

**PANEL 12 SESSION SCHEDULE**

**(FINAL)**

PANEL 12 - Smart Buildings, Smart Grid, and the Internet of Things			
		LEAD AUTHOR/ORGANIZATION	TITLE
Mon 8/13	Session 1 8:30 am - 10:00 am <b>The Internet of Things</b>	Wesley Whited, DNV GL	<i>IoT for Everyone</i>
		Tom Fisher, Vermont Energy Investment Corporation	<i>Sub-metering IoT: The Future was Yesterday</i>
		Barry Coflan, Schneider Electric	<i>The Wonders of AI: Even in Your HVAC!</i>
	Session 2 10:30 pm - 12:00 pm <b>HEM(ming) (Not Hawing) - Smart Home Controls</b>	Bethany Sparn, National Renewable Energy Laboratory	<i>Laboratory Resources and Techniques to Evaluate Smart Home Technology</i>
		Katherine Cort, Pacific Northwest National Laboratory	<i>Completing the Connected Home with Smart Window Shades</i>
		Eric Martin, Florida Solar Energy Center	<i>Energy Savings and Comfort Enhancement Potential of Smart Ventilation Control</i>
Tues 8/14	Session 1 8:30 am - 10:00 am <b>Failure is Not Always an Option - FDD and Optimization</b>	Cameron Roach, Buildings Alive, Ltd.	<i>Exploring Unusual Sensor Behaviour in Buildings Using BMS Data and Unsupervised Learning Techniques</i>
		Siliang Lu, Carnegie Mellon University	<i>Simulations of Dynamic Ventilation Operations with Real-Time Occupancy Estimation</i>
		Abinesh Selvacanabady, Pacific Northwest National Laboratory	<i>Advanced Data Analytics for Improved Control of Building Energy Systems</i>
	Session 2 10:30 pm - 12:00 pm <b>Trustworthy Transactions - Data Security and Verification</b>	Rois Langner, National Renewable Energy Laboratory	<i>Navigating Cyber Security Implications of Smart Outlets</i>
		Leopoldo Molina, CENDES	<i>Blockchain for Climate Change Mitigation through Effective and Distributed Energy Efficiency Actions</i>
		Dylan Cutler, National Renewable Energy Laboratory	<i>A Demonstration of Blockchain-based Energy Transactions between Laboratory Test Homes</i>

**PANEL 12 SESSION SCHEDULE**  
**(FINAL)**

		LEAD AUTHOR/ORGANIZATION	TITLE
Wed 8/15	Session 1 8:30 am - 10:00 am <b>Go Big or Go Home - Large Scale Modeling</b>	David Pudleiner, ICF	<i>A Customizable Framework for Large Scale Portfolio Analysis through Cloud-based Building Energy Modeling</i>
		Peter Alstone, Humboldt State University	<i>Integrating Demand Response and Distributed Resources in Renewable Energy Integration</i>
		Hao Huang, Buildings Alive, Ltd.	<i>Predicting Peak Energy Demand in Commercial Buildings under Extreme Conditions: By How Much Can We Improve Accuracy?</i>
	Session 2 10:30 pm - 12:00 pm <b>Data to Deeds - Operationalizing Analytics</b>	Hannah Kramer, Lawrence Berkeley National Laboratory	<i>Moving Beyond Data Paralysis to Effective Use of Analytics</i>
		Jim Kelsey, kW Engineering	<i>Bringing Big Data Analytics to Retro-commission the Corner Grocery Store</i>
Thurs 8/16	Session 1 8:30 am - 10:00 am <b>Connectivity: Adding Value through Controls and Data Analytics</b>	Ethan Goldman, Vermont Energy Investment Corporation	<i>Free X-Ray Specs—Just Send in Your Smart Thermostat Data for an Automated Peek inside Your Home’s Envelope!</i>
		Michael Zeifman, Fraunhofer Center for Sustainable Energy Systems	<i>Residential Retrofits at Scale: Opportunity Identification, Saving Estimation and Personalized Messaging Based on Communicating Thermostat Data</i>
		Brian Gerke, Lawrence Berkeley National Laboratory	<i>Driving Adoption of Demand-Responsive Commercial Lighting with a Clarified Value Proposition: Site Level Energy Savings and Cost-benefit Analysis</i>
	Session 2 10:30 pm - 12:00 pm <b>Efficiency Efficiently</b>	Chris Perry, ACEEE	<i>Smart Building Strawman: Leveraging Data to Overcome Energy Savings Skepticism</i>
		Marty Davey, New Ecology, Inc.	<i>BEMS on a Budget: Energy Savings with Low-cost, Cloud-based Monitoring Systems in Affordable Housing</i>
		Kristin Field-Macumber, National Renewable Energy Lab.	<i>BuildingSync in Action: Example Implementations</i>

**PANEL 12 SESSION SCHEDULE**  
**(FINAL)**

		LEAD AUTHOR/ORGANIZATION	TITLE
<b>Fri 8/17</b>	<b>Session 1</b> 8:30 am - 10:00 am <b>Using Data to Get from Here to There</b>	Marina Sofos, U.S. Department of Energy	<i>Laying Down the Foundation: An R&amp;D Roadmap for Energy Savings from Smart Building Technologies</i>
		John Elliott, Lawrence Berkeley National Laboratory	<i>Towards a Scalable Model for Smart Buildings</i>
		David Blum, Lawrence Berkeley National Laboratory	<i>When Data Analytics Meet Site Operation: Benefits and Challenges</i>
	<b>Session 2</b> 10:30 pm - 12:00 pm <b>Controls Potpourri for 100, Alex</b>	Martin Prado, Electric Power Research Institute	<i>Integrating Connected Loads to Provide Grid Balancing and Distribution Support</i>
		Joshua Rasin, Sacramento Municipal Utility District	<i>Demonstration of Electric Resistance Water Heater Controller to Support Flexible Demand Response</i>
		Kelly Sanders, Energy Solutions	<i>Driving Adoption of Demand-Responsive Commercial Lighting with a Clarified Value Proposition: Non-Energy Benefits Framework</i>