June 9, 2016
Call Slides and Discussion Summary
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
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<td><strong>John Wesley Miller Companies</strong></td>
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<td><strong>Lawrence Berkeley National Laboratory</strong></td>
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• 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
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: 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
Best Practices: WeatherBug Home
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
Weather Matters: Weather is the Biggest Driver of Home Energy Use

50% of your energy use is driven by the weather.
WeatherBug Home Benefits

Hyper-local Real-time Data

Energy Usage Data

Connected Thermostat

Connected Devices

DATA

COLLECTION

OUTPUT

UTILITY BENEFITS

Energy Efficiency
DR/Load Optimization
Consumer Engagement

CONSUMER BENEFITS

Energy Efficiency
Home Insights
Device Optimization
WeatherBug Home Solutions & Results

ENERGY EFFICIENCY

- Intelligent Device Optimization
  - Automation
  - 16% Average HVAC Savings per Home (National Grid, MA)

- ScoreCards & Mobile App
  - 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
  - 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

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<th>Category</th>
<th>Engagement</th>
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<td>Portals</td>
<td>65.90</td>
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<td>E-Mail</td>
<td>51.51</td>
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<td>Search</td>
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<td>Weather</td>
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<td>Social Networking</td>
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<tr>
<td>Entertainment</td>
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<td>News &amp; Current Events</td>
<td>27.18</td>
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<td>Music</td>
<td>20.64</td>
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<tr>
<td>City Guides/Maps</td>
<td>19.88</td>
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<tr>
<td>Instant Messaging</td>
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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 **ConnectedSolutions Program**

![Diagram of Connected Solutions Program]

**Utility Benefits:**
- Energy Efficiency
- DR/Load Optimization
- Consumer Engagement

**Consumer Benefits:**
- Energy Efficiency
- Home Insights
- Device Optimization
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!
THANK YOU!

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

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 = Engagement
Teams
Daily Credit
Rewarding
Visible
5,578 PARTICIPANTS
200,614 COOL CHOICES
14,393 IDEAS GENERATED
$3,179,801 EST. ANNUAL SAVINGS
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.
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](#)

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%
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
See the Better Buildings Residential Network Program website to register