



November 17–20, 2013  
Sacramento, CA

# 2013 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*

SUNDAY, NOVEMBER 17	
10:00 AM-6:00 PM	<p><b>Pre-Conference Workshops</b></p> <p><b>Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing</b> Dr. Doug McKenzie-Mohr, 10am – 6pm</p> <p><b>Reaching Customers through Innovative Community Energy Programs</b> Paul Markowitz, Efficiency Vermont/Vermont Energy Investment Corporation. 10am – 6pm</p> <p>(See <a href="http://www.BECCconference.org">www.BECCconference.org</a> website for information on registration and fees)</p>
7–9 PM (Registration 6–9 PM)	<p style="text-align: center;"><b>KICK-OFF PROGRAM &amp; DESSERT RECEPTION</b></p> <p style="text-align: right;">Reception Sponsor <b>Opinion Dynamics</b></p>

MONDAY MORNING, NOVEMBER 18	
7:30–8:30	<b>Continental Breakfast &amp; Registration</b>
8:30 AM – 10:00 AM	<p><b>Opening Plenary</b></p> <p><b>Welcome: BECC Conference Directors and Co-Chairs</b></p> <p><b>Keynote: <i>What You Need to Know About the Framing of Energy and Global Warming</i></b> <b>George Lakoff</b>, Richard &amp; Rhoda Goldman Distinguished Professor of Cognitive Science &amp; Linguistics University of California, Berkeley</p> <p><i>Dr. Lakoff has been a major figure in Linguistics since the 1960's and is one of the founders of both the cognitive science and the cognitive linguistics fields. He is particularly well known for his work on the framing of political discourse and on the mechanisms of metaphorical thought. He is author of The New York Times bestseller Don't Think of an Elephant!, as well as Moral Politics: How Liberals and Conservatives Think, Whose Freedom? and many other books and articles.</i></p>
10:00–10:30	<b>Morning Break</b>

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BECC has purchased offsets for the conference's CO2 emissions through SMUD's Carbon Offset Program.

<b>MONDAY MORNING, NOVEMBER 17</b>	
<b>10:30–12:00</b>	<b>Concurrent Sessions 1</b>
<b>Session 1A Golden State</b>	<p><b><u>LIGHTNING SESSION: FRONTIERS IN RESEARCH</u></b>  <b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Energy Consumption Feedback and Behavior Change: A Literature Review and Pilot Study</b> – Katherine Binder, Western Michigan University Office for Sustainability</li> <li>• <b>Energy Demand Reduction in Family Homes: Using Multi Disciplinary Methods to Unpick the Complexity</b> – Richard Buswell, Loughborough University</li> <li>• <b>How Clever is That Thermostat?</b> – Alan Meier, LBNL</li> <li>• <b>Measuring Voluntary Conservation Efforts in Response to Short Term Urgent Utility Outreach on Fox Island, WA</b> – Josiah Narog, The Evergreen State College</li> <li>• <b>Usage and Waste: Examining Technological and Behavioral Inefficiencies</b> – Bill Norton, Opinion Dynamics</li> <li>• <b>Serious Games and Serious Energy Saving</b> – Brian Orland, Pennsylvania State University</li> <li>• <b>Evaluation of the Impact of Bill Alerts on Usage and Bill Payment Behavior</b> – Josh Schellenberg, Freeman, Sullivan &amp; Company</li> <li>• <b>New Directions in Goal Setting: The Effects of Action Planning on Electricity Conservation</b> – Nicole Sintov, University of Southern California</li> <li>• <b>Application of Persuasive Technology and Wireless Sensors, in Conservation of Energy and Carbon Emission Reduction in a University Campus</b> – Anthony Okey Emeakaroha, University of Kent, UK</li> </ul>
<b>Session 1B Regency D</b>	<p><b><u>SOCIAL MEDIA</u></b>  <b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Is Facebook Making us Greener? - The Roles of Social Connectedness and Web Use in Shaping Conservation Priorities</b> – Evan Johnson, University of North Carolina, Chapel Hill</li> <li>• <b>Setting the Right Social Media Goals</b> – Nick Laurrell, S. Groner Associates</li> <li>• <b>How Gaming is Creating Customer Engagement and Savings Opportunities for Residential Energy Efficiency Programs</b> – Dain Nestel, PECl</li> </ul>
<b>Session 1C Regency E</b>	<p><b><u>APPLICATION OF BEHAVIOR THEORY TO IMPROVE TRANSPORTATION PROGRAM DESIGN</u></b>  <b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Using the Reasonable Person Model to Explore Personal Transportation Pro-Environmental Behavior</b> – Matt Biggar, Stanford University</li> <li>• <b>Drive Less: Easy to Say, Hard to do. Understanding decisions to change travel modes.</b> – Caroline Noblet, University of Maine</li> <li>• <b>Identifying Transportation Deserts in Rural North Carolina Counties: Where Environment, Transportation Supply, and Socio-Demographics Intersect</b> – David Salvesen, University of North Carolina, Chapel Hill</li> </ul>
<b>Session 1D Carmel</b>	<p><b><u>ENGAGING EMPLOYEES WITH GAMES, INCENTIVES AND FUN!</u></b>  <b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>The Kilowatt Cup: Engaging and Sustaining Through Healthy Competition</b> – Kelly Rose, PECl</li> <li>• <b>Driving Behavior Change Through Persuasive Technology</b> – Susan Hunt Stevens, Practically Green</li> <li>• <b>Engaging Employees with Games, Incentives and Fun!</b> – Cindy Olson, Eco-Coach</li> </ul>
<b>Session 1E Big Sur</b>	<p><b><u>DRIVING SUSTAINABLE BEHAVIOR: ENGAGING INDIVIDUALS</u></b>  <b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Sustainable Lifestyles and Identities: Segmenting Consumers Based on Behaviors, Perceptions and Openness to Change</b> – Jonn Axsen, Simon Fraser University</li> <li>• <b>Reasons Against Adopting Renewable Energy Systems in Consumer Decision-Making</b> – Mark Peterson, University of Wyoming</li> <li>• <b>Quantifying Cumulative Carbon Footprint Mitigation Opportunities Based on Key Life Decisions</b> – Max Wei, Lawrence Berkeley National Laboratory</li> </ul>
<b>Session 1F Regency F</b>	<p><b><u>EXPERIMENTAL DESIGN TO EVALUATE BEHAVIOR PROGRAMS</u></b>  <b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Tell Me Something I Don't Already Know: Consumer (Un)Informedness and the Impact of Smart Meters on Residential Energy Consumption</b> – David Byrne, University of Melbourne</li> <li>• <b>Engagement, Knowledge, and Motivation: The Pathways Through Which Normative Comparisons Lead to Energy Savings and Improved Customer Satisfaction</b> – Julie O'Brien, Opower</li> <li>• <b>What Drives Program Uptake? Looking Beyond Savings to Bundles of Features: Latest in Non-Energy Benefits (NEBs) and Indirect Impacts</b> – Lisa Skumatz, Skumatz Economic Research Associates</li> </ul>
<b>12:00–1:30</b>	<b>Lunch (Regency Ballroom)</b>

## MONDAY AFTERNOON, NOVEMBER 18

<b>1:30–3:00</b>  Session 2A <b>Golden State</b>	<b>Concurrent Sessions 2</b>  <u><b>LIGHTNING SESSION: GREENING THE WORKPLACE</b></u> <b>Moderator:</b> <ul style="list-style-type: none"> <li>• <b>Equipment Dashboards Improve Energy Use</b> – Greg Baker, Vermont Energy Investment Corporation</li> <li>• <b>Building a Persuasive Business Case for Energy Efficiency</b>– Daniel Bresette, Maryland Energy Administration</li> <li>• <b>Who Put Those LEDs in the Closet? An Examination of Remaining Lighting Savings in C&amp;I Facilities</b> – Adam Burke, Opinion Dynamics</li> <li>• <b>Turn Off the Lights or 1000 Little Steps</b> – Kady Cowan, University Health Network</li> <li>• <b>Driving Behavior Change: Sustainability Engagement in Commercial Buildings</b> – Melissa Donnelly, Johnson Controls Institute for Building Efficiency</li> <li>• <b>Greening the SMB Workplace</b> – Kirsten Liske, Ecology Action</li> <li>• <b>Barriers to Energy Efficiency &amp; Revolving Funds at Canadian Public Institutions</b> – John Maiorano, University of Toronto</li> <li>• <b>Research, Development &amp; Knowledge Management for Sustainable Operations in Federal Agencies</b> – Trista Patterson, USDA Forest Service</li> <li>• <b>Driving Behavior Change in Large Organizations</b> – Grant Ricketts, Tripos Software, Inc</li> </ul>
Session 2B <b>Regency E</b>	<u><b>CAN “BIG DATA” LIVE UP TO THE HYPE?</b></u> <b>Moderator:</b> <ul style="list-style-type: none"> <li>• <b>Using ‘Big Data’ to Achieve Both Broad and Deep Savings in Hard-to-Reach Customer Segments</b> – Steven Meyers, EnerPath</li> <li>• <b>Get Out The Watt! : Drawing Parallels with a GOTV Campaign and Influencing Behavior for Results in Energy Efficiency</b> – Gomathi Sadhasivan, DNV KEMA</li> <li>• <b>Reducing electricity consumption and maximizing self-consumption – lessons from Germany</b> – Nikolaus Starzacher, Discovery GmbH</li> <li>• <b>Can “Big Data” Live up to the Hype? Benefits and Limitations of “Big Data” for Program Evaluation of Energy Savings and Persistence</b> – Annika Todd, Lawrence Berkeley National Laboratory</li> </ul>
Session 2C <b>Regency D</b>	<u><b>CONSERVATIVES AND LIBERALS: POLITICAL AFFILIATION AND MARKETING</b></u> <b>Moderator:</b> <ul style="list-style-type: none"> <li>• <b>Predicting Attitudes toward Smart Meters from Connectedness to Nature, Comfort with Technology and Political Affiliation</b> – Patricia Aloise-Young, Colorado State University</li> <li>• <b>The Cost of Environmental Messaging On Demand For Energy Efficiency</b> – Dena Gromet, The Wharton School, University of Pennsylvania</li> <li>• <b>A Tale of Two Cities: Marketing Energy Efficiency Programs to “Red” and “Blue” Customers in Colorado</b> – Kim Burke, E Source</li> <li>• <b>A Look at Texas’ Water and Electricity Shortages in the Face of Climate Change</b> – Kate Zerrenner, Environmental Defense Fund</li> </ul>
Session 2D <b>Carmel</b>	<u><b>CYCLING, WALKING AND PUBLIC TRANSIT</b></u> <b>Moderator:</b> <ul style="list-style-type: none"> <li>• <b>Spare the Air Youth: Youth Initiatives to Reduce Vehicle Miles Traveled</b> – Hannah Kapell, Alta Planning + Design</li> <li>• <b>Behaviour Change and Cycling for Transportation</b> – Beth Savan, University of Toronto</li> </ul>
Session 2E <b>Regency F</b>	<u><b>DIFFERENT SOCIAL SCIENCE PERSPECTIVES ON BEHAVIOR</b></u> <b>Moderator: Samantha Neufield, Arizona State University</b> <ul style="list-style-type: none"> <li>• <b>Anthropological Theory and Practice: Why We Need it to Understand Behavior</b> – Alan Elliot, Opinion Dynamics</li> <li>• <b>Conscientious Personality and Residential Energy Conservation Behavior</b> – Nicholas Schwab, University of Northern Iowa</li> <li>• <b>Theorizing Environmental Worlds: The Systems of Exchange Typology</b> – Nicole Woolsey Biggart, University of California</li> </ul>
Session 2F <b>Big Sur</b>	<u><b>MODELING ENERGY USE AND MITIGATION OPPORTUNITIES</b></u> <b>Moderator:</b> <ul style="list-style-type: none"> <li>• <b>Behavior Wedge Profiles for Cities: A Strategic Approach for Reducing Energy Consumption</b> – Karen Ehrhardt-Martinez, Human Dimensions Research</li> <li>• <b>A Framework to Describe and Model Human Energy-Related Behavior in Buildings</b> – Tianzhen Hong, Lawrence Berkeley National Laboratory</li> <li>• <b>One of These Homes is Not Like the Other: Residential Consumption Variability</b> – Phillip Kelsven, Itron</li> <li>• <b>Residential Behavioural Savings</b> – K H Tiedemann, BC Hydro</li> </ul>
<b>3:00–3:30</b>	<b>Afternoon Break</b>
<b>Spotlight Panels</b> <b>3:30–5:30</b>	
<b>5:30–6 PM</b>	<b>Poster Preparation</b>
<b>6PM – 8 PM</b>	Libations Sponsor <b>CLEARresult</b>
<b>Poster Session and Reception</b>	Reception Sponsor <b>Nature Climate Change</b>

<b>TUESDAY MORNING, NOVEMBER 19</b>	
7:30– 8:30	<b>Continental Breakfast &amp; Registration</b>
Spotlight Panels 8:30–10:00	
10:00–10:30	<b>Morning Break</b>
10:30–12:00	<b>Concurrent Sessions 3</b>
<b>Session 3A Golden State</b>	<p><b><u>LIGHTNING SESSION: COMMUNITY PROGRAMS</u></b>  <b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Tiny Steps: Engaging Residents in Small Energy Saving Actions Through Simple Tools</b> – Claudia Barriga, UC Davis - WCEC</li> <li>• <b>Staying on Target: Optimal Community Selection Techniques for Community-Based Programs</b> – Tami Buhr, Opinion Dynamics</li> <li>• <b>Food: Too Good to Waste – A Toolkit to Reduce Household Food Waste</b> – Karen Cook, County of Alameda</li> <li>• <b>Transforming an Island Community and Economy: RePower Bainbridge</b> – Stephanie Gray, Conservation Services Group</li> <li>• <b>Accelerating Residential Energy Efficiency Upgrades with People-First Approaches to Energy Efficiency Program Delivery</b> – Laura Hutchings, Populus LLC</li> <li>• <b>Selling Retrofits Via the Tupperware Model</b> – Marjorie Isaacson, CNT Energy</li> <li>• <b>Vermont Home Energy Challenge</b> – Paul Markowitz, Vermont Energy Investment Corporation</li> <li>• <b>Will You [Complete a Comprehensive Home Energy Upgrade,] My Neighbor?</b> – Joe Van Clock, Research Into Action</li> <li>• <b>Gaining Community Support for Climate Protection Projects</b> – Barry Zalph, Plan Z</li> </ul>
<b>Session 3B Regency F</b>	<p><b><u>STORYTELLING</u></b>  <b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Seeing is Believing: the Science of Successful Visual Communications</b>– Debbie Slobe, Resource Media</li> <li>• <b>The Strategy of Storytelling</b> – Melinda Briana Epler, Change Catalyst</li> <li>• <b>Operators’ Stories about Why Buildings Are Operated As They Are, and Consequences for Creating Change</b> – Mithra Moezzi, Portland State University</li> </ul>
<b>Session 3C Carmel</b>	<p><b><u>NET ZERO BUILDINGS</u></b>  <b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>A Study on Energy Efficient Behaviour Interventions on a Smart Apartment Residents</b> – Natsuko Enomoto, Tokyo Gas Company</li> <li>• <b>Resident Behavior and Zero Net Energy: West Village Case Study</b> – Christine Hammer, Sustainable Design + Behavior</li> <li>• <b>Achieving Zero Net Energy through Transformation of Market Actor Behavior</b> – Jim Leahy, DNV KEMA</li> <li>• <b>Speaking in 3D: Convincing Decision Makers to Go Net Zero</b> – Michael Rovito, Energy and Resource Solutions</li> </ul>
<b>Session 3D Regency D</b>	<p><b><u>FEEDBACK ON COST OF DRIVING – MOVING BEYOND GASOLINE PRICE AS ECONOMIC MOTIVATION OF VEHICLE CHOICE AND DRIVING</u></b>  <b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Scale and Metric Design as Choice Architecture Tools</b> – Adrian Camilleri, Duke University</li> <li>• <b>Challenges Field-testing Usage-based Insurance Incorporating Behavioral Economics Techniques in the U.S.</b> – Allen Greenberg, U.S. DOT/FHWA</li> <li>• <b>An Empirical Study of Vehicular Rebound Effects in Pennsylvania</b> – Alan Jenn, Carnegie Mellon University</li> <li>• <b>Smart Driving Pilots</b> – Ursula Vogler, CA Metropolitan Transportation Commission</li> </ul>
<b>Session 3E Regency E</b>	<p><b><u>FRAMING</u></b>  <b>Moderator: Marsha Walton, NYSERDA</b></p> <ul style="list-style-type: none"> <li>• <b>Behavioral and Social Impacts on HVAC Energy Efficiency: Beyond the End User</b> – Kristin Heinemeier, UC Davis - WCEC</li> <li>• <b>Reconstructing Promises in Energy Efficiency: Building Bridges Between Hero, Learning, and Love Stories</b> – Kathryn Janda, University of Oxford, ECI</li> <li>• <b>How to Engage the Public in Climate Adaptation: A Research-Based Framing and Communications Guide</b> – Cara Pike, The Resource Innovation Group</li> <li>• <b>Health Incentives In Energy Conservation: A Residential Field Experiment</b> – Delmas, UCLA</li> </ul>
<b>Session 3F Big Sur</b>	<p><b><u>ENERGY USE UNCOVERED USING SMART METER DATA</u></b>  <b>Moderator: Kevin Cooney, Navigant Consulting</b></p> <ul style="list-style-type: none"> <li>• <b>Energy Lifestyle Segmentation Using Hourly Electricity Data: Implications for Energy Efficiency and Demand Response Programs</b> – Jungsuk Kwac, Stanford University</li> <li>• <b>Anatomy of a Demonstration Pilot: Smart Grid Appliances Case Study</b> – Jolyn Newton, DNV KEMA</li> <li>• <b>Can We Count on Demand Savings from Residential Behavioral Energy Efficiency Programs? Evidence from PPL’s Opower Program Evaluation Protocols for Behavior-Based Energy Efficiency Programs</b> – James Stewart, The Cadmus Group</li> </ul>

## TUESDAY AFTERNOON, NOVEMBER 19

12:00–  
1:30

**Lunch** (Regency Ballroom)

1:30–  
3:00

**Concurrent Sessions 4**

Session 4A Golden State	<p><b><u>LIGHTNING SESSION: MARKETING</u></b></p> <p><b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Redesigning Bills: Effect of Format on Responses to Electricity Use Information</b> – Casey Canfield, Carnegie Mellon University</li> <li>• <b>Minnesota’s Energy Index: Where all the Homes are Above Average</b> – Jennifer Edwards, Center for Energy and Environment</li> <li>• <b>Nature and Extent of Barriers to Individual and Clusters of Energy Reduction Behaviors</b> – June Flora, Stanford University</li> <li>• <b>The CHARM Home Energy Study: A Comparison of Individual and Social Norms Feedback</b> – Professor Ruth Rettie, Kingston University Business School</li> <li>• <b>Engaging Customers through Smart Meter Portals: It’s Not About the Bar Charts</b> – Bill LeBlanc, E Source</li> <li>• <b>The Social Ground Game: Moving Beyond Marketing and the Individual</b> – Kevin Luten, Behavior Design Works</li> <li>• <b>Using Behavioral Economics to Enhance Dynamic Pricing and Deliver Peak Reduction Results</b> – Justin Segall, Simple Energy</li> <li>• <b>Smart Consumers, Customers, Citizens: Connecting End-Users to the Grid</b> – Pieter Valkering, VITO</li> </ul>
Session 4B Carmel	<p><b><u>HOW WE UNDERSTAND AND FRAME ENERGY AND ENVIRONMENT</u></b></p> <p><b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>How to Make Saving Energy as Fun as Skiing</b> – Beth Hartman, E Source</li> <li>• <b>Assuming Consumer Behavior and Energy Use Across Competing Visions of Smart Grid</b> – Elizabeth Wilson, Humphrey School of Public Affairs</li> <li>• <b>Framing the Consequences of Mitigation: Does Health Matter More than Climate Change?</b> – Lisa Zaval, Columbia University Center for Research on Environmental Decisions</li> </ul>
Session 4C Regency D	<p><b><u>NEW TERRITORY FOR TARGETED PROGRAMS</u></b></p> <p><b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Leveraging Peer Effects: The Effect of Community-based Programs on the Adoption of Solar Panels</b> – Kenneth Gillingham, Yale University</li> <li>• <b>San Leandro: Doin’ it For Themselves – DIY Residential Energy Upgrade for Working Class Communities</b> – Sally Barros, City of San Leandro</li> <li>• <b>Energy for ME – Student-Driven Behavior Change with Real-Time Energy Data</b> – Suzanne MacDonald, Island Institute</li> </ul>
Session 4D Regency F	<p><b><u>INCREASING ENGAGEMENT IN ENERGY PROGRAMS</u></b></p> <p><b>Moderator: Cathy DuBoise, Kent State University</b></p> <ul style="list-style-type: none"> <li>• <b>Using Home Energy Scoring to Motivate Energy Upgrade Actions</b> – Kat Donnelly, MIT PhD Candidate and EMpower Devices</li> <li>• <b>From Eco-Driving to Thermostats: Behaviors Real People Will Adopt</b> – Kathy Kuntz, Cool Choices</li> <li>• <b>The ‘Market for Behavior Change’ in California Households</b> – Loren Lutzenhiser, Portland State University</li> <li>• <b>How Likely Are You to Participate in a Utility Sponsored Energy Efficiency Program?</b> – Sunil Maheshwari, PPL Electric Utilities</li> </ul>
Session 4E Big Sur	<p><b><u>INFLUENCING BEHAVIOR THROUGH PRICING, INFORMATION AND TECHNOLOGIES</u></b></p> <p><b>Moderator: Sharyn Barata, Itron, Inc.</b></p> <ul style="list-style-type: none"> <li>• <b>A Messaging Behavioral Thermostat Customer Trial to Measure Energy Savings and Customer Experience</b> – Lucy Arnot, Pacific Gas &amp; Electric Company</li> <li>• <b>Smart Grid Showdown: Enabling Technologies vs. Dynamic Pricing</b> – Bethany Glinsmann, Navigant Consulting</li> <li>• <b>In-Home Displays: Impact on Customer Behavior</b> – Christine Hungeling, Itron</li> <li>• <b>Strategies for Improving Customer Response to Price Signals</b> – Barb Ryan, EnerNOC Utility Solutions</li> </ul>
Session 4F Regency E	<p><b><u>SELF-REPORTED VS. METERED: UNDERSTANDING ENERGY USE USING DIFFERENT METHODS</u></b></p> <p><b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>I Always/Sometimes/Never Turn That Off: Identifying and Mitigating Common Self-Reporting Errors in Energy Surveys</b> – Amanda Dwelley, Opinion Dynamics</li> <li>• <b>Modelling Energy Saving Actions in Households</b> – Aurore Julien, UCL Energy Institute</li> <li>• <b>Households Activities and Energy Consumption Through Different Lenses: Mixing Surveys, Interviews, Diaries, and Sensors</b> – Mathieu Durand-Daubin, EDF-R&amp;D</li> </ul>
3:00– 3:30	<p><b>Afternoon Break</b></p>

<b>TUESDAY AFTERNOON, NOVEMBER 19</b>	
<b>3:30–5:00</b>	<b>Concurrent Sessions 5</b>
<b>Session 5A Golden State</b>	<p><b><u>LIGHTNING SESSION: PROGRAM DESIGN</u></b> Moderator:</p> <ul style="list-style-type: none"> <li>• <b>Strategies and Motives of Engagement in a DSM Automated Cycling Experiment</b> – Joana Abreu, Fraunhofer CSE</li> <li>• <b>Keep the Change: The Persistence of Behavior Change</b>– Kira Ashby, Consortium for Energy Efficiency</li> <li>• <b>PG&amp;E's 2013-14 Commercial Whole Building Performance Demonstration</b> – Leo Carrillo, Pacific Gas &amp; Electric Company</li> <li>• <b>Lay Theories for Prediction and Program Design</b> – Alexander Davis, Carnegie Mellon University</li> <li>• <b>Designing Behaviour Change Interventions Towards the Transition to Smart(er) Grids. A Portuguese Case Study</b> – Marta Lopes, INESC Coimbra, IPC-ESAC</li> <li>• <b>Peak-Time Reduction at Scale: Motivating Behavior Change in Opt-Out Programs</b> – Tom Mercer, Opower</li> <li>• <b>Information Management and Behavior Change, Building IT and Social Communications Platforms Together</b> – Calla Rose Ostrander, San Francisco Department of Environment</li> <li>• <b>Leaping then Looking: Lessons Learned by the Cambridge Energy Alliance</b> – Mike Sherman, Navigant Consulting</li> <li>• <b>Contractor Selection has Dramatic Impact on the Success of EE Programs</b> – Dan Zasloff, EnergySavvy</li> </ul>
<b>Session 5B Regency D</b>	<p><b><u>REACHING LOW-INCOME HOUSEHOLDS</u></b> Moderator:</p> <ul style="list-style-type: none"> <li>• <b>Does In-Home Energy Education Influence Customer Behavior? A Review of California's Low-Income Energy Efficiency Programs</b> – Valerie Richardson, DNV KEMA</li> <li>• <b>Reaching Low Income Households</b> – Sam Starks, MLK 365</li> </ul>
<b>Session 5C Regency F</b>	<p><b><u>LARGE UTILITY APPROACHES TO CHANGING BEHAVIOR IN HOMES AND BUSINESSES</u></b> Moderator: <b>Edward Vine, Lawrence Berkeley National Laboratory</b></p> <ul style="list-style-type: none"> <li>• <b>Home Inventories Identifies Savings Drivers from Home Energy Reports</b> – Brian Arthur Smith, Pacific Gas &amp; Electric Company</li> <li>• <b>From Data to Customer Insight – New Tools for Enhancing the Utility-Customer Relationship</b> – Janice Berman, Pacific Gas &amp; Electric Company</li> <li>• <b>PG&amp;E Business Energy Reports: What Is It and How Does It Work?</b> – Michael Seelig, Pacific Gas &amp; Electric Company</li> <li>• <b>The Role of Behavioral Approaches in an Investor Owned Utility Customer Experience</b> – Ted Reguly, Sempra Utilities</li> </ul>
<b>Session 5D Big Sur</b>	<p><b><u>MAKING PEV WORK FOR MORE PEOPLE</u></b> Moderator:</p> <ul style="list-style-type: none"> <li>• <b>“Utility Controlled Charging” of Plug-In Electric Vehicles: Will Car Buyers Allow It?</b> – Joseph Bailey, Simon Fraser University</li> <li>• <b>Do You Mind if I Plug in My Car? How Etiquette Shapes PEV Drivers' Vehicle Charging Behavior</b> – Nicolette Caperello, UC Davis</li> <li>• <b>SMUD EV Innovators Pilot</b> – Lupe Jimenez Strickland, Sacramento Municipal Utility District</li> <li>• <b>California's Evolving PEV Market</b> – Timothy Treadwell, California Center for Sustainable Energy</li> </ul>
<b>Session 5E Regency E</b>	<p><b><u>MARKETING STRATEGIES FOR PROGRAM DESIGN</u></b> Moderator:</p> <ul style="list-style-type: none"> <li>• <b>Feeding a Community Through Fridge Recycling</b> – Susan Jamison, Energy Trust of Oregon</li> <li>• <b>SMUD's SmartPricing Options Pilot- Recruitment, Implementation, and Retention</b> – Jennifer Potter, Sacramento Municipal Utility District</li> <li>• <b>Raising the Bar on Customer Experience – Increased Engagement Through Multi-Channel Marketing</b> – Steven Propper, Pacific Gas &amp; Electric Company</li> <li>• <b>Signing Up Customers for Renewable Energy: Insights on What Works</b> – Rachael Terada, Center for Resource Solutions</li> </ul>
<b>Session 5F Carmel</b>	<p><b><u>THE HOLY GRAIL OR SMART METER DATA – UNDERSTANDING WHAT IS GOING ON INSIDE HOMES TO TARGET CUSTOMER ENGAGEMENT</u></b> Moderator: <b>Ram Rajagopal, Stanford University</b></p> <ul style="list-style-type: none"> <li>• <b>Big Data and its Big Potential: Exploring Opportunity at the Intersection of the Smart Grid and Human Behavior</b> – Anne Dougherty, Opinion Dynamics</li> <li>• <b>On Structure in Residential Energy Consumption Patterns</b> – Adrian Albert, Stanford University</li> <li>• <b>Impact of Disaggregated Energy Consumption Insights on Consumer Behavior</b> – Prateek Chakravarty, Bidgely</li> <li>• <b>The Analysis of Energy Consumption for Building Operations Through the Integration of Data from Multiple Sources in Los Angeles County</b> – Giovanni Circella, University of California, Davis</li> </ul>
<b>5:15–6:30</b>	<p><b>Film Festival (Regency A, B &amp; C)</b> Bill LeBlanc, Senior Advisor, E Source</p> <p style="text-align: right;">Sponsor: <b>Navigant</b></p>
<b>7:30–9:30</b>	<p><b>PARTICIPANT ORGANIZED SESSIONS</b> (check bulletin board by registration desk for rooms)</p>

WEDNESDAY MORNING, NOVEMBER 20	
7:30– 8:30	Continental Breakfast & Registration
8:30– 10:00	Concurrent Sessions 6
Session 6A Regency A	<p><b><u>LIGHTNING SESSION: TECHNOLOGY &amp; BEHAVIOR</u></b>  <b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Achieving Deep Savings by integrating Feedback/Behavior-Based Programs into DSM Portfolios</b> – Ali Bozorgi, ICF International</li> <li>• <b>How People Actually Use (Smart) Thermostats</b> – Seth Frader-Thompson, EnergyHub</li> <li>• <b>Interim Results from SMUD’s Time Variant Pricing Experiment</b> – Stephen George, Freeman, Sullivan &amp; Co.</li> <li>• <b>SMUD IHD Checkout Pilot</b> – Lupe Jimenez, Sacramento Municipal Utility District</li> <li>• <b>Graphical Displays in Eco-Feedback: A Cognitive Approach</b> – Beth Karlin, University of California, Irvine</li> <li>• <b>Nest Learning Thermostat’s Summer 2013 Trial Results</b> – Yoky Matsuoka, Nest Labs</li> <li>• <b>Engaging Building Occupants for Increased Savings</b> – Nicole O’Connor, Energy Outreach Colorado</li> <li>• <b>Why People Participate in Feedback Programs (Or Don’t Participate)</b> – Jennifer Robinson, EPRI</li> <li>• <b>The Use of Rewards to Drive Behavior Change</b> – Bud Vos, Simple Energy</li> <li>• <b>What Features Make In-Home Energy Displays Useful to Occupants?</b> – Tai Stillwater, UC Davis</li> <li>• <b>Real-Time Resource Consumption Feedback: Evidence from 45,000 Showers</b> – Verena Tiefenbeck, ETH Zurich</li> <li>• <b>Improving Programmable Thermostat Usage With Less Aggressive Default Setbacks</b> – Bryan Urban, Fraunhofer Center for Sustainable Energy Systems</li> </ul>
Session 6B Regency B	<p><b><u>INSIGHTS INTO COMMUNICATION</u></b>  <b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Connecting the Dots Between Social Activation and Behavior Change</b> – Cynthia Jolicoeur, Marketing Drive</li> <li>• <b>Think Like an EcoSystem: Cognition + Affect = Effect</b> – Marda Kirn, EcoArts Connections</li> <li>• <b>The Chill of the Moment: Teachable Moments and Climate Change</b> – Daniel Schwartz, Carnegie Mellon University</li> </ul>
Session 6C Regency C	<p><b><u>ORGANIZATIONAL CHANGE MANAGEMENT</u></b>  <b>Moderator: Margaret Taylor, Precourt Energy Efficiency Center, Stanford University</b></p> <ul style="list-style-type: none"> <li>• <b>Change Leadership for Energy Efficiency – Reconsidering the Role of Policy Makers and Practitioners</b> – Patrick Crittenden, University of Technology, Sydney</li> <li>• <b>Addressing Group Influence in Organizational Energy Research</b> – Mary Beth Deline, Cornell University</li> <li>• <b>Selection and Use of Energy Efficient Opportunities vs. Customer Purchasing Behaviour: A Case Study on Argentinean Supply Chains Using Dynamic Alignment Models</b> – Alejandra Efron, BrAle Consulting</li> <li>• <b>From Code-Minimum Mentality to Performance Standards</b> – Duane Jonlin, City of Seattle</li> </ul>
Session 6D Regency D	<p><b><u>WHAT’S WORKING IN COMMUNITY PROGRAMS?</u></b>  <b>Moderator: Kathy Kuntz, Cool Choices</b></p> <ul style="list-style-type: none"> <li>• <b>Energy Concierge and Better Buildings Programs – What’s Working?</b> – Megan Chu, Skumatz Economic Research Associates</li> <li>• <b>Social Networks and Household Energy Efficiency</b> – Megan McMichael, University College London (UCL Energy Institute)</li> <li>• <b>Persistence of Energy Efficiency Behaviors Over Time: Evidence from a Community-Based Program</b> – Donna Whitsett, Energy Market Innovations, Inc.</li> </ul>
Session 6E Regency E	<p><b><u>BEST PRACTICES IN PROGRAM DESIGN</u></b>  <b>Moderator: Kira Ashby, Consortium for Energy Efficiency</b></p> <ul style="list-style-type: none"> <li>• <b>Translating Theories into Interventions</b> – Jane Peters, Research Into Action</li> <li>• <b>Task 24: A Global Project Aiming to Turn Behaviour Change Theory Into Practice</b> – Sea Rotmann, SEA - Sustainable Energy Advice</li> <li>• <b>Expand Your Thinking: A Design Strategy for Behavior Change Programs</b> – Linda Dethman, Cadmus</li> <li>• <b>What is Needed to Build an Expanded Toolbox for Behavior Change</b> – Mersiha McClaren, Research Into Action</li> <li>•</li> </ul>
Session 6F Regency F	<p><b><u>BEHAVIORAL ECONOMICS</u></b>  <b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Information Strategies and Energy Conservation Behavior: A Meta-Analysis of Experimental Studies from 1975-2011</b> – Magali Delmas, UCLA</li> <li>• <b>Understanding Tradeoffs in Critical Peak Pricing Rate Design</b> – Robert Letzler, Bureau of Economics, Federal Trade Commission</li> <li>• <b>Encouraging Participation in a Free Energy Efficiency Program</b> – Catherine Wolfram, UC Berkeley</li> <li>• <b>Commercial Building Electricity Consumption Dynamics: The Role of Structure Quality, Human Capital, and Contract Incentives</b> – Matthew Kahn, UCLA</li> </ul>

10:00–10:30	<b>Morning Break</b>
10:30–12:00	<b>Concurrent Sessions 7</b>
Session 7A Regency A	<p><b><u>LIGHTNING SESSION: SCHOOLS</u></b></p> <p><b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Change Management in Schools: Engaging Staff before Students</b> – Ann Arney, CLASS 5 Energy</li> <li>• <b>Students Foster Behavior Change: University Green Office Certification</b> – Jo Tiffany, Alliance to Save Energy</li> <li>• <b>Behavior Change and Energy Reeducation in the Higher Education Sector</b> – Stephen Bell, Illinois Green Economy Network</li> <li>• <b>UTSA's SmartLiving Campus: A Real-Time Approach to America's Future</b> – Juan Gomez, University of Texas at San Antonio, Texas Sustainable Energy Research Institute</li> <li>• <b>Engaging Schools on Energy and Climate: Lessons from the Make an Impact Program</b> – Katie Mandes, Center for Climate and Energy Solutions</li> <li>• <b>Quantifying Behavior Change: The myPower Project</b> – Lisa McNeilly, University of California, Berkeley</li> <li>• <b>Value of Occupant Outreach: Design and Evaluation of a Dorm Energy Efficiency Program</b> – Dallase Scott, GreenerU</li> <li>• <b>Energy Management Impact Assessment: A Comprehensive Whole-Campus Approach</b> – John Silkey, Milepost Consulting</li> </ul>
Session 7B Regency B	<p><b><u>GAME, COMPETITIONS &amp; SOCIAL INFLUENCE</u></b></p> <p><b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Harnessing the Power of Social Marketing to Fuel the Next Frontier in Recycling: Food Scrap Diversion</b> – Dawn Bement, Skumatz Economic Research Associates Inc.</li> <li>• <b>From Participants to Kilowatt-Hours: An Impact Evaluation of a Game</b> – Ingo Bensch, Energy Center of Wisconsin</li> <li>• <b>Competitions for Change: A Recipe for Energy Use Reduction and Team Building</b> – Matt Klosinski, Milepost Consulting</li> <li>• <b>Fostering Peer Interaction to Save Energy</b> – Ankur Mani, Massachusetts Institute of Technology</li> </ul>
Session 7C Regency C	<p><b><u>STRATEGIC ENERGY MANAGEMENT IN BUSINESSES</u></b></p> <p><b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Early Adapters: Results of a Pilot to Engage Small Businesses in Climate Action</b> – Tom Bowman, Bowman Global Change</li> <li>• <b>Uncovering Energy Management Practices that Matter</b> – Robert Graebert, Stanford University</li> <li>• <b>Manufacturers are People Too: Behavior Change Takes Industrial Savings to the Next Level</b> – Richard Hart, EnerNOC</li> <li>• <b>Adoption of Energy Efficient Technologies: The Role of Management's Behavior</b> – Manuel Hertel, Science Centre Straubing/Germany</li> </ul>
Session 7D Regency D	<p><b><u>PROGRAM DESIGN IN MESSY SITUATIONS</u></b></p> <p><b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Beyond Buildings: Adding Behavior Modification to Whole-House Upgrades</b> – Scott Fable, BKI</li> <li>• <b>SusLabNWE: Integrating Qualitative and Quantitative Data to Understand People's Everyday Energy Behavior</b> – Dan Lockton, Royal College of Art, Helen Hamlyn Centre for Design</li> <li>• <b>A Comparison of Innovation Methodologies for Upstream and Downstream Behaviour Change Initiatives</b> – Banny Banerjee, Stanford University</li> </ul>
Session 7E Regency E	<p><b><u>ACHIEVING PERSISTENCE</u></b></p> <p><b>Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Estimating Measure Life from Behavioral Programs: What We Know, What We Need to Know, and How it Challenges our Current Thinking</b> – Hannah Arnold, Opinion Dynamics</li> <li>• <b>Net Nits: Myths, Risks, and Rational Thinking for Assessing Net Impacts</b> – Mimi Goldberg, DNV KEMA</li> <li>• <b>Strategic Energy Management: A Portfolio Approach</b> – Virginia Ulrich, Ecova</li> </ul>
Session 7F Regency F	<p><b><u>BIG DATA – SMARTER METERS – BUILDINGS</u></b></p> <p><b>Moderator: David Hungerford, California Energy Commission</b></p> <ul style="list-style-type: none"> <li>• <b>Promoting Energy-Efficient Behaviors Through Energy Benchmarking Ordinances</b> – Nicole Ballinger, City of Seattle - Office of Sustainability &amp; Environment</li> <li>• <b>Smart Rebates: Targeting High-Value Energy Efficiency Improvements with Smart-Meter Data</b> – Russell Meyer, Carnegie Mellon University</li> <li>• <b>Increasing the Energy Productivity of the Grid with Cloud Services and Big Data</b> – Sandra Kwak, AutoGrid</li> <li>• <b>Big Data: The Human Perspective</b> – Ellen Steiner, Energy Market Innovations</li> </ul>
	<b>POST-CONFERENCE WORKSHOPS</b>



## ACKNOWLEDGEMENTS

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