



# BEHAVIOR, ENERGY & CLIMATE CHANGE CONFERENCE

*A conference focused on understanding the behavior and decision-making of individuals and organizations and using that knowledge to accelerate our transition to an energy-efficient and low-carbon future*

convened by



**BECC 2017 | October 15 - October 18, 2017 | Sacramento, CA**

## Sunday, October 15

9:00 AM – 5:00 PM      **Preconference Workshops** *(see last page for list)*

5:30 PM – 6:45 PM      **Young Professionals Reception**

7:00 PM – 9:00 PM      **Kickoff Program and Dessert Reception**  
Registration 6:00 – 9:00 PM

## Monday, October 16

7:00–8:15      **Continental Breakfast and Registration**      *Sponsored by ILLUME*

8:30–10:00      **Opening Plenary**  
**Keynote: Naomi Oreskes**  
  
*Author of "Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco to Global Warming", which was made into a movie (co-authored with Erik M. Conway).*



10:00–10:30      **Morning Break**

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## 10:30–12:00 Concurrent Sessions

Lightning Session: Commercial Programs

Moderator: Olivia Patterson, Opinion Dynamics

- 1A
- Big Efficiency Squeeze: Energy Code Compliance in California Buildings – Sahar Abbaszadeh, Cadmus
  - Does Your Health Trump Our Environment? Motivating Hotel Guests to Save Water – Anouk Griffioen, Wageningen University
  - Changing How We Do Business: Saving Energy and Improving Processes in Small Businesses – Shannon Kahl, ILLUME Advising
  - We've Got Issues: Employee Perspectives on the Journey to Sustainability – Kathy Kuntz, Cool Choices
  - Behavior Change Strategies to Advance Sustainable Business Practices – Amy McLean Salls, United Illuminating
  - Smart Thermostats for the Small Business Gap – Charlie Richardson, Consumers Energy
  - Multi-stage Interventions to Promote Persistent Plug-Load Energy Savings in Office Buildings – Emma Johnson, City of Bellevue, Washington
  - It's Complicated! How to (and How NOT to) Motivate Sustainable Energy Management in Commercial Buildings – Stephanie Whitney, University of Waterloo
  - Reimagining Workplace Thermal Comfort and Energy Efficiency Through "Smart" Office Chairs – Gwelen Paliaga, TRC Energy Services
  - How Continuous Energy Improvement Programs Change What Energy Managers do All Day – Anna Kelly, Cadmus

AMI and Time-of-Use

Moderator: Debbie Brannan, Navigant

- 1B
- Getting to Know You: Predicting Customer Response to Utility Programs – Anthony Duer, Applied Energy Group
  - How Consumers Make Decisions about Time-of-Use Electricity Pricing Plans – James Fine, Environmental Defense Fund
  - Stretch It Out: Heterogeneity in Estimated Demand Elasticities under Residential Time-Based Rates – Peter Cappers, Lawrence Berkeley National Laboratory

Framing and Segmentation

Moderator: Chris Jones, BECI, University of California, Berkeley

- 1C
- Moral Foundations and Environmental Decision-Making – Erica Iverson, Columbia University
  - Using Neuroscience to Predict Nationwide Energy Decisions – Nik Sawe, Precourt Energy Efficiency Center, Stanford University
  - Promoting Pro-social and Pro-environmental Behavior through Values-Affirmation – Claudia Schneider, Columbia University
  - Financial Scarcity Shapes Conservation Choices and Motivations – Brandon Tomm, University of British Columbia

The Future of Mobility

Moderator: Shruti Vaidyanathan, ACEEE

- 1D
- Community Context, Human Needs, and Transportation Choices – Matt Biggar, Connected to Place
  - Personalized Infrastructure: Leveraging Behavioral Strategies for Future Mobility – Andrew Duvall, National Renewable Energy Laboratory
  - Reducing Drive-alone Trips in a Car-Light Urban Neighborhood – Julie Colehour, C+C
  - Towards Energy Efficient and Shared Mobility Services in Three Cities – Clement Rames, National Renewable Energy Laboratory

Shaking Up the Norm

Moderator: Ed Smyth, DNV GL

- 1E
- Five Ways to Scale Up Energy Efficiency in Commercial Settings – Holly Barrett, Brand Cool Marketing
  - CBSM for Tribal Recycling: Recalling the Past to Drive the Future – Brenna Thorpe, Booz Allen Hamilton
  - South Sup: Community Demand Response – Adriane Wolfe, Quinn Energy
  - Encouraging Customers in Multi-Family Complexes to Reduce Energy and Water Use: Off the Drawing Board and into the Field – Patrice Ignelzi, Applied Energy Group

Panel Session: Connecting Relevant Research to the Market

Moderator: Elaine Ulrich, U.S. Department of Energy

- 1F
- Panelists:
- Kris Mayes, Arizona State University
  - Vikram Aggarwal, EnergySage
  - Margaret Taylor, Lawrence Berkeley National Laboratory

**12:00–1:30 Lunch Panel Session: Take Two! SWAP-ers Tell It All: Learning from Leaders**

When you think about energy savings, reality TV probably doesn't come to top of mind. But that all will change when you hear about how a web-series has attracted over 45 million viewers—and counting.

Starting in 2016, the Energy Department debuted a new way to exchange and share proven solutions—the Better Buildings Challenge SWAP. Through the series, leaders of various organization and business types, and in locations, all over the country, demonstrate how they have achieved significant energy savings. They broadcast their innovative approaches to the people, processes, and practices behind operating and powering their buildings.

Last year you heard from Whole Foods and Hilton Worldwide. During this lunch plenary, the cast of SWAP Seasons 3—the cities of Atlanta and Boston—will reunite and talk about how they lead each other towards greater energy efficiency and why doing it in a fun, collaborative (and sometimes competitive) way helps them glean real and lasting lessons learned. By collaborating with one another in a multiple day experiment of sharing tips between energy professionals—no matter the organization or business or building site or purpose—SWAP partners tell us all about it.

Panelists: TBD

**12:00–1:30 Precourt Fellows Lunch**

**1:30–3:00 Concurrent Sessions**

2A

**Lightning Session: Transportation**  
 Moderator: Margaret Taylor, Lawrence Berkeley National Laboratory

- Identifying Areas with High Proclivity to Adopt Electric Vehicles – John Anderson, Center for Sustainable Energy
- A Carbon Price by Another Name May Seem Sweeter: Consumers Prefer Upstream Offsets to Equivalent Downstream Taxes – Alec Beall, The University of British Columbia
- Race to the Bottom: Using Advanced Analytics, Operator Training, and Feedback to Improve Electric Bus Fuel Economy – Mersiha McClaren, Research Into Action
- Quantitative Estimation for Residential Vehicle Parking Rate in China and Its Potential Influence on PEV Purchasing – Shiqi Ou, Oak Ridge National Laboratory
- Transitions to Alternative Fueled Vehicles Using a Spatial Consumer Choice and Fueling Infrastructure Model – Kalai Ramea, University of California, Davis
- Findings from a Meta-Analysis of In-Vehicle Eco-Driving Feedback – Angela Sanguinetti, University of California, Davis
- Assessing Long-Distance Trip Length Distributions for Improving the Modeling of Plugin Vehicle Market Demand and EV Travel Performance – Gil Tal, University of California, Davis
- Outcomes from a Northern California Electric Vehicle Incentive Program from the Lead Agency, Administrator, and Dealer Perspectives – Kipp Searles, Center for Sustainable Energy
- Report from the Dealer Trenches: Selling EVs in San Diego – Eric Cahill, Plug In America

2B

**Thermostats!**  
 Moderator: Jennifer Robinson, Electric Power Research Institute

- Staying Cool: Understanding Residential Air Conditioning Use Behavior – Molly Podolefsky, Navigant
- Clearing up the Unclear Savings of Advanced Thermostats – Pace Goodman, Navigant
- Squeezing Every Last Drop: A Nest Seasonal Savings Evaluation – Noah Lieb, Apex Analytics
- The Role of Self-Reporting in Heating Energy Efficiency – David Keyson, Delft University of Technology

2C

**No Seriously, Start Building an Ark: Communicating to Non-believers on Climate**  
 Moderator: Darrin Kayser, Booz Allen Hamilton

- Can Metaphor Shift the Behavior of Climate Skeptics? Hopeful Evidence from a Public Goods Game – Cynthia Frantz, Oberlin College
- The Surprising Relationship between Psychological Distance and Psychological Avoidance: Results from Climate Change Communication Research – Christie Manning, Macalester College
- Extreme Weather and Attention to Climate: An Analysis and Messaging Tool – Matthew Sisco, Columbia University
- Effective Communication Tactics: A Consumer Neuroscience Perspective – Michael Smith, Nielsen

2D

**Using Information and Data to Engage Consumers**  
 Moderator: Sylvia Bender, California Energy Commission

- Insights on Effective Nudging across Decision Styles and Choice Models – Anne Arquit Niederberger, Enervee
- Designing and Implementing Demand Response Trials in a Large-Scale Representative Household Sample – Thomas Rushby, University of Southampton
- Click Here for Savings? Using Online Tools for Continuous Customer Engagement in Energy Efficiency – Valerie Richardson, DNV GL
- The Virtual Solar Panel as a Unit of Measurement – Duane Jonlin, City of Seattle

**Successfully Engaging Low-Income Communities**

Moderator: Wesley Schultz, California State University, San Marcos

2E

- Integrated Sustainability Management at The Rose – Jeni Cross, Colorado State University
- Sustainability at Your Service: How an Ecoconciierge Can Boost Savings from the Tough to Reach Multifamily Market – Jacqueline Freidel, Seventhwave
- SEM for Multifamily: Engaging Multiple Audiences in Energy Saving Behaviors – Julie Hayes, Milepost Consulting
- Motivating Energy Savings in Apartment Buildings without Financial Incentives: Long Term Persistence – Joey Schmitt, Action Research

**Panel Session: Customer Data and Behavior Change**

Moderator: Sena Koleva, See Change Institute

2F

Panelists:

- Michael Murray, Mission:data
- Ben Grady, Yardi Energy
- Fatima Crerar, ecobee

3:00–3:30

Afternoon Break

Sponsored by 

3:30–5:00

Concurrent Sessions

**Lightning Session: Marketing and Design**

Moderator: Matt Perry, DDB San Francisco

3A

- Education: Key to Successful Weatherization Programs – Jennifer Alldredge, Alliance to Save Energy
- Achieving Global Energy Savings: An Optimized Approach to Engage and Communicate with Utility Customers – Lonny Blumenthal, Oracle
- Lunch at the Walmart: Outreach Strategies for Rural Communities – Clare Butterfield, Illinois Science and Energy Innovation Foundation
- Quantifying the Role of Education in Behavior Programs – Eugene Cordero, San Jose State University
- Looking at Home Energy Efficiency through the Hispanic Lens: Insights from a Sociocultural Study in California – Ria Langheim, Center for Sustainable Energy
- Using Market Segmentation and Targeting to Enhance Program Participation – Lisa Lancaster, Wisconsin Energy Conservation Corporation
- High Five: Art + Science Step Out Together – Lara Whitley and Jane Wilch, Community Office for Resource Efficiency

**Designing Effective Programs for Commercial Buildings**

Moderator: Amanda Dwelley, ILLUME Advising

3B

- Small Actions Add Up! Engaging Large Organizations in Behavior Change – Linda Dethman, Research Into Action
- SEM for SMB: DIY, YMMV, MOOC, WTF? – Dan Fredman, Vermont Energy Investment Corporation
- Smart Energy in Offices - Year 3 and Beyond – Julie Hyde, Duke Energy
- Synergies for Success: Optimized Relationships between Behavior-Based and Measures-Based Electricity Conservation Programs – Bryan Young, Independent Electricity System Operator

**Panel Session: Innovating for Inclusion: Removing Communication Barriers to Niche Markets**

Moderator: Jason Kupser, DTE Energy

3C

*An interactive dialogue with DTE Energy on the role of dynamic partnerships and how they opened the door to serving the Deaf and hard of hearing community.*

Panelists:

- David DeLind, DTE Energy
- Todd Morrison, Alliance for Deaf Services
- Mylan Stevens, Franklin Energy Group

**New Intervention Strategies**

Moderator: Karen Ehrhardt-Martinez, Navigant

3D

- Sort It Out: Effective Communication Strategies to Encourage Food Scrap Recycling – Judi Ettliger, StopWaste
- How Do You Rate? How Scoring Systems Impact Consumer Behavior – Luisa Freeman, DNV GL Energy
- Monsters, Magic Carpets, and Fairy Tale Stories: The Findings of Task 24 – Sea Rotmann, IEA DSM Task 24
- ThermWise Personalized Recommendations – Ted Peterson, Questar Gas

**Framing Policies and Programs**

Moderator: Annalisa Schilla, California Air Resources Board

3E

- Understanding the Impact of Non-Energy Benefits in the United States – Brendan Wade Brown, Green & Healthy Homes Initiative
- Partisan Barriers to Bipartisanship: Understanding Policy Support of Washington State's Carbon Tax Initiative – Phillip Ehret, University of California, Santa Barbara
- Framing Energy Efficiency with Payback Period during Facility Procurement Processes – Laura Delgado, U.S. Coast Guard

**Panel Session: Applying Game Design Thinking to Demand Response Programs**

Moderator: Jennifer Green, City of Burlington

3F

**Panelists:**

- Bonnie Reese, University of Vermont
- Marguerite Dibble, GameTheory, Inc.
- Neale Lunderville, Burlington Electric Department

**Monday Evening**

**Film Festival**

Sponsored by NAVIGANT

5:45–7:00



Featuring Bill LeBlanc, Chief Instigation Agent, E Source

**Tuesday, October 17**

**7:30–8:30 Continental Breakfast and Registration**

**Panels**  
8:30–10:00

**Spotlight 1**

**Design for People! Inspiration from Urban Planning, Architecture, and Engineering Towards Carbon-Free Living**  
Moderator: Rick Diamond, Lawrence Berkeley National Laboratory

Design shapes our buildings, our landscapes, and communities and is instrumental to influencing behavior. This spotlight describes shaping behavior in the urban context (e.g., encouraging walking and use of public transportation) and in buildings (e.g., encouraging use of stairs, a building that teaches, breaking out of conventional HVAC design) as well as the institutions that help drive these changes.

- Professor Louise Mazingo, Chair of the Landscape Architecture and Environmental Planning Department at University of California, Berkeley
- Kevin Hydes, CEO of Integral Group and former chair of USGBC
- Susi Marzuola, Architect and LEED BD+C

**Spotlight 2**

**Immersion, Emotion, and the Power of Storytelling**  
Moderator: Beth Karlin, See Change Institute

Good storytelling is vital to successful climate communication. Three senior media professionals who are using stories across various media platforms—*virtual reality*, *social media*, and *television*—will discuss how they curate and create stories to build awareness, engage the public, and accelerate action for climate mitigation and adaptation.

- Julia Cort, Deputy Executive Producer, NOVA (PBS)
- Jill Kubit, Co-Founder and Director, Dear Tomorrow
- Liz Bronstein, Executive Producer, Whale Wars and Ocean Warriors (Animal Planet Channel)

**10:00–10:30 Morning Break**

**10:30–12:00 Concurrent Sessions**

**Lightning Session: Residential Programs**

Moderator: Ed Wisniewski, Consortium for Energy Efficiency

4A

- **Enhancing Behavioral Programs for Aging-in-Place Populations with Wireless Sensor Technologies and Applications** – Cecilia Arzbaeher, Applied Energy Group
- **Breaking Down Barriers on Hard-to-Reach Multifamily Consumers: Understanding How Behaviors and Cultural Factors Correlate to Energy Consumption** – Stephanie Berkland, TRC Energy Services
- **Gateways to Dynamic Pricing Enrollment Explosions: Lessons in Failure and Success** – Sarah Gulezian, Elevate Energy
- **Getting Customers to Choose Efficient Products without Financial Incentives** – Alex Katzman, Enervue
- **Gathering Learnings from a Behavioral Methodology Aimed at Rio De Janeiro Low Income Communities with High Incidence of Energy Commercial Losses** – Rodrigo Lagreca, HomeCarbon
- **Connecting with Low Income Customers** – Jim Malcom, Apogee Interactive
- **Public Service Company of New Mexico (PNM): A Flexible, High-Impact Approach to the State’s First Multifamily Program** – Elizabeth McCollum, TRC Energy Services

**Putting Customers' Needs First**

Moderator: Susan Norris, Pacific Gas and Electric Company

4B

- **What Are Thermostats Really Doing?** – Joel Gilbert, Apogee Interactive
- **Small Businesses and Behavioral Energy Efficiency: Diving Deep into Data to Estimate Statewide Potential** – Eileen Hannigan, ILLUME Advising
- **Opportunities to Save Energy and Money in Large, Multifamily Public Housing** – Marta Marelo, Boston University
- **Leading with Behavior—Does It Make a Difference?** – Ingrid Rohmund, Applied Energy Group

**Getting to the Best Program Design**

Moderator: Linda Dethman, Research Into Action

4C

- **Incentives Are Key—But What Really Changes Behavior? Results on Loyalty Points (RecycleBank™) and PAYT (Recycle & Save)** – Dana D’Souza, Econservation Institute
- **Using Health Impact Assessments to Reframe the Conversation** – Courtney Henderson, ILLUME Advising
- **Ubiquitous but Overlooked: Associative Learning and Climate Change** – Susan Schneider, Root Solutions
- **Odd Couple or Perfect Pair? Recommendations for Academia-Industry Partnerships in Energy Research** – Nicole Sintov, The Ohio State University



**Using Information to Affect Transportation Choices**

Moderator: Jane Peters, Research Into Action

4D

- GreenFLY: Adding Carbon to the Equation in Online Flight Searches – Nina Amenta, University of California, Davis
- Game-Changer: Shifting Commutes with Gamification and Social Marketing – Sarah Church, Alameda County General Services Agency
- EV Explorer: Facilitating Electric Vehicle Adoption with an Online Energy Cost Calculator – Kiernan Salmon, University of California, Davis
- Electrification of Transport Refrigeration: A Technical Assistance Case Study – John Thornton, CleanFuture, Inc.

**10:30–12:00 Concurrent Sessions****Organizational Decision-Making**

Moderator: Christopher Payne, Lawrence Berkeley National Laboratory

4E

- FISHing for Energy Efficiency in UK MOD: A New Behavior Change Model for Reducing Infrastructure Energy Consumption in Multi-use Buildings – Eleanor Forrest, Bright HF
- EMIS: Identifying Variables that Act as Barriers and Enablers to Adoption – Nora Harris, Virginia Tech
- Applying Principles of Behavioral Economics to the Design and Construction of Energy Efficient Buildings in Kuwait – Dalya Ismael, Virginia Tech
- Measuring Impacts of Institutional Change Workshops Given at BECC – Liyang Wang, Lawrence Berkeley National Laboratory

**Panel Session: Behavioral Strategies for Energy Code Compliance**

Moderator: Jeffrey Domanski, Institute for Building Technology and Safety

4F

Panelists:

- Ken Baker, Northwest Energy Efficiency Alliance
- Suzanne Shelton, Shelton Group
- Cosimina Panetti, Building Codes Assistance Project

**12:00–1:30 Lunch****1:30–3:00 Concurrent Sessions****Lightning Session: Renewable Energy**

Moderator: Elaine Ulrich, U.S. Department of Energy

5A

- How Do Swiss Renters and Homeowners Value Green Building Features? – Anna Ebers, University of St. Gallen/University of Maryland
- Leveraging Discrete Choice Experiments to Forecast Residential Solar PV Adoption – Jennifer Robinson, Electric Power Research Institute
- Residential Demand Response Using a Single Variable Information System – Susan Mazur-Stommen, Indicia Consulting
- Project RePower: Empowering States through Renewable Energy Targets – Melissa Miyashiro, Blue Planet Foundation
- Are Carbon Neutrality and Energy Efficiency Important to California Homebuyers? A Study of the Zero Net Energy Home Market – Chelsea Petrenko, Opinion Dynamics

**Feedback and Behavioral Demand Response**

Moderator: Jim Parks, Sacramento Municipal Utility District

5B

- Preferences for Demand Response Behavioral Sacrifices – Patricia Aloise-Young, Colorado State University
- Going the Distance: Behavioral Persistence in Utility Energy Efficiency Programs – Kira Ashby, Consortium for Energy Efficiency
- Behavioral Energy Efficiency and Flexible Demand Opportunities in Low-Carbon Resource Constrained Environments: A Case Study in Nicaragua – Diego Ponce de Leon Barido, University of California, Berkeley
- Who Should Join DR? Modeling with Machine Learning and Credit Scoring – Wonjong Rhee, Seoul National University

**Leading with People and Behavior**

Moderator: Laurie ten Hope, California Energy Commission

5C

- A Tailored Approach to Domestic Retrofit: Incorporating Occupant Behavior – Hui Ben, University of Cambridge
- Relationship among Resident's Saving Habits and Electricity Bills in Thai Households – Daranee Jareemit, Faculty of Architecture and Planning, Thammasat University
- Opportunities to Tackle the "Hidden" Energy and Emissions Embodied in Goods and Food – Miya Kitahara, StopWaste
- Watts It Worth? Targeted Interventions Show Behavior Change ROI – Laura Michael, Booz Allen Hamilton

**Spotlight on Efficiency in Schools and Hospitals**

Moderator: Taghi Alzera, ADM Associates

5D

- Evaluation Methods to Avoid Undercounting Savings in Behavior Programs – Emily Cross, Navigant
- The Challenges and Opportunities for Measuring Behavior Programs with K-12 Schools – Laurel Kruke, Pierce Energy Planning
- Do I Turn On the Lights or Not? Investigating Room Light Signatures – Signo Uddenberg, MKThink
- Teacher Knows Best? Balancing Energy Savings, Air Quality, and Comfort in Schools – Sarah Outcalt, University of California, Davis-Western Cooling Efficiency Center

**Energy Efficiency in Diverse Contexts**

Moderator: Bruce Cenicerros, Aluminum Coating Technologies

5E

- Be the Change: Collaboration Fuels Strategic Energy Management – Kim Crossman, Great Work Energy
- Continuous Improvement in Industry: Getting to Strategic Energy Management Best Practices – Elizabeth Titus, NEEP
- Customer Characteristics that Lead to a Successful Strategic Energy Management (SEM) Program – James Reese, California Manufacturing Technology Consulting
- Change Management Applied to Energy Efficiency Behaviors – A. Kris Widdison, California Manufacturing Technology Consulting

**Panel Session: How to Talk About Home Energy Upgrades: Lessons from Psychology and Behavioral Economics**

5F

Moderator: Reuven Sussman, ACEEE

Panelists:

- Hale Forster, Columbia University
- Douglas Miller, Rocky Mountain Institute
- Lauren Cheatham, Stanford University

3:00–3:30 Break

**3:30–5:00 Concurrent Sessions**

6A

**Lightning Session: Social Norms**

Moderator: Gene Rodrigues, ICF

- Home Energy Reports—Avoiding a Mid-life Crisis – Guillaume Calas, Pacific Gas and Electric Company
- Utility Behavioral Demand Response Programs: Cost-Effective Demand Savings – Beth Fitzjarrald, E Source
- Assessing Consumers' Perceptions of Electricity Use: Does Providing Reference Points Help? – Vedran Lestic, Leeds University Business School
- Casting a Wide Net: What We Know Now about Behavioral Strategies and Energy Use – Elizabeth Palchak, University of Vermont/Vermont Energy Investment Corporation
- Improving Customer Satisfaction in Home Energy Report (HER) Programs without Sacrificing Savings – Rebecca Malfroid, DTE Energy
- National Energy Literacy Survey of High School Seniors – Gary Swan, National Energy Foundation

**Scaling Up Utility Program Savings**

Moderator: David Jacot, Los Angeles Department of Water and Power (invited)

6B

- Behavioral Energy Efficiency Programs also Boost Utility-Branded Marketplace Sales – Elena Dulys, Simple Energy
- Mass-scale, Multifamily Benchmarking and Conservation: Lessons from a Behavioral Energy and Water Competition Pilot – Galib Rustamov, Pomona College
- Insights from California's Very Own "Nudge Unit" – Josh Schellenberg, Nexant
- Designing Better Energy and Water Programs by Understanding the Nexus at the Residential Level – Kate Zerrenner, Environmental Defense Fund

6C

**Electric Vehicles**

Moderator: Rachael Kuykendall, Sonoma Clean Power

- Evaluating the Connecticut Dealer Incentive for Electric Vehicle Sales – Colin Santulli, Center for Sustainable Energy
- Modeling Human Behavior Is Critical to Accurately Assess the Promise of Electric Vehicles for the Smart Grid and the Need for Charging Infrastructure – Colin Sheppard, Lawrence Berkeley National Laboratory
- Consumer Behavior and the Plug-in Electric Vehicle Purchase Decision: A Research Synthesis – Margaret Taylor, Lawrence Berkeley National Laboratory
- California's Electric Vehicle Rebate: Assessing Impact – Brett Williams, Center for Sustainable Energy

6D

**Scaling Up Solar**

Moderator: Dave Rench-McCauley, U.S. Department of Energy

- Long-Run Effects of Competition on Solar PV Demand and Pricing – Kenneth Gillingham, Yale University
- Learning in Renewable Energy Ecosystems: A Knowledge Network Study – Mark Hand, LBJ School of Public Affairs
- Measuring PV Technical and Financial Feasibility for U.S. Educational Buildings – Nichole Hanus, Carnegie Mellon University
- Making Decisions While the Sun Shines: Savvy Consumers and Strategic Technology Adoption Timing – D. Cale Reeves, LBJ School of Public Affairs

6E

**Policy Development**

Moderator: Kristin Heinemeier, University of California, Davis

- Low Income, High Efficiency: Appliance Markets and Purchase Behaviors in Low-Income Societies – Joseph Lopes, DNV GL
- Multi-pronged Approaches to Public Engagement for City Climate Action Planning – Andrea Martin, Cascadia Consulting Group
- Recycling Vs. Energy Programs - Who Wins? Cost-effectiveness, Energy Trade-offs, and Integrated Planning – Michael Santulli, Skumatz Economic Research Associates
- Prove It: Generating Commercial Evidence on Behavior Change for UK Government Policy-making – A Case Study on Smart Meters – Jeremy Vincent, UK Department of Business, Energy & Industrial Strategy

6F

**Panel Session: Buildings are for People: Engaging Occupants on Resilience and Energy Efficiency**


Moderator: Kat Donnelly, AZENTIVE


Panelists:

- David Younan-Montgomery, AZENTIVE
- Lauren Taymor, DNV GL
- Hazlyn Fortune, California Public Utilities Commission

5:30–7:00

**Poster Session**

Sponsored by 

Refreshments sponsored by 

Wednesday, October 18	
7:30–8:30	Continental Breakfast and Registration
8:30–10:00	<b>Concurrent Sessions</b>
7A	<p><u>Panel Session: Constructing California’s Climate Careerforce: Building California’s Career Pipeline through Workforce Education and Training Programs</u></p> <p>Moderator: <i>Melanie Peck, The Energy Coalition</i></p> <p>Panelists:</p> <ul style="list-style-type: none"> <li>• Baily Hall, Bay Area Community Resources–Climate Corps AmeriCorps</li> <li>• Kecia Washington, Los Angeles Department of Water and Power</li> <li>• Veronica Soto, Emerald Cities Collaborative</li> <li>• Audrey Knox, The Energy Coalition</li> </ul>
	<p><u>Behavior Change through Rates and Bills</u></p> <p>Moderator: <i>TBD</i></p> <ul style="list-style-type: none"> <li>• The Costs of Convenience—Do Auto Pay and Budget Bill Options Lead to Higher Energy Bills? – Gomathi Sadhasivan, DNV GL</li> <li>• Behavioral Drivers of Prepaid Electric Service – Nat Treadway, DEFG</li> <li>• Intersection of Energy Efficiency and Residential Rate Design – Mary Shoemaker, American Council for an Energy Efficient Economy</li> </ul>
7C	<p><u>Feedback</u></p> <p>Moderator: <i>Sharyn Barata, Opinion Dynamics</i></p> <ul style="list-style-type: none"> <li>• Reducing Contamination in Recycling – Anna DeMers, C+C</li> <li>• Characters Animated by Real-Time Data Enhance Emotion and Conservation – John Petersen, Oberlin College</li> <li>• Engage and Expand: How to Keep Home Energy Report Programs Fresh and Impactful – Kelly Kuehn, Duke Energy</li> <li>• Incentivizing Energy Efficiency in Commercial Buildings through Peer Comparison - Ammon Reagan, City and County of San Francisco</li> </ul>
7D	<p><u>Panel Session: Artists and Climate Change and Climate Solutions?</u></p> <p>Moderator: <i>TBD</i></p> <ul style="list-style-type: none"> <li>• Kirsi Jansa, documentary filmmaker and producer of Sustainability Pioneers and Gas Rush Stories, co-founder of Creatives for Climate, visiting researcher and video journalist at The Institute for Green Science, Carnegie Mellon University</li> <li>• Beth Osnes, applied theatre practitioner, theatre scholar, solo performer, co-founder of the Inside the Greenhouse, University of Colorado</li> <li>• Chantal Bilodeau, playwright and translator, artistic director of Arctic Cycle, founder of Artists&amp;Climate Change, co-founder of Climate Change Theater Action</li> </ul>
	<p><u>Motivating Residential Behavior</u></p> <p>Moderator: <i>Derek Okada, Southern California Edison</i></p> <ul style="list-style-type: none"> <li>• Smart Home Energy Management: A User Scenario Approach – Rebecca Ford, University of Oxford</li> <li>• Making It Personal—Aligning Customer Wants and Needs with the Universal Loading Order of Integrated Demand Side Management – Mark Martinez, Southern California Edison</li> <li>• Using Building Analytics to Drive Behavioral Energy Savings – Jaymes McMullin, McKinstry</li> <li>• Effective Occupant Engagement Technology for Reduced Plug Load Consumption – Moira Hafer, Stanford University</li> </ul>
7F	<p><u>Panel Session: Know Your People, People: Understanding the Human Benefits of Low-Income Energy Efficiency Program Delivery</u></p> <p>Moderator: <i>Scott Harrell, Tennessee Valley Authority</i></p> <p>Panelists:</p> <ul style="list-style-type: none"> <li>• Elizabeth Parsons, Tennessee Valley Authority</li> <li>• Erin Gill, City of Knoxville, Tennessee</li> <li>• Bruce Tonn, Three<sup>3</sup></li> </ul>
10:00–10:30	Morning Break
10:30–Noon	CLOSING PLENARY



## Pre- and Post Conference Workshops

### Sunday, October 15

- 8:30 am – 5:00 pm | **Reaching Customers through Innovative Community Engagement Programs**  
Paul Markowitz, Efficiency Vermont, Vermont Energy Investment Corporation
- 8:30 am – 5:00 pm | **Behavior Program Evaluation 101**  
Alexandra Dunn and Amanda Dwelley, ILLUME Advising
- 1:00 pm – 4:30 pm | **Let's Talk Climate Change within Your Community**  
Dan Barry, Director of Path to Positive Communities, ecoAmerica
- 1:30 pm – 5:00 pm | **Cause and Effect: Using RCTs and Machine Learning to Identify Interventions that Work**  
Maximilian Auffhammer, University of California, Berkeley and Mar Reguant, Northwestern University

### Wednesday, October 18

- 1:00 pm – 4:00 pm | **Creating Effective Organizational Change: A Five-Step Framework**  
Christopher Payne, Lawrence Berkeley National Laboratory
- 1:00 pm – 4:00 pm | **Transportation Workshop: Emerging Travel Behaviors, Mobility Choices of Millennials, and Impacts on Transportation Planning**  
Giovanni Circella, University of California, Davis
- 1:00 pm – 5:00 pm | **You Want to Know What Gets Between Me and My Clean Energy Technology? Permitting. But That Can Change...**  
Margaret Taylor, PEEC, Stanford University

## Acknowledgements

#### Convening Directors

Steven Nadel, ACEEE  
 Paul Wright, BECI, UC Berkeley  
 Carl Blumstein, Director, CIEE and Chairman of the Board, ACEEE  
 James Sweeney, PEEC, Stanford University

#### Conference Co-Chairs

Naomi Baum, ACEEE  
 Reuven Sussman, ACEEE  
 Therese Pepper, BECI, UC Berkeley  
 Margaret Taylor, PEEC, Stanford University

#### Founding Chair

Linda Schuck, CIEE, UC Berkeley

#### Conference Management

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