



Better Buildings Residential Network Peer Exchange Call Series: *The Return of Residential PACE – the Sequel (201)*

July 21, 2016

Call Slides and Discussion Summary

Agenda

- Agenda Review and Ground Rules
- Opening Poll
- Brief Residential Network Overview
- Overview of U.S. DOE Best Practice Guidelines
 - **Steve Dunn**, Project Manager, Building Technologies Office, U.S. Department of Energy
 - **Eleni Pelican**, Policy Advisor, Weatherization and Intergovernmental Programs Office, U.S. Department of Energy
- Featured Speakers
 - **Jonathan Kevles**, Vice President, Renew Financial
 - **Mark Kelley**, Program Manager – Financing, Efficiency Vermont (*Network Member*)
- Discussion
- Closing Poll and Upcoming Call Schedule

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, email bbresidentialnetwork@ee.doe.gov, or go to energy.gov/eere/bbrn and click Join

U.S. Department of Energy: Best Practice Guidelines for Residential PACE Financing Programs

DOE Best Practice Guidelines for Residential PACE Financing Programs



White House Clean Energy Savings for All Initiative

- Announced by the White House on July 19th
 - a new cross government partnership to increase access to solar energy and promote energy efficiency across the United States, particularly in low- and moderate- income communities.
- PACE related actions
 - new guidance for lenders announced by the Federal Housing Administration (FHA) and Veterans Affairs (VA)
 - DOE issues **revised best practice guidelines** for stakeholder comment and input
 - DOE to provide technical assistance to support the design and implementation of effective PACE programs and develop and disseminate best practices

“Using PACE, families will be able to make their homes more energy efficient and sustainable in the long run, while still keeping their costs affordable today. As PACE programs continue to develop across the nation, the positive impact on families, jobs, and the environment will only grow.”

- Ed Golding, HUD
Principal Deputy
Assistant Secretary for
Housing

DOE Revised Best Practice Guidelines

- DOE has released *Best Practices Guidelines for Residential PACE Financing* for public comment from stakeholders
- The revised Guidelines reflect the evolving structure of the PACE market and incorporate lessons learned from active PACE programs
- Includes best practices for residential PACE programs and recommended consumer and lender protections
- Information resources for appraisers on valuation of energy related improvements
- Recommendations for data collection and evaluation of PACE financing programs, including cost effectiveness, energy savings and non-energy benefits



Stakeholder Outreach and Feedback

- DOE seeks input and feedback from stakeholders on:
 - Use and application of the Guidelines as a framework for jurisdictions to create PACE programs that reflect their priorities
 - Establishment of protocols with adequate consumer and lender protections, data collection and energy saving measures
 - Whether the Guidelines effectively address concerns regarding consumer and lender protections (e.g., disclosure of PACE assessments, contractor requirements, debt service reserve fund, etc.)
 - Methods and data collection requirements for determining the effect of PACE assessments on household income and property values, including impacts on energy savings and appraised value
- Submit comments by August 19th, 2016 to:
rpaceguidelines@ee.doe.gov

For More Information

- **White House Clean Energy Savings for All Initiative**
 - Fact sheet
<https://www.whitehouse.gov/the-press-office/2016/07/19/fact-sheet-obama-administration-announces-clean-energy-savings-all>
 - DOE blog
<http://energy.gov/eere/articles/pace-adds-market-value-home-energy-upgrades>
- **DOE Best Practice Guidelines**
 - <http://energy.gov/eere/slsc/downloads/best-practice-guidelines-residential-pace-financing-programs>
- **FHA Guidance for lenders**
 - HUD Announcement:
http://portal.hud.gov/hudportal/HUD?src=/press/press_releases_media_advisor/s/2016/HUDNo_16-110
 - Mortgagee Letter (ML):
<http://portal.hud.gov/hudportal/documents/huddoc?id=16-11ml.pdf>

Contacts

- **Steve Dunn, Project Manager**
DOE Building Technologies Office

- **Eleni Pelican, Policy Advisor**
Weatherization and Intergovernmental Programs Office

PACE Financing: Program Updates

- FHA mortgage program is the main federal program to support low-to-moderate income (LMI) homebuyers.
 - By unlocking PACE for FHA insured programs, a broader range of households are able to access financing.
- PACE has been working with the appraisal industry, institutes, foundations, and other partners to provide guidance, resources and trainings.
 - To ensure that partners are engaged, FHA requires that appraisers include the value of energy efficiency features and alternative energy, like solar, in their value assessments.
- Although there are exciting [PACE updates](#), PACE financing is not available to most people across the country. Look into other financing tools for immediate programs to help your constituents access energy efficiency financing.

Renew Financial



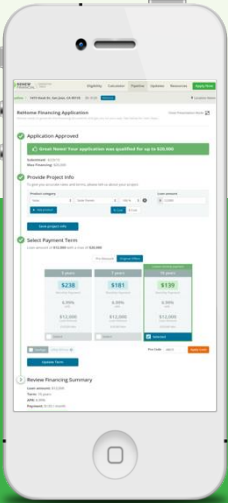
RENEW
FINANCIAL™

Energy Improvement Financing Made Simple

Jonathan Kevles, VP – Government Affairs and
Market Development

July 21 2016

RENEW FINANCIAL: SCALING QUICKLY



HEADQUARTERED IN OAKLAND, CA

270+
Employees

35,000+
Clean Energy Projects Financed
to Date (PACE + Unsecured)



Brief History of PACE Financing

- 2007/2008:
 - Renew Financial Founder and CEO Cisco DeVries innovated the concept of PACE while serving as Chief of Staff to Berkeley Mayor
- 2009-2010:
 - The PACE model was enthusiastically embraced by state and local governments: 32 states have passed PACE-enabling legislation
 - Scientific American: PACE is one of “top 20 ways to change the world.”
- July 2010:
 - Federal Housing Finance Agency (FHFA) took precipitous regulatory action that halted virtually all Residential PACE programs
 - Sonoma County SCEIP kept on going. Riverside County started up in 2012
- 2014:
 - California established a residential PACE reserve. Designed to protect mortgage holders, including Fannie and Freddie, from risk/fears of losses associated with PACE liens.
 - CaliforniaFIRST R-PACE program launches Summer 2014

HOW PACE WORKS

PACE = Property Assessed Clean Energy

City, county or other Public Entity Creates or **joins** a specific type of assessment district or similar legal mechanism



Eligible property owners sign-up voluntarily for financing and install **eligible** energy Projects



Financing provided to property owner/**registered contractor** to pay for energy project - **after work is completed**



Property owner repays bond through property tax bill (up to 25 years)

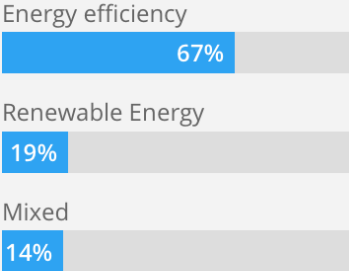


PACE: A \$2 BILLION INDUSTRY

Residential and Commercial PACE Market Growth

104,000

Number of Home Upgrades



\$2,237

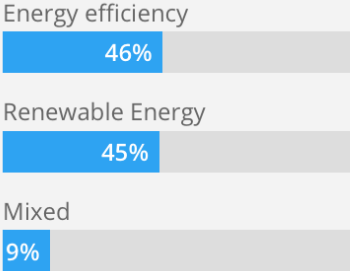
million

22,000

Jobs Created

750

Number of Commercial Buildings



\$250

million

3,000

Jobs Created

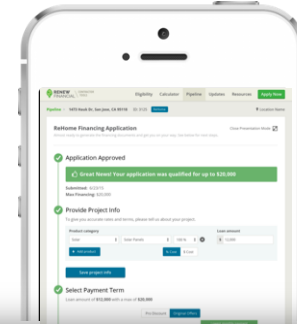
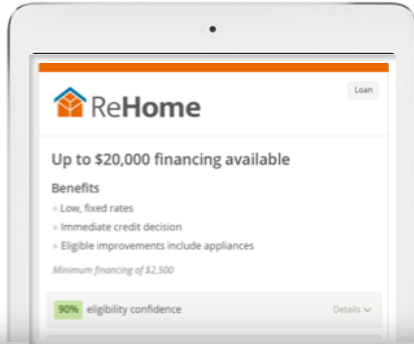
Source: PACE Nation

A PACE LESSON

- A new path to solving the existing home retrofit



SIMPLE, FAST, AND TRANSPARENT



CONTRACTOR

Easily Integrate Financing Information into Proposals

Close the Sale in One Visit

Complete Energy Upgrades

RECEIVE

EFT Payment Based Upon Completion

APPLY

SIGN

INSTALL

PROPERTY OWNER

Sign Up Online or via Phone, Receive Instant Approval

Complete Financing Documents Electronically

Support for Questions, Information, or Issues

REPAY

Payment via Property Taxes or Loan Servicing

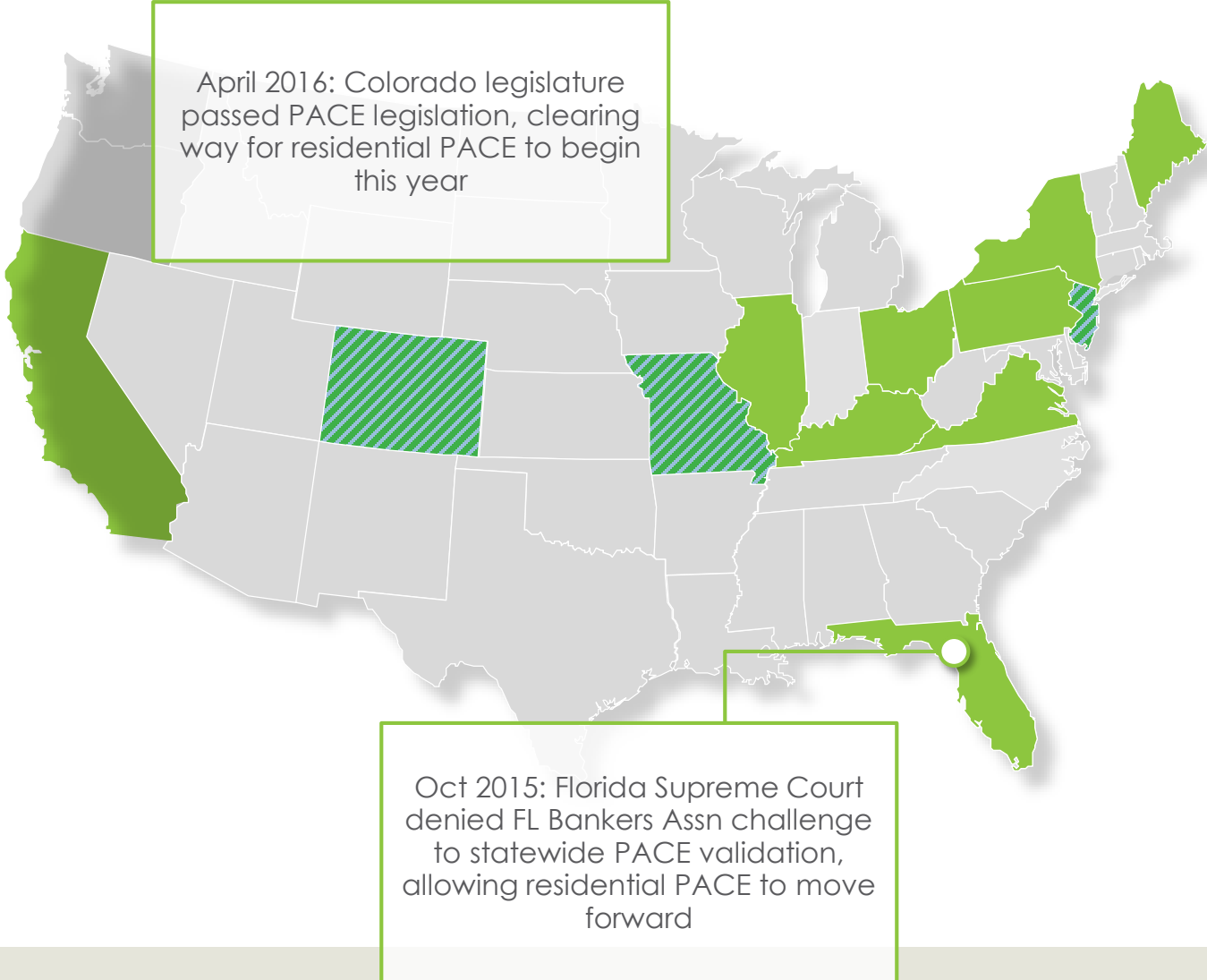
35%+ of CaliforniaFIRST
Borrowers from Households at or
Below Median Income

Renew Financial, 2015

CONTINUED EVOLUTION OF PACE

- Strongest Consumer Protections in Finance
- Robust Market Competition
- Program Scale and Uniformity Across Local Governments/ States
- Sponsor Regulation and Oversight
- Option for Subordination to Mortgage
- Active Securitization Market
- **FHA Announcement – PACE Assessment the same as any other assessment**

RENEW FINANCIAL NATIONAL EXPANSION



ENERGY IMPROVEMENT FINANCING MADE SIMPLE

Jonathan Kevles

Renew Financial: Best Practices

- **Contractors:** Design streamlined programs that don't burden contractors with administrative processes and extended timelines.
 - Programs can make PACE financing more attractive to contractors by not charging dealer fees.
- **Lenders:** PACE can be competitive with other financing options if programs work with municipalities to set up beneficial regulations.
 - Oftentimes, locally mandated restrictions make PACE financing options less competitive.
- **Homeowners:** Low-to-median income homeowners experience difficulty accessing fair housing and long-term financing to afford upgrades.
 - Offering repayment periods that match the life of energy efficiency equipment (i.e. 20 years) is an equitable solution to overcome this challenge.

Efficiency Vermont



Lessons Learned from a PACE program in a small rural state

Mark Kelley
Program Manager



Efficiency Vermont - Who We Are

- Founded in 2000
- Statewide energy efficiency utility
- Administered by VEIC, under appointment of VT Public Service Board
- Administrator of VT PACE



What We Do

- Provide sustainable energy solutions
 - Education
 - Services
 - Rebates & Financing
- Serve all Vermonters
- Manage a statewide network of contractors



Vermont PACE

- ❖ Enacted by state legislature in 2009
- ❖ Unfunded when enacted
- ❖ Junior Lien
- ❖ Left up to each municipality to hold a vote, raise funds, design program, promote, process applications, billing, etc.
- ❖ Efficiency Vermont became the state-wide administrator to provide the above services free of charge

Basics of Vermont PACE

- ❖ Residential owner occupied 1 to 4 family units of:
 - ❖ Individual homes
 - ❖ Units of condos or coops
 - ❖ Mobile homes
 - ❖ Primary residences and vacation homes
- ❖ Eligible measures include qualifying thermal and electric efficiency, on-site renewables and EV charging stations
- ❖ \$3,500 - \$30,000 for terms of 10, 15 or 20 years. Interest rate around 6%
- ❖ Free analysis by EVT of energy savings, carbon reduction and project cash flow

Some bumps we've hit and how to avoid them

- ❖ Requirement for each municipality to hold a public vote
 - ❖ Ensure your program will be available to a large enough customer-base from the outset
 - ❖ Not having enough eligible participants initially can stall or kill a PACE program
 - ❖ Design the on-boarding process for municipalities to be easy and scalable

- ❖ Default collection process does not work for the municipalities (process or software)
 - ❖ Work the process through with municipality upfront, in the program design phase
 - ❖ Understand the willingness of municipalities to be “on the hook” for collecting defaults
 - ❖ Be sure to have answers for all situations:
 - ❖ Bankruptcy?
 - ❖ What if the municipality ends up owning the property after tax sale?
 - ❖ Property tied up in probate, lease-to-own contracts, etc.

- ❖ Complicated and confusing process for potential borrowers
 - ❖ People shied away from advocating for PACE because it was too complicated to explain, and far more complex than other financing
 - ❖ Once information about your program is out there, even when you make improvements it is hard to overcome a negative impression
 - ❖ Take the time to design the process well from the beginning and obtain copious amounts of feedback from as many sources as possible
 - ❖ **Refine before you launch!**

Suggestions to avoid problems

Talk with the people at the municipal offices who will be affected by your program

- Show them a draft of your process and ask for their feedback
 - If more than one municipality will be involved (as a state-wide program), talk with a cross-section of municipalities.

Suggestions continued

Talk with representatives of your:

- Lending community
- Realtors and appraisers
- Contractors
- Property tax assessors and collectors
- Local politicians on both sides of the isle.

Get their feedback, concerns and suggestions.

Things that worked well

- ❖ Local grass-roots energy committees
 - ❖ Strong correlation of success in areas where active energy committees exist
- ❖ Community-based workshops to educate and build interest in PACE
- ❖ Local funding source
 - ❖ In rural areas, people trust local banks and credit unions far more than out-of-state lenders
- ❖ Personalized service – meeting directly with city councils and municipal employees

Consumer Protection

- ❖ Underwriting criteria established by VTDFR
- ❖ Debt-to-income not greater than 41%, loan-to-value not greater than 90%
- ❖ PACE assessment cannot exceed \$30,000 or 15% of assessed value
- ❖ No past-due municipal bills, no involuntary liens, judgements, reverse mortgages, mortgages in default, etc.
- ❖ Cannot be an asset in any pending bankruptcy, legal or divorce proceeding
- ❖ All owners of the property required to sign PACE agreements
- ❖ Eligible measures list established by EVT annually
- ❖ Network of qualified contractors; Efficiency Excellence Network
- ❖ Detailed project cash flow analysis with projected energy savings provided by EVT prior to PACE application
- ❖ EVT reviews and approves each project prior to application
- ❖ No pre-payment penalties

Thank you!



Efficiency Vermont: Lessons Learned

- **Get Creative!** If your locality does not currently have PACE legislation, find a path forward by looking at precedents in the state:
 - Research the ways in which **communities vote to tax themselves** to make improvements (i.e. underground utility and sidewalk infrastructure).
 - Look for opportunities within **inter-local agreements or districts** in your region. A single entity responsible for bonding can help make for a successful program structure.
- **Be Political:** Municipalities may only vote on legislation once a year, which can lead to slow results and doubt about the program effectiveness.
 - **Think Local:** make the case to city councils or other elected officials to **speed up the process for authorization and onboarding.**

Discussion: Program Experience

- Look for innovative ways make PACE an attractive financing option:
 - **Lenders:** Renew Financial offers limited contractual subordination, which puts the bank in first position for repayment.
 - **Contractor Networks:** By offering free services such as training on PACE financing, programs can build and maintain a qualified network of contractors.
 - **Homeowners:** Clear messaging can highlight PACE financing as valuable augmentation for other financing options, such as Energy Star rebates.
- The more **streamlined and scalable** the process is, the easier it will be to get results.

Related Resources in the Residential Program Solution Center

Financing resources:

- [Financing – Identify Partners](#) handbook provides step-by-step instructions on how to identify and develop relationships with lenders that align with your program's goals.
- Watch the [Building Relationships with Financial Institutions](#) video to hear about the experiences of ShopSmart with JEA in Jacksonville, FL.
- [Financing – Make Design Decisions](#) handbook discusses how to develop loan products consistent with lending partners' and your program's objectives.



- While you're there, see the latest [Proven Practices](#) post on [Contractor Selection](#).
- The Solution Center is continually updated to support residential energy efficiency programs—**[member ideas are wanted!](#)**

Solution Center Seeks Focus Group Volunteers

- Do these criteria describe you?
 - I have used the Solution Center to look for information
 - I am an program administrator or in a decision-making role for a residential energy efficiency program
- If interested, please respond in the chat field, or email BBRPSolutionCenter@ee.doe.gov (by 7/29) with:
 - Name
 - Email address & phone number
 - Organization & title/role
- WHEN: Focus group will take place the week of Aug. 15 by conference call. Time commitment ~1 hour

PACE Financing Resources

- **DOE Best Practice Guidelines for Residential PACE Financing Programs**, July 2016
<http://energy.gov/eere/slsc/downloads/best-practice-guidelines-residential-pace-financing-programs>
- **SEE Action Energy Efficiency “Pathways Guide”**, February 2016 <https://www4.eere.energy.gov/seeaction/EEpathways>
- **PACE Nation**: PACE legislation and programs, market data, case studies, news and updates www.pacenation.us
- **State Policy Opportunity Tracker (SPOT)**: PACE adoption status by state, gap analysis, policy brief
<http://spotforcleanenergy.org/>

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:

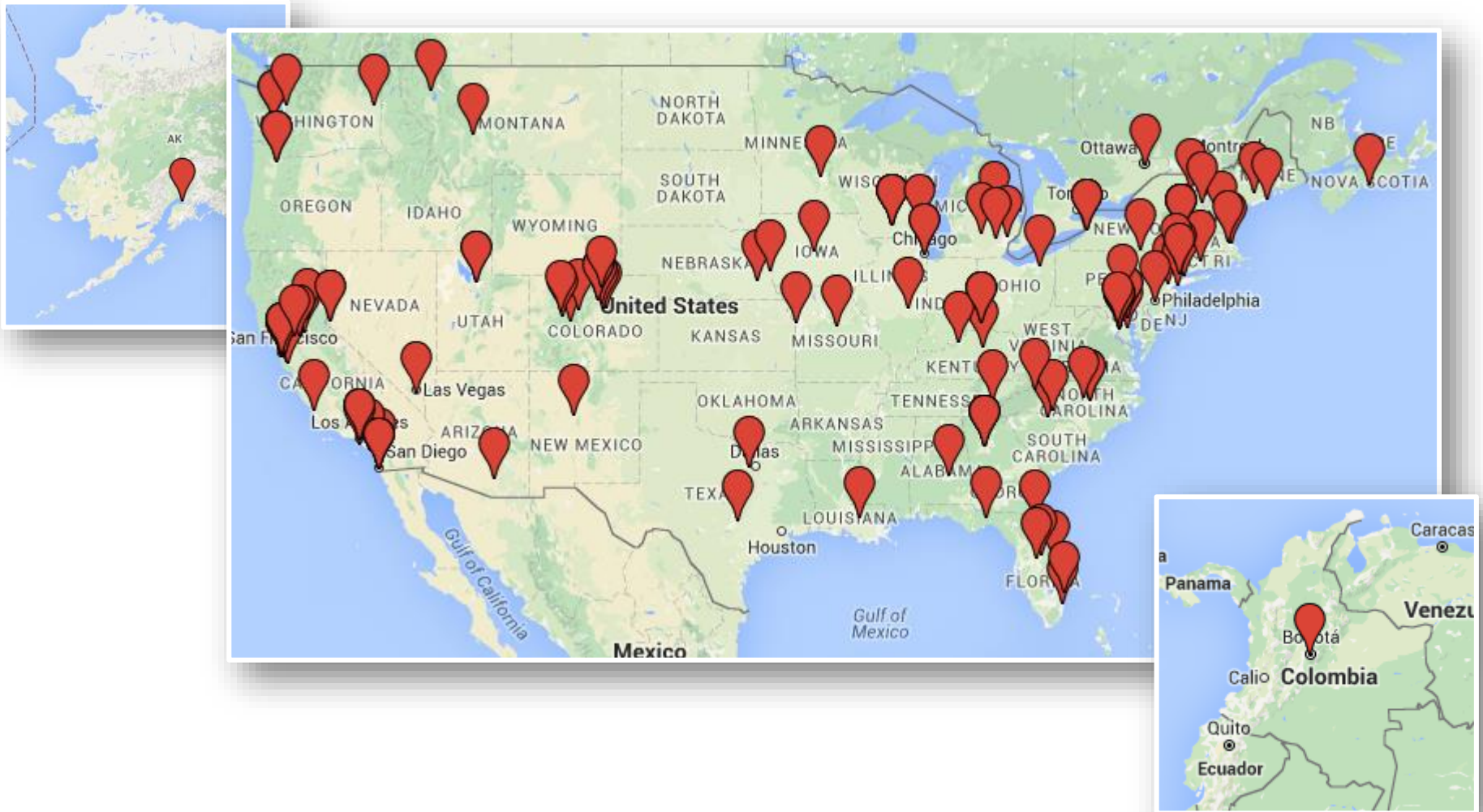
- August 4: Energy Efficiency Olympiad: Best Practices from Around the World (201)
- August 11: Gold Medal Approaches for Obtaining and Using Energy Efficiency Data (101)
- August 18: Vinicius, Quatchi, and You: Using Power Words and Branding to Increase Interest and Participation (301)

Send call topic ideas to peerexchange@rossstrategic.com

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

Addenda: Attendee Information and Poll Results

Call Attendee Locations



Call Attendees: Network Members (1 of 2)

- Alaska Housing Finance Corporation
- Boulder County
- CalCERTS, Inc.
- Center for Energy and Environment (CEE)
- Center for Sustainable Energy
- City of Bellevue
- City of Cambridge
- City of Fort Collins
- City of Palo Alto
- City of Sunnyvale
- CLEAResult
- Columbia Water & Light
- County of San Luis Obispo
- Efficiency Nova Scotia
- Efficiency Vermont
- Elevate Energy
- Energize New York
- Focus on Energy
- Greater Cincinnati Energy Alliance
- Iowa State University, Department of Civil, Construction, and Environmental Engineering
- Jackson Electric Membership Corporation
- Metropolitan Energy Center
- Michigan Saves
- Net Zero Analysis & Design Corporation

Call Attendees: Network Members (2 of 2)

- North Carolina Building Performance Association
- North Carolina Sustainable Energy Association
- Northeast Energy Efficiency Partnerships (NEEP)
- OmStout Consulting
- Pure Eco Environmental Solutions
- PUSH Buffalo
- Renovate America
- Southeast Energy Efficiency Alliance (SEEA)
- Southface
- The Insulation Man, LLC
- Wisconsin Energy Conservation Corporation (WECC)

Call Attendees: Non-Members (1 of 3)

- About Saving Heat
- AHP Homeownership Center
- Alabama Department of Economic and Community Affairs
- Algonquin College
- AnnDyl Policy Group
- Appalachian Voices
- AppleBlossom Energy Inc.
- Arp Builders Inc.
- Bay City Electric Light and Power
- BKi
- BuildCoach
- California Alternative Energy and Advanced Transportation Financing Authority
- California Energy Commission
- Chicago Bridge & Iron Company
- City of Philadelphia
- Community Office for Resource Efficiency
- Complete Home Comfort
- CounterPointe Energy Solutions LLC
- Craft3
- CSRA
- CT Green Bank
- Danfoss
- Design-Manage-Sustain LLC
- Dividend Solar
- EarthSTEPS, LLC
- Eastern Research Group, Inc.
- ECO Milwaukee

Call Attendees: Non-Members (2 of 3)

- ecobeco
- Energon Plus
- Energy Florida / Space Coast Energy Consortium
- Energy Management Services, LLC
- Energy Metering Technology Ltd
- Energy Programs Consortium
- Energy Smart Colorado
- Environmental Design / Build
- Environmental Finance Center at UNC
- Facility Strategies Group
- FCI Management
- Figtree Financing
- Flathead Electric Cooperative
- Gunnison County Electric Association
- Health & Energy Co.
- Holy Cross
- Horizon RES NH LLC
- ICAST
- ICF International
- Island Institute
- JEA
- Lake Apopka Natural Gas District
- Louisiana Public Facilities Authority
- Mayor's Office of Atlanta
- Montana Department of Environmental Quality
- National Association of Realtors

Call Attendees: Non-Members (3 of 3)

- Nevada Governor's Office of Energy
- North Central Texas Council of Governments
- NYSERDA
- Oakland Community College
- Off The Grid Renovations
- PACENation
- Pennsylvania Public Utility Commission
- Poch
- Pura Vida High Performance Builders
- PUSH Green
- Renew Financial
- Solar Habitats, LLC.
- Southwest Energy Efficiency Project
- SPEER
- SRA International
- StopWaste
- The Cadmus Group
- Thermostat Recycling Corporation
- Urban Affairs Committee, Nebraska Legislature
- US EPA, Region 9
- Utah Clean Energy
- WA Dept of Commerce - State Energy Office
- Washington State University Energy Program

Opening Poll

- Which of the following best describes your organization's experience with Residential PACE?
 - Some experience/familiarity – **34%**
 - Limited experience/familiarity – **31%**
 - Very experienced/familiar – **24%**
 - No experience/familiarity – **7%**
 - Not applicable – **3%**