



HIGHLIGHTS FROM RECENT ENERGY EFFICIENCY CONFERENCES

October 16, 2018

Presented by Jeremy Kraft



AGENDA

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Overview

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ACEEE Summer Study

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AESP Summer Conference

4

BECC Annual Conference

Objective: Share key learnings from industry with the MPSC and the EWR Collaborative

OVERVIEW

Strategic Energy Management

Apply tested approaches in new environments.

Pay for Performance/NMEC

Use AMI data and advanced analytics to incent different types of program designs.

Beneficial Electrification

Switch focus from kWh reduction to cost-effective GHG reductions

Equity

New methods for designing DSM programs that reach all customer segments

ACEEE SUMMER STUDY

August 13 - 17 in Pacific Grove, California

- An advocacy group focused on advancing energy efficiency policies, programs, technologies, investments, and behaviors.
- Summer Study focused on energy efficiency buildings (separate conferences look at industry and transportation).
- Consumers Energy and DTE Energy both presented papers.
- Papers online here:
<https://aceee.org/files/proceedings/2018/>



ACEEE SUMMER STUDY

Applying Strategic Energy Management to Multifamily – Julie Hayes at Milepost Consulting & Clint Stewart at Puget Sound Energy



TAKEAWAY

Strategic Energy Management has the potential to be effective in other settings outside of large commercial buildings.

- Similar challenges in MF properties as in commercial buildings – facility managers are driven by tenant comfort vs. energy savings. Also, a split incentive between owners and tenants.
- Apply SEM principles (cohort training, O&M toolkits, education for residents, benchmarking) to MF properties.
- 15 participants (between 124 and 470 units) in PSE service territory
- 1.82% electric savings – lower than expected (goal was 5%).
- High staff turn-over impacted delivery.

ACEEE SUMMER STUDY

Leveraging HER Analytics: Data Driven Approaches to Informing Program Redesign by Understanding Participant Performance. Guillaume Calas and Kimberly Conley, PG&E, Stefanie Wayland and Olivia Patterson, Opinion Dynamics



TAKEAWAY

“Big Data” has the potential to reveal targetable groups in HER programs to improve an already effective program.

- PG&E has implemented a Home Energy Report program for seven years and evaluations have consistently shown electric and natural gas savings.
- PG&E conducted a study to develop and understand different HER customer segments to inform future program designs that will increase cost-effectiveness and maximize program savings.
- Key characteristics included:
 - Realized energy savings
 - Overall energy consumption
 - Participation in different rate designs (e.g., NEM, TOU, EV)

ACEEE SUMMER STUDY

Looking Towards Future Integration of Energy Efficiency, Clean Energy, and Strategic Electrification. Samantha Caputo and David Lis, Northeast Energy Efficiency Partnerships



TAKEAWAY

Integration of energy efficiency, energy storage, electric vehicles, and renewables may provide an attractive path for overall energy management but not cost-effective yet.

- Electrification focuses on long-term greenhouse gas emission reductions targets found in many states and jurisdictions.
- Strategies including the electrification of transportation and the built environment.
- **Pros:** Core component to achieving significant carbon reductions (alongside energy efficiency and clean energy generation)
 - “Currently, space and water heating, industry process heat and steam, and on-road vehicles account for 85 percent of direct fossil fuel use in the Northeast (Synapse and Meister 2017).”
- **Cons:** Not cost-effective under current policies for many applications.

ACEEE SUMMER STUDY

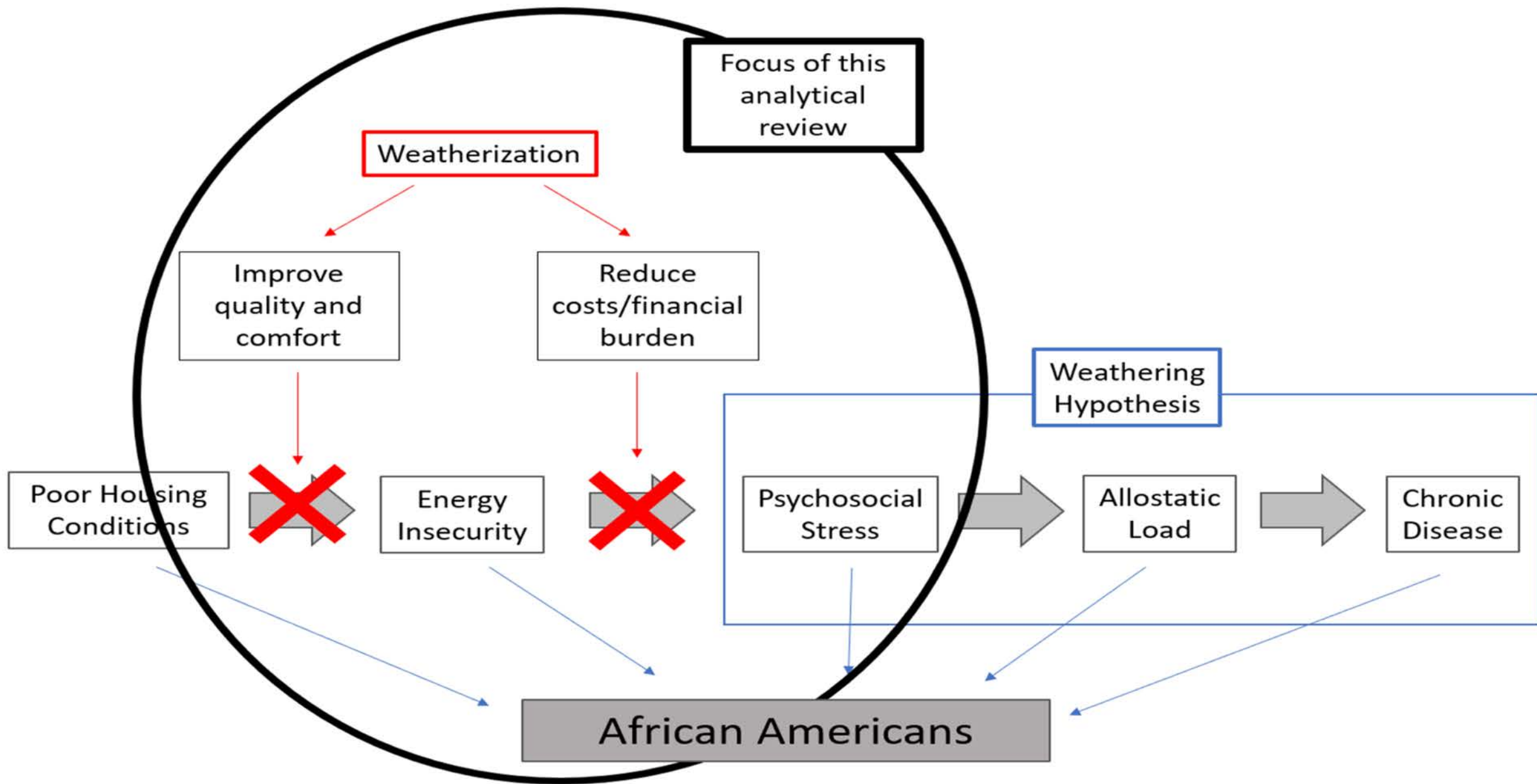
“De-weathering” through Weatherization - Jamal Lewis, MPH(c) and Diana Hernández, PhD, Columbia University



TAKEAWAY

Social justice is a potential non-energy benefit of weatherization programs.

- Inefficient homes leads to increased psychosocial stress
- “Weatherization... could act as an intervention point to reduce the disproportionate stress affecting low-income individuals and ultimately improve health and social outcomes among African Americans in the US.”
- Energy insecurity can deplete the psychosocial reserve capacity through the lack of situational control, limited social support and bundled hardships.
- Non-energy benefits in low-income programs are currently part of Michigan policy as a result of these programs not being subject to traditional cost-benefit tests.
- The MPSC-sponsored Low-Income Workgroup is currently exploring similar topics.




AESP SUMMER CONFERENCE

August 21 - 23 in Indianapolis, Indiana


- A member-based association dedicated to improving the delivery and implementation of energy efficiency, demand-side management and demand response programs.
- Summer conference focus on the intersection of implementation and evaluation
- Amy Glapinski from Consumers Energy part of a panel re: new ways of engaging customers in energy efficiency programs


AUGUST 21-23 | INDIANAPOLIS
2018 SUMMER CONFERENCE AND EXPO
FEATURING ENERGY EFFICIENCY'S


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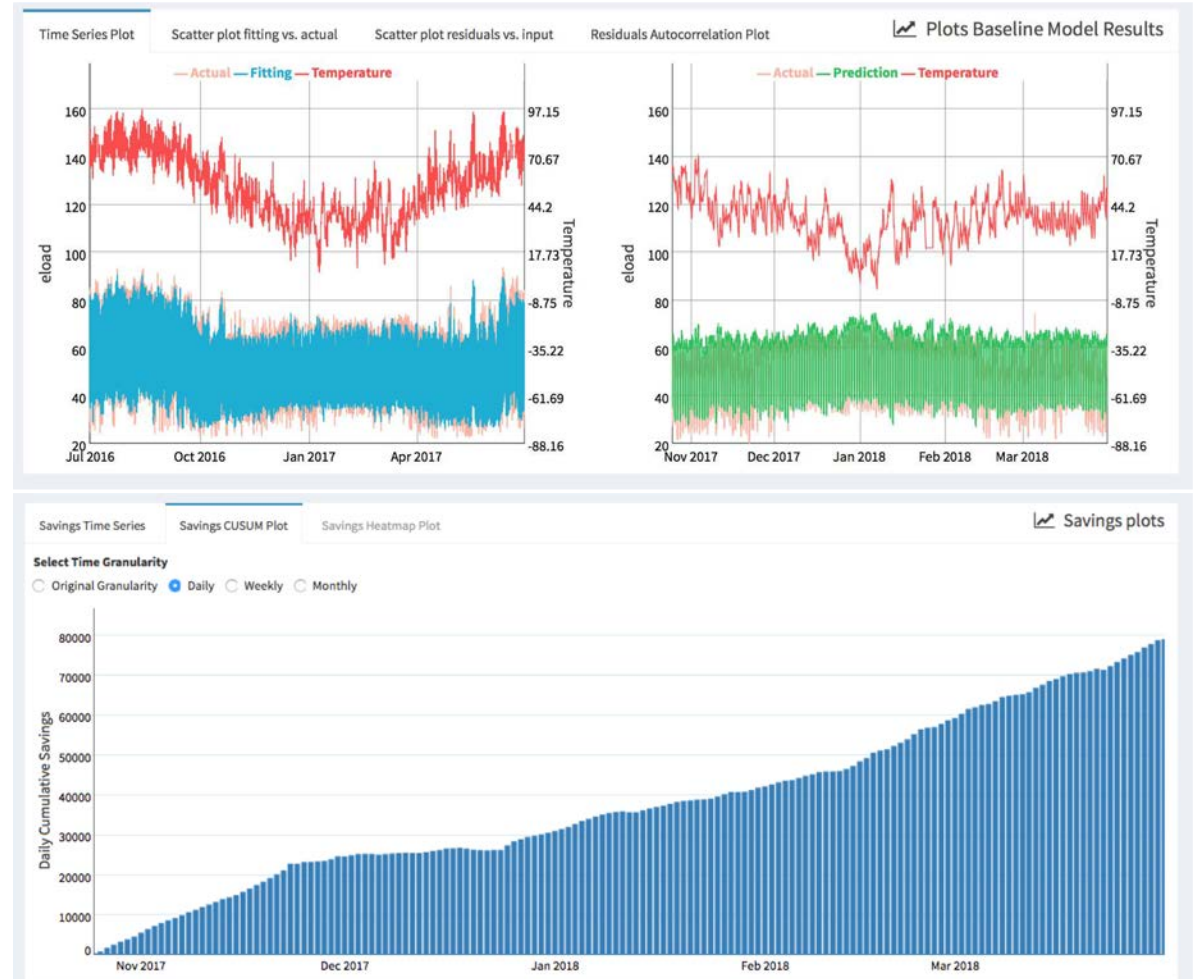
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AESP SUMMER CONFERENCE

Promises, Promises - Is M&V 2.0 Ready to Deliver?! – Eliot Crowe from LBNL

Like a “Robo-Suit,” can Auto-M&V Tools and Methods Augment Traditional EM&V? – Jeremy Eddy from ODC

- Is M&V 2.0 ready to deliver?
- M&V 2.0 is the use of large datasets and automated analysis to assess the performance of energy efficiency projects on a continuous basis
- LBNL is developing a tool that incorporates data from 600 buildings to test various M&V 2.0 tools.
- Important – M&V 2.0 doesn't demonstrate a causation.



AESP SUMMER CONFERENCE

Taking a Capacity-Building Approach to Influencing New Construction in the Affordable Housing Sector – Corrie Morton from Enbridge Gas

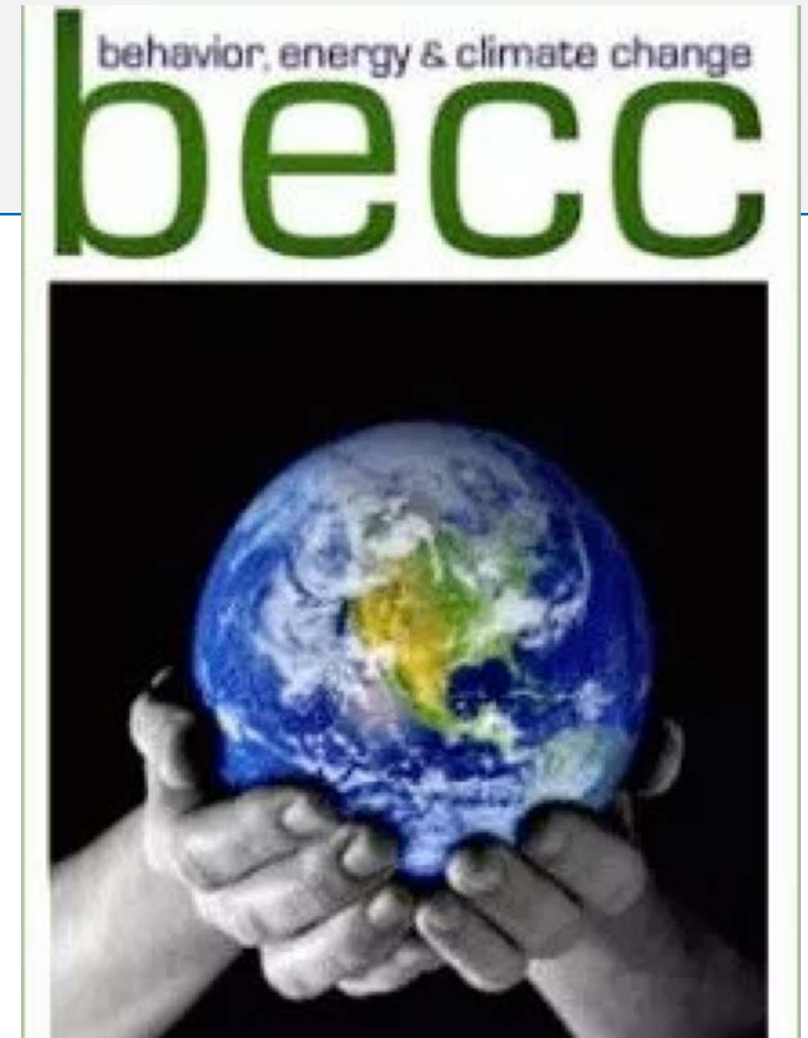
- A holistic approach to incorporating energy efficiency into low income multifamily housing
- Focused on “getting people in the room” – site review, plan review, design charrettes,
- Uses post-construction commissioning to determine incentives
- Includes a “welcome home” kit for tenants upon move-in.
- Program website: <http://energy-savings-programs.ca/new-construction-program/>



BECC ANNUAL CONFERENCE

October 8 – 10 in Washington D.C.

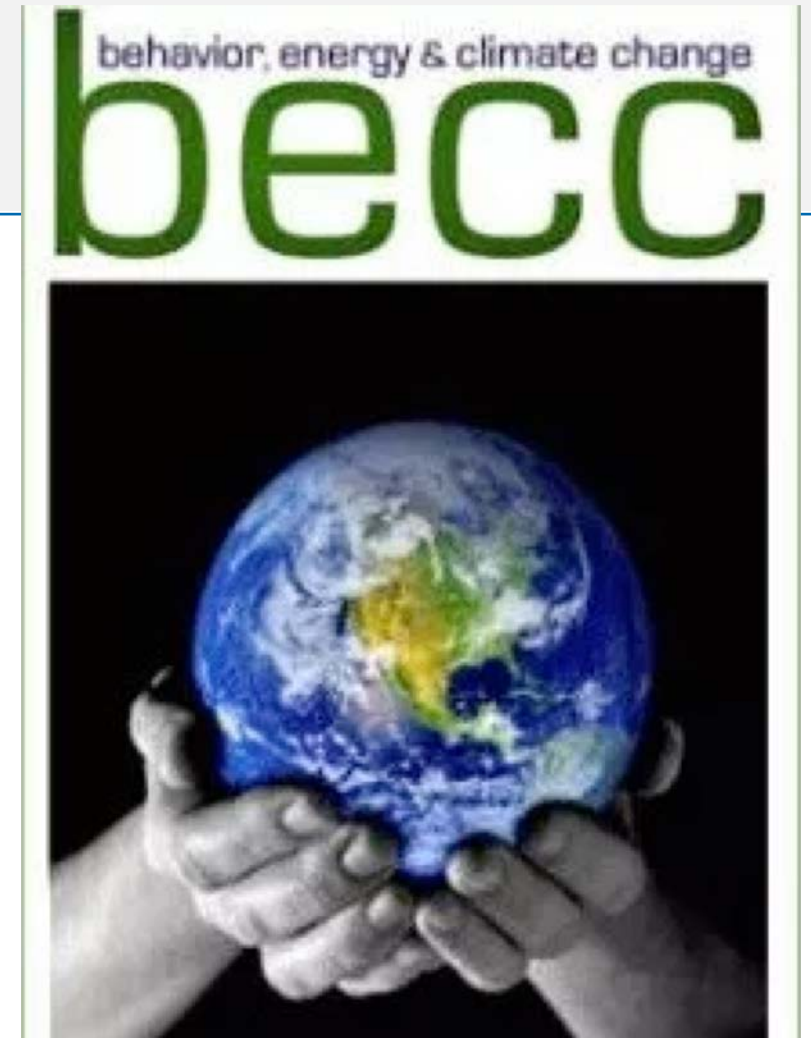
- Focused on understanding individual and organizational behavior and decision-making related to energy usage, greenhouse gas emissions, climate change, and sustainability
- Organized by California Institute for Energy and the Environment and ACEEE
- Presenters from MSU, U of M, and former Michigan Governor, Jennifer Granholm
- How do we use what we know about human behavior to achieve energy savings?



BECC ANNUAL CONFERENCE

October 8 – 10 in Washington D.C.

- Panels included:
 - Varied Approaches to Engaging Customers
 - Energy in Households: Dynamics, Roles, Action!
 - Time Varying Pricing and Effects on Customers
 - Stimulating Behavior Change in Homes and Neighborhoods
 - Hard to Reach and Hard to Change: Examples of Behavior Change Success
- Proceedings here:
<https://intelliquestmedia.com/store/events/2018-becc>



thank you

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