WAYS TO **SAVE!**

National Grid Electric Customers  
**Sign up and save!**  
Join **ConnectedSolutions** today.

 **For Wi-Fi Thermostats**

Enroll your supported Honeywell or ecobee Wi-Fi thermostat into ConnectedSolutions and save more!

<b>TOTAL SAVINGS</b>	Save up to <b>\$185</b> your first year*
<b>AT SIGN UP</b>	\$25 for signing up for ConnectedSolutions
<b>AT THE END OF EACH YEAR</b>	\$25 for participating in at least 75% Peak Energy Events
<b>ONGOING</b>	No Cost ConnectedSolutions weather optimization, save up to \$135/year!

**The best part?**  
Enjoy continued savings while staying comfortable!

\*National Grid does not guarantee savings. Savings and energy efficiency expenses may vary. These programs are limited by the energy efficiency program and associated rules. In Massachusetts, WeatherBug is an approved provider.

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National Grid Electric Customers  
**Sign up and save!**  
Join **ConnectedSolutions** today.

For Wi-Fi Thermostats



**Mass Save Home Energy Services**



**Buy Your Own**



**Use Your Own**

	Mass Save Home Energy Services	Buy Your Own	Use Your Own
<b>TOTAL SAVINGS</b>	Save up to <b>\$410</b> your first year*	Save up to <b>\$185</b> your first year*	Save up to <b>\$85</b> your first year*
<b>AT SIGN UP</b>	No Cost energy assessment, No Cost Wi-Fi thermostat* & installation (up to \$350 value) <a href="#">MassSave.com/Rebates</a>	Get \$100 for a Wi-Fi thermostat* from Mass Save Heating and Cooling Program, plus \$25 for signing up for ConnectedSolutions <a href="#">MassSave.com/Rebates</a>	\$25 for signing up for ConnectedSolutions
<b>AT THE END OF EACH YEAR</b>	\$25 for participating in at least 75% Peak Energy Events	\$25 for participating in at least 75% Peak Energy Events	\$25 for participating in at least 75% Peak Energy Events
<b>ONGOING</b>	No Cost ConnectedSolutions weather optimization (up to \$35 in savings)	No Cost ConnectedSolutions weather optimization (up to \$25 in savings)	No Cost ConnectedSolutions weather optimization (up to \$25 in savings)

**The best part?**  
Enjoy continued savings while staying comfortable!

\*Customers need to be National Grid electric customers with smart AC to participate. National Grid does not guarantee savings. Energy savings may vary based on use, home and participation.

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*THANK YOU!*

*Contact: Dave Oberholzer, VP Business Development  
doberholzer@weatherbug.com*

[www.weatherbughome.com](http://www.weatherbughome.com)

# Presentation Highlights: WeatherBug Home

- Machine to machine interaction can only go so far. There is a human, **behavioral component to energy use.**
- People do not spend quality time with their energy bill, but they do spend a lot of time looking at their weather app:
  - The WeatherBug app provides users with a picture of their home energy use on a smart app by **combining hyper local weather data with energy use data** either simulated or measured by smart meters or connected thermostats.
- Apps that display actual energy use data, or simulated data at a hyper local level, **show customers personalized ways in which they can modify their energy use behavior.**
  - Over **5.5 million users** engage with the weather bug app, which is one of the top 3 weather apps on the market.
    - When first launched in an automated format, **thousands of users contacted Weather Bug** asking to be able to customize their data/settings, which they can now do.

# Lessons Learned: Cool Choices



**Greetings from Cool Choices.** We're a nonprofit that offers a customizable engagement tool to save money, protect the environment and have fun in workplaces and communities!



**Raj Shukla**  
Director of Programs

June 9, 2016



6%

Median  
Residential  
Savings

Fun  
Social  
Easy  
+

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Engagement





**Teams**  
**Daily Credit**  
**Rewarding**  
**Visible**



**5,578**

PARTICIPANTS

**200,614**

COOL CHOICES

**14,393**

IDEAS GENERATED

**\$3,179,801**

EST. ANNUAL SAVINGS



# Presentation Highlights: Cool Choices (1 of 2)

Cool Choices has found success in targeting organizations that already have an environmental bent.

- When surveyed, employees often report that although they value sustainability, they do not think others at their work share their interests.
- Social media programs can remedy this perception by **making sustainability a workplace game.**

Programs that encourage people to change their energy use behavior should be:

- **Fun:** People are busy. If you want to capture someone's interest, you've got to **make it enjoyable to participate.**
  - Cool Choices **gave out prizes randomly** to anyone that participated during the week. The lottery format had two benefits:
    - **Everyone has a chance to win-** not just the most frequent players.
    - Participants **do not receive prizes for specific actions;** behaviorally, if you pay people, once payment stops, new behaviors also stop.

# Presentation Highlights: Cool Choices (2 of 2)

- **Social:** People spend 8 hours a day with coworkers. Creating a public forum for people to share energy efficient behavior has a number of benefits:
  - **Creating a Network:** A coworker may have recently redone their insulation. You now know a real person you can contact to discuss your potential project.
  - **Building Community:** Learning about other coworker's energy behavior may open the door to other ways to connect. You may learn that the person next to you loves to garden or walk to work.
  - Visibility is the “secret sauce” of a behavioral energy change campaign:
    - By making **all individual actions visible** to coworkers, Cool Choices was able to mitigate the cheating potential of self-reporting.
    - **Transparency builds social proof**; people want to be seen engaging in sustainability if sustainability is seen as popular.
- **Easy:** Engage by **showing individuals how their energy efficiency behavior fits into a larger portfolio.**
  - Connect with an individual based on their interests (e.g. cycling) and **show them ways to decrease their energy impact even further.**

# Related Social Media Resources in the Residential Program Solution Center

- [Social Media Toolkit](#) - Learn more about engaging potential customers through social media with the Better Buildings Residential Network toolkit.
- [Previous Call Summaries](#)- These summaries include lessons learned, examples, and helpful tips from previous social media calls:
  - April 9, 2015: [Residential Energy Efficiency Messaging](#)
  - July 9, 2015: [Social Media and Messages that Matter Top Tips and Tools](#)



[www.energy.gov/rpsc](http://www.energy.gov/rpsc)

The Solution Center is continually updated to support residential energy efficiency programs—[member ideas are wanted!](#)



# Discussion Highlights: Lessons Learned

- **Be realistic about individuals capacity to participate:**
  - For example, school-centered initiatives can be difficult, because there are tight time constraints on teachers.
- **Connect with people where they are:**
  - Apps on smartphones allow individuals to **check their energy use on a device they use constantly.**
  - **Lines of communication (e.g. emails, phone numbers) are already established in the workplace.** Collecting this information from informal groups, like community organizations, may prove more challenging.
- **Make your platform engaging:**
  - Social media is a huge draw; the closer you **make your communication channels to represent national conversations** (newsfeeds, pictures, videos), the more successful you will be.



# Closing Poll

- After today's call, what will you do?
  - Seek out additional information on one or more of the ideas – **74%**
  - Consider implementing one or more of the ideas discussed – **22%**
  - Make no changes to your current approach – **4%**
  - Other (please explain) – **0%**

# Peer Exchange Call Series

***We hold one Peer Exchange call the first four Thursdays of each month from 1:00-2:30 pm 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:

- June 23: Home Improvement Catalyst: Strategies for Ongoing Customer Engagement (201)
- July 7: It's Getting Hot in Here! Best Practices for Hot and Humid Climates (101)
- July 14: Innovation Station: The Latest Advances in Energy Efficiency Technology (301)
- July 21: The Return of Residential PACE – the Sequel (201)

*Send call topic ideas to [peerexchange@rossstrategic.com](mailto:peerexchange@rossstrategic.com)*

*See the Better Buildings Residential Network Program [website](#) to register*