



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 **ACEEE** American Council for an Energy-Efficient Economy | **ciee** University of California California Institute for Energy and the Environment | **Stanford** Environmental and Energy Policy Analysis Center
Launched by the Precourt Institute for Energy and Stanford Institute for Economic Policy Research

BECC 2019 | November 17 - 20, 2019 | Sacramento, CA

Sunday, November 17

8:30 AM–4:30 PM **Pre-conference Workshops** *(see page 9 for details)*

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

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


Monday, November 18

7:00–8:15 AM **Continental Breakfast and Registration**

8:15–10:00 AM **OPENING PLENARY**

Keynote: Phil Sharp, Fellow, The Center on Global Energy Policy at Columbia University's School of International and Public Affairs; former President, Resources for the Future

In spite of national leaders' hostility to climate action, major actions are underway, facilitated by the structures of our government, our economy, and our civil society. Since the 2018 election, the prospects for strong federal policy have grown. Democrat political leaders are pressing major new proposals, and a few positive voices are emerging among congressional Republicans. Climate concerns will be on the public agenda for several decades given the necessity to slash global emissions and the local and regional need to grapple with the impacts of a warming world. The political and intellectual challenge ahead is to design and adopt strong policies that capitalize on the basic structures of our society without waiting for politics to radically reform the structures of our government or economy.



10:00–10:30 AM **Morning Break**

10:30 AM–12:00 PM **Concurrent Sessions**

Lightning Session: Design and Evaluation

Moderator: Susan Norris, Pacific Gas and Electric Company

- [Building Better Teams: An Overview of Prosocial Behavior for Cooperative Groups and Why It Matters in Our Action Against Climate Change](#) – Julia Fiebig, Ball State University
- [Acknowledging the Gorilla in the Room: Time to Shake Up and Sharpen Our Understanding of Energy and Conservation Behaviors](#) – Nicholas Janusch, California Energy Commission
- [You Can't Build a Great Building on a Weak Foundation: How a Shortage of Skilled Trade-Workers Impacts Your Energy Efficiency Programs' Ability to Scale Up](#) – Andrew Mielcarek, ILLUME Advising
- [Energy-Saving Tweaks: The Sequel – How Long Do They Persist?](#) – Carly Olig, Navigant
- [Breaking the Mold: Collaborating with Implementation Partners to Build Scalable Programs That Reach New Customers](#) – Pam Goertzen, Summerhill
- [Product Design Lessons Learned the Hard Way: Why Don't We Apply Behavior Principles to Ourselves?](#) – Morgan Hood, Vermont Energy Investment Corporation
- [Mining Your Data for Actionable Insights](#) – Sarah Gibson, Verdant Brand Communications (formerly Brand Cool)

1A

Cows, Hobos and Spots: Unique Approaches to Sustainability

Moderator: TBD

1B

- [How to Measure People's Shower Length Without Being a Stalker](#) – Cynthia Frantz, Oberlin College
- [Personal and Contextual Dimensions of Undergraduates' Environmentally Responsible Behavior in Green and Conventional Residence Halls](#) – Erin Hamilton, Texas Tech University
- [Scaling Up Participatory Thermal Sensing Programs Across the University of California System](#) – Kiernan Salmon, University of California, Davis
- [Huge Energy and Dollars Savings in University Labs](#) – Gail Lee, University of California, San Francisco

Utility Bills and Changing Behavior

Moderator: Jim Stewart, Cadmus

1C

- [Using Prepayment Plans to Save Energy and Reduce Emissions – an Evaluation of Results in the Midwest](#) – Matthew Wisniewski, Cadmus
- [Utility Investment vs. Consumer Loans: Getting to Yes on Energy Efficiency Through Inclusive Financing for All](#) – Holmes Hummel, Clean Energy Works
- [Behavioral Drivers of Prepaid Electric Service](#) – Nat Treadway, DEFG
- [Prepay Electricity Programs: Potential Energy Savings but at What Cost to the Consumer?](#) – Jeannette LeZaks, Slipstream

Telling the Climate Change Story

Moderator: Anne Dougherty, ILLUME Advising

1D

- [The Time Is Now! Best Practices for Conservation Marketing in Times of Crisis](#) – Ellen Steiner, Opinion Dynamics
- [Change for Climate – Mobilizing One Million Residents Living in Oil Country](#) – Andrea Soler, The City of Edmonton
- [The Power of Minnesota: Using Film for Narrative Storytelling, Community Conversations, and Digital Engagement](#) – Dan Thiede, University of Minnesota
- [Electrification Market](#) – Keith Dennis, National Rural Electric Cooperative Association

Barriers to Clean on Demand Transportation

Moderator: Lina Fedirko, ClimateWorks Foundation

1E

- [Understanding the Role of Incentives in Enabling Use of Higher-Occupancy Options in Shared Mobility Modes: A City-Level Analysis](#) – Scott Middleton, EDR Group
- [Letting Go of the Wheel: The Nature and Role of Consumer Trust in Autonomous Vehicle Adoption Decisions](#) – Nicole Sintov, The Ohio State University
- [Is It Ok to Get in a Car with a Stranger? Risks and Benefits for Ride-Pooling in Shared Automated Vehicles](#) – Angela Sanguinetti, University of California, Davis Consumer Energy Interfaces Lab

Energy and Inclusion in the Energy Industry Evolution

Moderator: Lauren Casentini, Resource Innovations

1F

- [Designing Resident-Centric Programs: Lessons Learned on Low-Income Program Design and Implementation](#) – Srinidhi Sampath Kumar, California Housing Partnership
- [Qualifying the Lived Experience of Energy Poverty in Toronto, Canada](#) – Runa Das, Royal Roads University
- [Climate Change Resiliency in the U.S. Forest Service](#) – Cindi West, USDA Forest Service
- [Equity and Inclusion in the Energy Industry: Measure What Matters](#) – Elizabeth Palchak, Vermont Energy Investment Corporation

12:00–1:30 PM

Lunch

12:00–1:30 PM

Fellows Lunch

1:30–3:00 PM

Concurrent Sessions

Lightning: Mobility & Electric Vehicles

Moderator: Jim Sweeney, Environmental and Energy Policy Analysis Center, Stanford University

2A

- [Leading from the Sales Floor: How Hawaii's EV Expert Certification Program Is Driving Change](#) – Lauren Reichelt, Blue Planet Foundation
- [Characteristics of Lower-Income Participants in California's Clean Vehicle Rebate Project](#) – James Tamerius, Center for Sustainable Energy
- [Why and How Utilities Need to Scale Up Their Electric Vehicle Marketing Efforts](#) – Shelby Kuenzli, E Source
- [Addressing EV Range Anxiety by Going Beyond the Meter](#) – James Cater, Eversource Energy
- [It's a DC Fast Charger, Not a Vacuum Cleaner](#) – Christine White, Frontier Energy
- [Tensions and Complementarities in Mass Transit and Ride-Hailing Decisions Through a Survey-Based Randomization](#) – Saika Belal, Lawrence Berkeley National Laboratory
- [Using Location-Based Services Data for Calculating the Greenhouse Gas Emissions of Communities in Minnesota's Metropolitan Region](#) – Mauricio Leon, Metropolitan Council of the Twin Cities
- [Understanding Consumer Misconceptions of Plug-in Electric Vehicles](#) – Raquel Soat, Navigant
- [Electrifying Potential in Uber and Lyft: The Emission Benefits of Electric Vehicles in Ride-Sharing Platforms](#) – Alan Jenn, University of California
- [The Evolution, Usage, and Trip Chain Patterns of Taxis & Resourcing Services—Evidence from 2001, 2009 & 2017 US NHTS Survey](#) – Xiatian Wu, University of Washington

1:30–3:00 PM **Concurrent Sessions**

Deep Dives for Scaling Sustainability

Moderator: **Cindy Frantz, Oberlin College**

2B

- [Expanding the Pie: Identifying Opportunities to Address Impacts from Procurement](#) – Karen Cook, County of Alameda
- [Making Behavior Change Meaningful, Accessible, and Appealing for a Diverse Campus](#) – Lauren Hennessy, Stanford University
- [Super Size Me: Preparing the Way to Scale Energy Efficient Behavior to a Million Servicemembers and Civilians](#) – Eileen Westervelt, U.S. Army Corps of Engineers
- [Identify Organizational Barriers and Opportunities in Clean Energy Technology Adoption for Large Institutions](#) – Liyang Wang, Lawrence Berkeley National Laboratory

We'd Better Be Ready: Building Resilient Communities

Moderator: **Steve Menges, National Grid**

2C

- [Next-Generation Remote Sensing and Analysis for Societal Resilience](#) – Dan Staley, Arbor Drone
- [Fires, Floods, and Superstorms, Oh My! – How Efficiency and Resiliency Are Bridging the Gap to Climate Solutions](#) – Terra Bell, CLEAResult
- [Resiliency and Energy Efficiency: The Dynamic Duo to Increase Measure Uptake?](#) – Jennifer McWilliams, DNV GL

Science Behind Motivations, Framing and Targeting

Moderator: **Rob Buchanan, Xcel Energy**

2D

- [Insights from the Regulated Price Plan Pilot Project in the Province of Ontario](#) – Dave Thomson, BEworks
- [Loss Aversion and Energy Efficiency Escrows](#) – Joel Hicks, George Mason University
- [Exploring the Relationships Between Mindfulness and Household Energy Use](#) – Nischal Neupane, University of Massachusetts, Amherst

Electrification

Moderator: **Smita Gupta, Itron**

2E

- [Strategic Electrification in the New Energy Economy](#) – Neil Veilleux, Cadmus
- [Berkeley's Building Energy Saving Ordinance – What's Next for Decarbonization?](#) – Billi Romain, City of Berkeley
- [Customer Barriers to Residential Building Electrification as a Means to Reduce Greenhouse Gas Emissions](#) – Donna Whitsett, EMI Consulting
- [Using Network Analysis to Facilitate and Measure Behavior Change and Market Scaleup](#) – Daniel Kaufman, Industrial Economics

This. Is. How. We. Do. It. – Reading and Remediating Behavior in the Real World

Moderator: **Sharyn Barata, Opinion Dynamics**

2F


- [Utility Marketplace and Partnership: Utilization of Instant Rebate Platform for Incentive Distribution and Customer Engagement](#) – Roshini Das, City of Sacramento
- [Customer Engagement Enhancements Through Data](#) – Thomas Mcateer, CMC Energy
- [Energy Efficiency and Flexibility: How Behavioral Change Can Be Triggered with Smart Meters: Lessons from Germany](#) – Karin Kugler, Discovery GmbH
- [Empirical Experiments for Smartphone App Energy Conservation Services Targeting Residential Sectors: An Overview of Initial Findings](#) – Toshiya Iwamatsu, Central Research Institute of Electric Power Industry

3:00–3:30 PM **Afternoon Break**

<p>3:30–5:00 PM Behavior Change in Low-Income Communities and the Importance of Equity Click for more information</p> <p>How can increasing procedural equity help identify what's most important to a community to spur action, how evoking cultural values such as "not-wasting" might help shift behavior, and whether it's fair to implement behavior change programs to save energy in low-income communities—especially when owners often control investments in rental properties—rather than using weatherization or other efficiency program measures.</p> <p>Moderator: Mad Stano, Program Director California Environmental Justice Alliance</p> <ul style="list-style-type: none"> • Maria Stamas, Natural Resources Defense Council • Alana Mathews, California Energy Commission 	<p>Transportation Spotlight</p>
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5:15–6:30 PM  **American Forest Foundation Solutions Session—Preregistration Required**

6:30–8:00 PM **Poster Reception**

Refreshments sponsored by 

Tuesday, November 19

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

8:30–10:00 AM Concurrent Sessions

Lightning: Campuses and Communities

Moderator: Matt Williams, University of Florida

3A

- [Sustainability and Climate Action in Organizations and Communities – Using Online Tools and Community Organizing to Scale and Inspire Action](#) – Lisa Altieri, Community Climate Solutions
- [Developing Common Metrics – Moving Multiple Organizations to Action](#) – Jon-Paul D'Aversa, MORPC
- [Scaling Up Community Based Social Marketing Research with Student Research Teams](#) – Bridget Flynn, Oberlin College
- [Climate Change Needs Behavior Change: Seven Key Behaviors to Reduce U.S. Household Emissions](#) – Katie Williamson, RARE
- [Energize! A Climate Protection Scale Residential Energy Efficiency Competition](#) – Nelson Hal, Res-Intel
- [Building Capacity Through Resource Efficiency](#) – Haven Bills, Southface Institute
- [Data-Driven Change: Designing Your Energy Lifestyle \(DYEL\)](#) – Kira Smiley, Stanford University

Measuring Non-Energy Impacts

Moderator: Ellen Steiner, Opinion Dynamics

3B

- [DSM Task 24 and CEE: Learnings from an International Behavior Change Collaboration](#) – Sea Rotmann, Sustainable Energy Advice (SEA)
- [Findings from a Benefit-Cost Analysis of Residential Asthma Interventions Using Medicaid Data](#) – Brendan Brown, Green and Healthy Homes Initiative
- [Triple Bottom Line \(TBL\): Getting Beyond "Handwaving" on the Social Bits for Recycling and Energy: Real World Examples](#) – Lisa Skumatz, Skumatz Economic Research Associates

You Down With IOT? Yeah, It Knows Me! – Making Connected Devices about People (In a Good Way)

Moderator: Jennifer Robinson, EPRI

3C

- [Smart for All: Smart Thermostats in Lower Income Multifamily](#) – Ben Adams, MaGrann Associates
- [Insights on Enhancing Engagement with Real-Time Energy Feedback and Expanding Energy Savings](#) – Mallika Jayaraman, Navigant
- [Made in the Shade: Advocating for Automation of Shading in Existing Buildings](#) – Cathy Higgins, New Buildings Institute
- [A Rising Tide Lifts All Ships: Results and Insights from Novel Behavior-Based Smart Home Efficiency Programs](#) – Daniel Fredman, Vermont Energy Investment Corporation

Social and Cultural Contexts

Moderator: TBD

3D

- [Can We Move Beyond the Status Quo? Communicating Climate Change Adaptation in Coastal Communities](#) – Krysta Sutton, Dalhousie University
- [Recessions or Polarization: How Economic Downturns and Partisanship Influence Climate Change Skepticism in the US](#) – Abhishek Sambatur, DePauw University
- [Energy Conservation Through Awareness Raising? The Evolution of the Japanese Cool Biz Campaign](#) – Robert Lindner, Kyushu University

Scalable Solutions for Small and Medium Businesses

Moderator: Anna Ebers Broughel, Tetra Tech

3E

- [A Scalable Solution for SMB Behavioral Energy Efficiency](#) – Lea Lupkin, ICF
- [The Energy Needs and Wants of Small and Medium Business Customers](#) – Nathan Shannon, Smart Energy Consumer Collaborative
- [Scaling Up to Better Engage and Serve a Full Customer Market](#) – Mike Maroney, TRC Energy Services

Charging Into the Future

Moderator: Gil Tal, University of California, Davis

3F

- [What Vehicles Are Electric Vehicles Replacing?](#) – Brett Williams, Center for Sustainable Energy
- [The Electric Vehicle Charger Installation Process: Insights from Service Providers and Site Hosts](#) – Amy Lastuka, Center for Sustainable Energy
- [An Inferential Study of the Potential Consumer Value of Free Charging](#) – Michael Maness, University of South Florida
- [Facilitating Electric Vehicle Adoption with Energy Cost Calculators](#) – Eli Alston-Stepnitz, University of California, Davis

10:00–10:30 AM Morning Break

10:30 AM–
12:00 PM**Concurrent Sessions****Lightning: Electrification and Renewables**

Moderator: Maria Vargas, U.S. Department of Energy

4A

- [Visualizing Floating Wind Farms and the Scale of a Whale](#) – Sara Guillinan, Bureau of Ocean Energy Management
- [Catching the Wave: Lessons Learned from a Heat Pump Water Heater Pilot Program](#) – Martin Bond, Community Energy Services Corporation
- [Plugging into an Electric Future](#) – Gomathi Sadhasivan, DNV GL
- [Beneficial Load Growth Through Electrification: Making BE Part of the DSM Portfolio](#) – Bob Dibella, ICF
- [Mass Customized Solar Permitting and Interconnection Reform: The Results of Discrete Choice Experiments](#) – Margaret Taylor, Lawrence Berkeley National Laboratory
- [The Solar Technical Assistance Team \(Stat\) Experience: Lessons in Designing, Executing, and Evaluating an Energy-Sector Technical Assistance Program](#) – Juliana Williams, National Renewable Energy Laboratory
- [The Seduction of Induction](#) – Susan Corbelli, Sacramento Municipal Utility District
- ["Urban Energy Commons," Shared Renewable Generator Sizing and Electricity Consumption Behavior Change](#) – Craig Burton, University of Melbourne
- [Soft Costs Knowledge Pathways in the US Solar Photovoltaic Ecosystem](#) – Erik Funkhouser, University of Texas at Austin
- [Providing Customer and Environmental Benefits with Residential Distributed Energy Resources and Innovative Tariffs](#) – Chun Zhu, Center for Sustainable Energy

The Power of Partnerships: Collaborations for Sustainability

Moderator: Kate Peters, Eversource Energy

4B

- [The Odd Couple: The Surprising Success of BC's Utility and Local Government Partnerships](#) – Robyn Wark, BC Hydro
- [Let's Link Up: Water-Energy Nexus Programs](#) – Melody Seesangrit, Irvine Ranch Water District
- [Leveraging the Brand: Partnering with Energy Star Increases Customer Satisfaction](#) – Wesley Schultz, California State University
- [Developing A Cleveland Metro Region Environmental Dashboard: A Partnership Between Oberlin College and the Great Lakes Science Center to Scale-Up Behavior Change and Community-Based STEM Education](#) – John Petersen, Oberlin College

Engaging with New Technologies

Moderator: Michael Frischmann, EcoMetrics

4C

- [Understanding Current and Employing Future Practices for Monitoring Building Energy Systems](#) – Frederick Paige, Virginia Tech
- [Market Transformation Using Technical Outreach: Lessons Learned from CHP, Energy Storage, and Commercial Tenant Efficiency in New York](#) – Gita Subramony, ERS
- [Classification of Household Behavior in Ownership and Usage of Energy Efficient Appliances and Analysis of Relationship of Household Classes with Socioeconomic Variables and Consumption](#) – Arijit Sen, University of Maryland

Shared Understandings of Change: Social Influence at Different Scales

Moderator: Liz Kelley, ILLUME Advising

4D

- [Fostering Social Change Through Dynamic Norms: Encouraging Counter-normative Sustainable Behaviors](#) – Gregg Sparkman, Stanford University
- [Using Neuroscience to Predict Consumer Social Media Engagement and Energy-Efficient Purchases](#) – Nik Sawe, Stanford University
- [Social Norms and Political Leader Influence on Climate Policy Support](#) – Jennifer Cole, University of Colorado Boulder
- [Utilizing University Resources to Build the Capacity of Local Organizations: A Case Study from the University of Florida](#) – Fiona Hogan, University of Florida

Life Circumstances and Travel Behavior – Equity to Families

Moderator: Lauren Cheatham, Schidler College of Business, University of Hawai'i at Mānoa

4E

- [Family Structure and the Impact of Home-Delivery on Household Shopping Trips](#) – C. Anna Spurlock, Lawrence Berkeley National Laboratory
- [Life Course as a Contextual System to Investigate the Effects of Life Events, Gender and Generation on Travel Mode Usage](#) – Ling Jin, Lawrence Berkeley National Laboratory
- [Issues and Opportunities Integrating TNCs Into Transportation Services for Older Adults and People with Disabilities](#) – Jeremy Halpern, University of California, Berkeley
- [New Potential for Paratransit? The Benefits and Limitations of Using E-Hailing Services to Provide ADA Paratransit Rides](#) – Madeleine Parker, University of California, Berkeley

Optimizing Performance with Strategic Energy Management

Moderator: Bruce Cenicerros, ACT

4F

- [Pushing a Bigger Lever: Organizational Change You Can Bring About and Measure-With CEI](#) – Elizabeth Palchak, Vermont Energy Investment Corporation
- [Beyond kWh: The Non-Energy Benefits and Skills at the Heart of a Successful Energy Manager Program](#) – Ari Michelson, ERS
- [Holistic SEM Practices: Power to the People!](#) – Kjell Van Zoen, Energy 350

12:00–1:00 PM

Lunch

1:00–2:30 PM Concurrent Sessions

Lightning: Equity and Resilience

Moderator: Kathy Kuntz, Kanndo Consulting

5A

- [Evaluating Transition Programs for Low-Carbon Resilience That Engages Communities at Neighbourhood Scale: Do They Work?](#) – Stephen Sheppard, Collaborative for Advanced Landscape Planning
- [Jumpstarting Adaptation Projects in Your Organization: A Replicable Half-Day Workshop Model](#) – Sarah Church, County of Alameda
- [Using Energy Affordability Analysis to Drive Participation in Low-Income Programs](#) – Kara Rodgers Marshall, Eversource Energy
- [A Method for Analyzing Air Quality-Related Health Risk Inequality in Southern California and Application to Energy Efficiency Projects Across California](#) – Stefani Penn, Industrial Economics
- [Shaping the Future of Energy Efficiency for Affordable Housing](#) – Shelley Beaulieu, TRC Energy Services
- [Digging Deeper: Avoiding Pitfalls in Measuring the Non-Energy Benefits of a Low-Income Multifamily Retrofit](#) – Nermin Dessouky, University of California, Davis Energy & Efficiency Institute
- [Expanding the Role of Human Behavior in Climate Change Adaptation: Proposed Framework and Practices](#) – Jennifer Carman, University of Michigan

Scaling Up Behavior Programs in Organizations

Moderator: Chris Jones, University of California, Berkeley

5B

- [Using Gamification at Universities and Beyond to Massively Scale Up Sustainability](#) – Ryan Bell, University of California Office of the President
- [Gamification and Behavior Change Strategies to Fuel Energy Conservation and Efficiency](#) – Kellie Carlson, Port of San Diego
- [Engaging in a Culture of Sustainability: Exploring a New Role of Organizational Culture in Reducing Carbon Footprints](#) – Nicholas Palaschuk, University of Waterloo

Distributed Energy Resources

Moderator: Obadiah Bartholomy, Sacramento Municipal Utility District

5C

- [Addressing Integration Challenges of High Shares of Solar Photovoltaics with Battery Storage, Electric Vehicles and Time-Varying Electricity Pricing](#) – Marius Schwarz, ETH Zurich
- [How Opower Uses Data and Research to Design the Ideal DER Customer Experience](#) – Karina van Schaardenburg, Oracle/Opower
- [Energizing Your Savings - Hourly Pricing and the Solar Net Metering Customer](#) – Araceli Martinez, Elevate Energy
- [Reuse and Recycle: Preparing California for a Sustainable Battery-Reliant Energy Future](#) – Bridget Clark, University of California

Human-Centric Programs: Design and Measurement

Moderator: Hal Nelson Portland State University

5D

- [Empathy, Ethnography, Engagement: Accelerating Change Through Human-Centered Design](#) – Bill LeBlanc, E Source
- [Beyond the Rct: Leveraging Meter-Based Savings Methods to Drive Behavioral Energy Efficiency](#) – Timothy Hillman, ICF
- [Going Beyond Customer Experience Improvements: Leveraging Journey Mapping to Deliver Added Evaluation Results](#) – Courtney Henderson, ILLUME Advising
- [Be More Than a Fly on the Wall: How to Use Mobile Participant Diaries to Experience Programs with Customers in Real Time](#) – Lisa Obear, ILLUME Advising

Mobility Choices

Moderator: Andy Duvall, National Renewable Energy Laboratory

5E

- [Development of an Integrated Model System of Transport and Residential Energy Consumption](#) – Shivam Sharda, Arizona State University
- [Adding Carbon to the Equation in Online Flight Searches to Promote Lower-Emissions Air Travel](#) – Nina Amenta, University of California, Davis Consumer Energy Interfaces Lab
- [Rethinking Our Streets for Future Mobility](#) – Beth Ferguson, University of California, Davis

Beyond Climate and Cash – What Really Motivates Energy Efficiency and Renewable Energy Adoption?

Moderator: Arien Korteland, BC Hydro

5F

- [Energy Efficiency: Reducing Emissions and Improving Health in the Midwest](#) – Nick Hromalik, Midwest Energy Efficiency Alliance
- [Multifamily Opportunities and Challenges to Energy, Environmental and Equity Outcomes](#) – Sean Denniston, New Buildings Institute
- [NEBs / NEIs: What Measures Matter? What Measures Deliver the Most NEBs? Getting Past Program-Wide NEBs to Uncover What Households Value Most](#) – Dana D'Souza, Skumatz Economic Research Associates
- [Does Self-Interest Attract More Sunlight? A Field Experiment on Solar Adoption](#) – Marten Ovaere, Yale University

2:30–2:45 PM Break

2:45–4:15 PM Concurrent Sessions

Lightning: Residential Programs

Moderator: Gene Rodrigues, ICF

6A

- [Using YouTube to Fight Climate Change](#) – Levi Hildebrand, One Island Media
- [We Are 100: Community Stories to Inspire Action on Climate Change](#) – Kamal Kapadia, Blue Planet Foundation
- [Multi-Stakeholder Design of Sustainable Complex Energy-Water Systems Using Real-Time Feedback](#) – Niles Guo, Carnegie Mellon University
- [Gas Savings from HER Programs](#) – Beth Fitzjarrald, E Source
- [Transforming Markets At Scale with Utility Choice Engine Platforms](#) – Anne Arquit Niederberger, Enervee
- [Household Energy Efficiency Adoption Behaviour: Integrating Findings from Choice Experiments into Energy Models](#) – Antoine Durand, Fraunhofer ISI
- [Is Efficacy the Key for Effective Climate Communication?](#) – Christie Manning, Macalester College
- [Information Is Power: Transforming the Real Estate Market](#) – Samantha Caputo, Northeast Energy Efficiency Partnerships

Cities and Buildings of the Future

Moderator: Laurie ten Hope, California Energy Commission

6B

- [What's in a Name? Megaprojects and the New Language of Efficiency at Scale](#) – Bruce Manclark, CLEARResult
- [Changing the Status Quo: Opportunities for High-Impact Interventions Throughout the Building Industry](#) – James Geppner, Erase40.Org
- [Industry Partnerships Help Department of Energy's Building Technologies Office Scale Innovation](#) – Hannah Debelius, U.S. Department of Energy
- [Transitioning to Highly Sustainable Office Buildings: The Role and Experience of Occupants and Managers](#) – Manuel Riemer, Wilfrid Laurier University

What Works for Utility Programs

Moderator: Annika Todd Blick, Lawrence Berkeley National Laboratory

6C

- [Can High Bill Alerts Help Utility Customers to Save Energy? Evidence from a Large Randomized Experiment](#) – Jim Stewart, Cadmus
- [Enabling Residential TOU Customers To Succeed](#) – Moiz Kapadia, Opower/Oracle
- [Now and Then: A Decade of Behavioral Approaches in Efficiency Programs](#) – Jennifer Smith, Consortium for Energy Efficiency
- [Knowledge Save Power: Driving Behavioural Change with Energy Made Visible](#) – Maya Papineau, Carleton University

Engaging for Change in Difficult to Reach Communities

Moderator: Amy Findlay, Eversource Energy

6D

- [Income Eligible Digital User Experience](#) – Kevin Dick, Delta Institute
- [Putting the Brakes on Burning: Using Effective Marketing Techniques to Raise Awareness and Improve Regional Air Quality](#) – Jose Villa, Sensis
- [Behavioral Program: New Ways to Engage With Customers](#) – Maria Liza Legaspi, Southern California Gas Company
- [Party of One: How and Why to Create Personalized Program Designs to Scale BEE Savings](#) – Monty Prekeris, Tendril

A Whole New World? New Thinking for Big Problems

Moderator: Nick Lange, ICF

6E

- [Giving Occupants Control of Their Thermal Comfort to Enable Deep HVAC Savings](#) – David Lehrer, Center for the Built Environment
- [Seeing the Light: Transforming the Adoption of Triple Pane Windows](#) – Enoch Lenge, Eversource Energy
- [Sustainable Consumer Finance Decisions: A First Look at Behavioral Drivers and Design Options](#) – Erin Sherman, Ideas42
- [Advanced Nuclear Technology and the American Public](#) – Kenton De Kirby, The Breakthrough Institute

Solar and Energy Efficiency for Low Income Households

Moderator: Pat Aloise-Young, Colorado State University

6F

- [An Open Market Opportunity for Savvy Companies](#), Rick Umoff, SEIA
- [Unlocking the Solar Market: Expanding Access to Low- and Moderate-Income Communities](#) – Shubha Jaishankar, Allegheny Science and Technology
- [Next-Level Sustainability: Affordable Housing's Role in an Equitable Clean Energy Future –Heat Pumps: Scaling Electrification of Multifamily Buildings](#) – Shah Ruchi, Tenderloin Neighborhood Development Corporation
- [Next-Level Sustainability: Affordable Housing's Role in an Equitable Clean Energy Future](#) – Rebecca Schaaf, Stewards of Affordable Housing for the Future

4:15 – 4:30 PM Break

4:30–6:00 PM	Community Spotlight	Organizational Behavior Spotlight
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BFF (otherwise known as the BECC Film Festival)

MC'd by the Marvelous Bryan Cohen

Sponsored by



6:15–7:15 PM

Lights! Camera! Behavior Change! The BFF is what critics have called, "the most entertaining hour of the entire conference." You'll laugh, you'll cry, you'll have a drink. Then you'll relax and enjoy some of the best content relating to climate change and energy efficiency, ever.

Wednesday, November 20

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

8:30–10:00 AM Concurrent Sessions

Lightning: Commercial Programs

Moderator: Derek Okada, Southern California Edison

7A

- [How Do We Affect the Behavior Needed to Study Behavior? Or: Getting the Best Response Rate to Surveys Is Still More Complicated Than You Think](#) – Ryan Bliss, ADM Associates
- [Competition, Collaboration, Transformation! The Boma Quebec Energy Challenge](#) – Genevieve Gauthier, Econoler
- [Fractals: Reshape Energy Efficiency Programs for Business Customers by Putting Building Operators at the Center](#) – Kady Cowan, Independent Electricity System Operator
- [Motivating – and Monetizing – Behavior Changes Through the Carbon IRA Framework](#) – Jason Makansi, Pearl Street

Renewables for All

Moderator: TBD

7B

- [Equal Access to Sunshine: Barriers & Opportunities for PV in Disadvantaged Communities](#) – Tabitha Harrison, AEA
- [Are We Approaching Equity in the US Residential Solar Market? Income and Demographic Trends of Residential Solar Adopters](#) – Naim Darghouth, Lawrence Berkeley National Laboratory
- [Distributed Solar and Environmental Justice: Exploring the Demographic and Socioeconomic Trends of Residential PV Adoption in California](#) – Boris Lukanov, Physicians, Scientists and Engineers for Healthy Energy
- [Energy Justice and Equity in Solar Development: How Solstice Is Developing and Piloting an Alternative Credit Metric to Qualify Community-Shared Solar Customers](#) – Lauren Levine, Solstice Initiative

The Interface of Technology and Behavior

Moderator: John Tideman, MyHEAT

7C

- [Lessons Learned from a Smart Home Demonstration in New York City](#) – Bethany Sparn, National Renewable Energy Laboratory
- [How Is Behavior Influenced Through Energy Feedback Messaging?](#) – Wendell Grinton, Virginia Tech
- [Bill Alerts: A Tool to Reduce Energy or Empower Customers](#) – Yifan Lu, Sacramento Municipal Utility District

How's It Gonna Be? – Insight into Handling an Uncertain Future

Moderator: Michael Li, U.S. Department of Energy (invited)

7D

- [What-If Modeling to See Energy Futures Under Climate Change: The Case of Air Conditioning](#) – Mithra Moezzi, Portland State University
- [Agent-Based Modeling of Energy Transactions Within a Micro-Grid Network Enhanced by Blockchain: Incorporating the Major Psychological Decision-Making Theories](#) – Constantine Spandagos, Hong Kong University of Science and Technology
- [Scaling Up Requires A Paradigm Shift for Data Access](#) – Robert King, Smart Energy Water
- [Market Intelligence? Eliciting Expert Opinions from Non-Expert Stakeholders](#) – Sarah Outcault, University of California, Davis Energy & Efficiency Institute

International Perspectives on Electric Vehicle Markets

Moderator: Scott Hardman, University of California, Davis

7E

- [Effectiveness of China's Plug-in Electric Vehicle Subsidy](#) – Rubal Dua, KAPSARC
- [The Characteristics of Commitment: A Comparison of Interest and Intention in Electric Vehicle Adoption](#) – Karen Ehrhardt-Martinez, Navigant
- [Touchpoints for E-Mobility: Vehicle Purchase Process Understanding for a More Efficient Promotion of Electric Vehicles](#) – Jana Plananska, University of St.Gallen

Invited Session

Presented by: Beth Karlin, University of California, Irvine

7F

10:00–10:30 AM Morning Break

10:30 AM–
12:00 PM

CLOSING PLENARY

Youth Action

Moderator: TBD

Panelists:

- TBD

1:00 – 4:00 PM

Post-conference Workshops *(see page 9 for details)*

Pre- and Post-Conference Workshops

Sunday, November 17

- 8:30am – 12:00pm | Leading High-Functioning and Resilient Sustainability Office: Making a Real Difference via Practical and Effective Leadership
Fahmida Ahmed Bangert, Stanford University and Chris Jones, University of California Berkeley
- 1:00pm – 4:30pm | Visual Storytelling: Putting Data into Context
Arlene Birt, Minneapolis College of Art and Design
- 1:00pm – 4:30pm | Creating Effective Organizational Change: A Five-Step Framework
Christopher Payne, Lawrence Berkeley National Laboratory
- 8:30am – 4:30pm | Behavioral Program Success: 10 Pitfalls to Avoid & Best Practices to Scale Up
Julie Colehour, C+C and Hal Nelson, Res-Intel
- 8:30am – 4:30pm | Play the Game: Energy Efficiency Can Be Fun—Seriously!
Dr. Catherine Cooremans, University of Lausanne and Dr. Clemens Rohde, Fraunhofer Institute
- 8:30am – 4:30pm | Behavior-Centered Design Challenge: Green Residential Energy
Kevin Green, Erik Thulin, and Katie Williamson, Center for Behavior & the Environment, Rare
- 8:30am – 4:30pm | Behavior Change 101
Nick Lange, ICF, Dr. Beth Karlin and Dr. Sea Rottman, See Change Institute

Wednesday, November 20

- 1:00pm – 4:00pm | Expanding and Scaling Up Behavioral Science Research on Climate Change
Tony Biglan, Oregon Research Institute, Tiffany Dubuc, The Chicago School of Professional Psychology, and Julia Fiebig, ABA Global Initiatives
- 1:00pm – 4:00pm | Cool Tools for Scaling Up Collective Climate Action Through Neighbourhoods and Schools
Stephen Sheppard and Kanchi Dave, Collaborative for Advanced Landscape Planning, University of British Columbia

Acknowledgments

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