



behavior, energy & climate change
becc

2012

Post-conference webinar
January 10, 2013

Housekeeping

- 1) If you are on the phone, please take a moment to mute your end of the line.
- 2) and please save all questions until the end, and then we will take them via the chat box.
- 3) This presentation will be recorded and slides and audio made available on the ACEEE website. It may take a few days, so we ask for your patience!

Introductions

The BECC Conference is convened by the Precourt Energy Efficiency Center ([PEEC](#)), Stanford University, American Council for an Energy-Efficient Economy ([ACEEE](#)), and the California Institute for Energy and Environment ([CIEE](#)), the University of California.

The Co-Chairs for 2012 were Chris Jones (CIEE), Frances Sprei (PEEC), and Susan Mazur-Stommen (ACEEE). For 2013, Margaret Taylor will take over for Precourt.

Today's post-conference webinar is being brought to you by the Behavior and Human Dimensions staff at ACEEE, Susan Mazur-Stommen and Michelle Vigen.

Behavior, energy, climate change

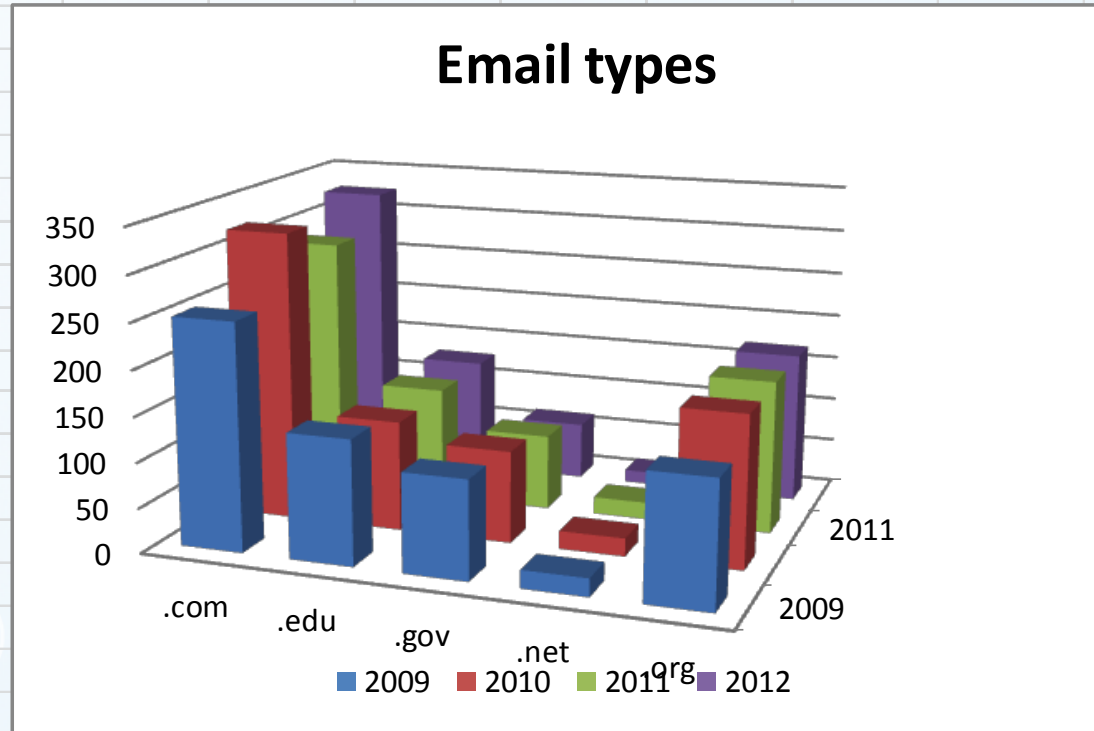
Goal: We want to change people's behavior in the realms of energy usage, carbon emissions, climate change, and sustainability.

Purpose of BECC: Since 2007, we have been working to bring together folks from various fields and worldviews to discuss how best to achieve this.

The **intent** of this post-conference webinar is to bring some of this thinking to folks who may have missed the opportunity to be there in person.

BECC by the Numbers: Who Attends?

169



Goals for BECC 2012

In last year's post-conference webinar, we discussed moving towards a systems approach in terms of the organization of the conference itself, as well as the content on offer.

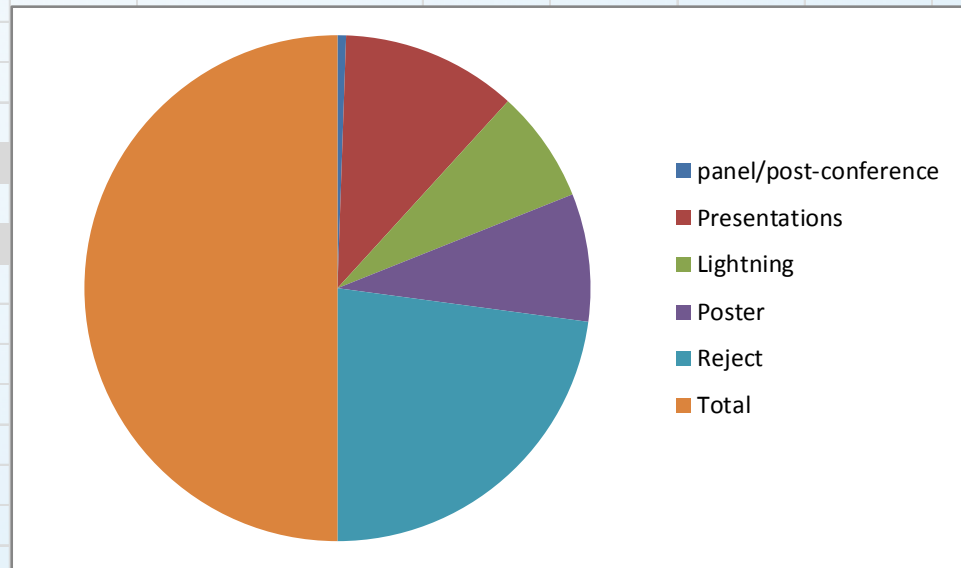
This meant:

- “heaps” of information → “whole” interventions
- multiple methods & levels of intervention
- cross-disciplinary metrics and language

So how did we do?

BECC by the Numbers: Abstracts

Types	number	percent
panel/post-conference	5	1%
Presentations	103	22%
Lightning	66	14%
Poster	75	16%
Reject	210	46%
Total	459	100%



Topic Areas

- Policy and Procedures
- Natural and Built Environments
- Social and Behavioral Sciences
- Methods and Models
- Media and Technology
- Institutions and Organizations
- Management and Decision-Making

Return to 'Artisanal'

The Co-Chairs focused on broadening the content offerings and included invited panels on healthcare, faith, neurology, political messaging, and the media.

- There was also a stronger focus on transportation, though the feedback we got was MOAR!
- We also pushed back on solely focusing on residential and cut 45% of abstracts in that area.

Putting the Climate Change back in BECC

As with the emphasis on residential consumers, sometimes BECC can focus too singularly on energy efficiency.

This year we had a strong set of Climate Change panels, including:

- *How Different Understanding of Climate Change Affects Policy and Communication*
- *Cooperation, Collective Action, and Climate Change Ethics*
- *Engaging Faith-Based groups in Climate Action*

In addition, there were presentations within more mixed panels, such as David Lehrer's widely praised presentation, *Using Segmentation Strategies to Create Targeted Climate Change Messaging for Office Workers*.

There was a spotlight on *Conservative Thinking on Energy and Climate*.

Finally, our keynote was focused on Climate Change Messaging.

Keynote: Culture, Ideology and a Social Consensus on Climate Change

Andrew Hoffman is Director of the Erb Institute and also the Holcim Professor of Sustainable Enterprise at the Ross School of Business, University of Michigan

- He studies the development, evolution, and influence of organizational fields – networks with broader regulative, normative, and cognitive influence.
- These are domains of debate involving a complex set of constituents over how to understand socially accepted notions of reality.

Professor Hoffman's research uses a sociological perspective to understand the cultural and institutional aspects of environmental issues for organizations. In particular, he focuses on the processes by which environmental issues both emerge and evolve as social, political, and managerial issues.

He has written extensively about the evolving nature of *field level pressures* related to environmental issues and the corporate responses that have emerged as a result of those pressures.

“So, for example, when the BP oil spill happens, how do we make sense of it? A set of constituents (oil companies, fisherman, environmentalists, think tanks, politicians) within the field define it on multiple terms – environmental, economic, technical, policy. The resultant definition comes to dominate our collective interpretation of that event – as an economic issues centered around jobs; the environmental aspects of the issues never really caught hold.”

Andrew Hoffman

Climate Change as a Cultural Issue

- **IS NOT** a pollution issue.
 - CO2 is a ubiquitous part of our existing biological, social, and economic reality.
 - We live in a fossil fuel based world.
- **IS** an existential challenge to our worldviews.
 - Think of a formerly benign, even beneficial, material in a new way; as a hazard.
 - Think of the global ecosystem and our place within it on different terms.
 - Consider how and whether we cooperate and organize a global response to this global problem.

(From his presentation available on BECC website)

Keynote Set the Yone

Some of the most highly regarded panels and spotlights continued the thread on messaging appropriately to your audience, particularly including conservative voices in the mix.

Others focused on creative ways to get at that messaging, including storytelling and understanding how the brain REALLY makes decisions.

Michelle's Picks: Conservative Spotlight

This Spotlight included presentations on conservative values that allow conservatives to really own the energy issue, and ways to engage today's evolving Republican party.

- Connie Roser-Renouf presented survey data demonstrating a growing divide on climate change issues.

Political polarization has widened with Republican affiliates' "belief that the effects of global warming have already begun" dropping to an all-time low of 29% (compared with the near 70% of Democrats).

- Drexel Kleber talked about the present energy system and how it challenges Republican values of independence and choice, of a free market, and deregulation.
- Alex Bozmoski shared how Republicans often feel there isn't a conservative option on the table to addressing climate change and that their easiest solution is to simply deny the problem.

Recommendation: Engage directly with those that have not been included in the solution-making for our climate change.

Kate's Picks: Policy and Planning

This Lightning Session on was moderated by Kristin Leonhart Vazquez from EPA.

- Sam Borgeson talked about problems with quantifying energy efficiency programs because there is an incentive to claim high kWh savings, which can conceal some easily-correctable problems.
- Sara Yeo discussed how public opinion of nuclear power is affected by values and the media.
- Phil Mosenthal talked about how **behavior programs are cost-effective and easy to implement, but face competition for resources from other DSM programs.**
- Flavia Tsang discussed an analysis of interventions for behavior change using Rapid Evidence Assessment, a defined protocol for literature review.
- Barry Fischer talked about **using large datasets to analyze energy consumption trends, such as uncovering the fact that frequent voters tend to use less electricity than infrequent ones.**

Michelle's Picks: Thermostats and Climate Controls

A lightning round showcased innovative thermostat design.

- Bryan Urban from Fraunhofer Center discussed new energy savings models that take into consideration greater schedule variability.
- Therese Pfeffer from UC Berkeley shared qualitative findings from thermostat users that explain the difficulty of using thermostats the way energy efficiency professionals promote.
- Wendy Foslein and Yoki Matsuoka showed off the latest work from their respective companies, Honeywell and Nest Thermostat.
- Other presenters discussed new feedback technologies, the impact of the Fukushima disaster on Japan's energy-saving campaign, and the use of community-wide feedback.

The panel aptly displayed the range of work happening in this area. **Thermostat technology is quickly moving in the direction of user engagement, either at the thermostat itself or via mobile devices (e.g., phones and tablets).**

- Michelle is putting together a thermostat project; for more information, please e-mail her at mvigen@aceee.org

Michelle's Picks: Health and Behavior Change

This panel explored the intersection and parallel tracks that the health field and the climate change and energy fields have taken in trying to understand behavior change.

- Julie Hayes asked: “can the 12 Steps framework used for addiction could be replicated for sustainable behavior change?” and “**could our energy behaviors be viewed through the lens of an addiction in need of a process to build support for new behaviors?**”
- Dr. Polly Ryan explained that healthcare has struggled with behavior change concepts. Healthcare has gone through the same phases as energy efficiency: from education, to risk-communication and tailored education, and **now holistically including infrastructure, technology, and social aspects as factors influencing behavior.**
- Janet Solie sees behavior change as the product of a "full circle" of motivators and drivers. The coaching method she uses seeks to **address various layers of a person's motivations.**

Recommendation: Taking an individualized approach to behavior change in the climate change and energy field; realize that each person has a different set of motivators and influences.

Kate's Picks: Engaging Building Occupants

The panel discussed **barriers to energy efficiency in multi-unit buildings** and strategies for encouraging efficient behaviors.

- Lucas Davis discussed bill confusion, asking two main questions: How do people react to utility bills, and do people understand prices?
 - He found that for customers with split bills, there was a low cross elasticity of electricity and natural gas. **For customers with combined bills, higher natural gas prices lead to lower electricity consumption, suggesting bill confusion is at play.**
- Olga Sachs' team tested programmable thermostats in the field, partnering with an affordable-housing building outside of Boston.
 - Thermostats were installed and instruction booklets left with residents, but the residents did not get specific training on how to use the thermostats. No energy savings were observed, and it is not clear why.
- Brennan Less discussed the **two kinds of people** who manage to achieve "deep" (50%+) energy savings on their homes through retrofits.
 - "Unengaged" people go through the deep retrofit process, but then continue to live life exactly as they had before. They might keep just as many lights on or continue to take longer showers, but they are simply using highly-efficient versions of common home appliances and devices.
 - "Engaged" people want to be very involved with the energy efficiency process, often pursuing specific energy goals. **These people can get the most impressive energy savings (60-80%) but often require a greater tolerance for discomfort.**
- Lonny Blumenthal discussed a new pilot credit for LEED on Occupant Engagement
 - Buildings can obtain an additional point towards their LEED rating by incorporating various **features intended to encourage energy-efficient behavior by occupants.**

*Vox Populi: From the Evaluations**

“The **Hollywood media and messaging** was great [Inspiring Hollywood’s Writers and Producers to Create Storylines that Change Lives], interesting and encouraging as was the **storytelling** session and **gamification**. I would like to have heard more about transportation.”

“Yes, the session on **Neuroeconomics** was very good. I was actually surprised by some of the information the speakers provided during that session.”

“**Best practices in behavior-based program evaluation** – the presentations worked together very well.”

“**New Marketing Insights** was a strong session – enjoyed the practical application and insight around audience.”

“I enjoyed the one about the religious and moral dimension of climate change [**Faith Based**].”

“**Gamification in the Workplace.**”

*Go to the BECC webpage to download the ones mentioned here and in the picks

One Theme to Bind Them

If there is one message that comes through consistently, whether in the CBSM workshop by Doug McKenzie Mohr, or many of the panels, it is that *there is no universal solution*. Any program or policy must:

- Keep it local and respect the culture.
- Practice segmentation of target audience.
- Use emerging technologies to reinforce good habits.
- Parse your data to understand consumer behavior.

BECC and CBSM

Community-based social marketing – principles and promoters – is a key takeaway from BECC, as it has been interwoven since 2007 when Doug McKenzie Mohr began offering his workshops in conjunction with the conference.

- This year, he and Wes Schultz gave a plenary talk about the approach.
- Community-based social marketing is an accessible way to apply a behavioral perspective in sustainability and energy efficiency programs.
- The research-based approach, plus focus on addressing specific barriers to a targeted action, improves program design efficacy.
- As mentioned above, programs must consider local and regional issues during their planning stages for the deepest savings possible.
- CBSM gives a set of steps for achieving this strategy.

For those interested in more, our recent white paper on CBSM, entitled *Reaching the “High Hanging Fruit” through Behavior Change: How Community-Based Social Marketing Puts Energy Savings Within Reach*, is available on the ACEEE website for download:

<http://aceee.org/white-paper/high-hanging-fruit>

BECC 2013: Save the Date!

Monday, November 18 – Wednesday, November 20, 2013 at the Hyatt Regency Hotel in Sacramento, CA.

- pre-conference workshops (separate registration and fee – open to conference attendees and non-attendees)
- a kick-off dessert and networking reception on Sunday, November 17th.

Mark your calendar – it sells out.

Resources for programs

2012 presentations available:

<http://beccconference.org/becc-2012-presentations/>

Foundational readings, bibliography, and tools: <http://www.beccconference.org/> and <http://peec.stanford.edu/behavior/>

Papers from Summer Study Human Dimensions panel:

<http://www.aceee.org/proceedings>

- If it is your first time accessing ACEEE materials, please register and use Interest Code *Behavior*.

Contact Us

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