Project LIT HoMES

Leveraging Individual Transitions Into Homeownership to Motivate Energy Savings

Duke UNIVERSITY | BASS CONNECTIONS

Abstract

As a person moves into homeownership for the first time, there are a variety of decisions for them to make about their new dwelling and lifestyle, new information to process, and new challenges, including the need to engage with a range of utility bills that they may or may not have previously encountered. During this period, educational information regarding household energy use (and potential savings) could be provided, and in fact some local organizations have begun to develop programs for people at this stage. We do not yet know enough about the optimal ways to engage the diverse array of people that comprise first time homeowners regarding energy behavior.

Our project's goal is to bring together a diverse array of representatives who work in energy or fields tangential to energy at a summit, and utilize this breadth of experience to imagine creative solutions to household energy education.

Figure 1: Invitation to the summit

Fall Planning

- Brainstormed initial possible strategies for intervening in the home ownership process
- Identified individuals and organizations that could contribute to the conversation
- Spoke with experts in informal science education and conference planning
    - Mishel Filisha, NYSERDA
    - Dr. Erika Shughart, Shughart Consulting
    - David Sittenfeld, Boston Museum of Sciences
- Began sending out first wave of invitations to conference invitees
- Established a presence on social networks
- Organized the logistics of the summit
- Prepared educational materials for participants

Goal and Mission Statement

We will bring together community stakeholders, researchers, businesses, and policy makers to identify best practices to incentivize and facilitate reduced household energy use. Ultimately, we will build a network for ongoing change in the residential energy saving arena.

Figure 4: Presenting innovation ideas to the group

Summit

- **Summit highlights:**
    - Beginning activity: As attendees arrived, they wrote or drew their idea of an efficient home on the paper "house" to start thinking about household energy efficiency (Figure 2)
    - Interactive exercise: Attendees were given an appliance and asked to stand on a number line for the associated energy costs. The exercise dispelled energy myths and acted as an icebreaker. (Figure 3)
    - Five attendees presented innovation idea pitches (Figure 4)
    - Five pitches further refined through working groups
    - Agenda included opportunities for networking throughout
- Over 40 individuals attended the summit, including representatives from government, academia, non-profit, and commercial sectors

Figure 3: Appliance Efficiency Exercise

Moving Forward

The refined ideas from the summit will be published in an edited volume titled ***Innovations in Homeowner Energy Use: Reshaping Behavior, Enabling Change*** through RTI Press**.** The book aims to provide an academically-grounded, broadly applicable discussion of innovative ideas targeted to generally informed practitioners and students in the energy efficiency field.

Example Chapter Topics Include:

- The economic case for homeowner energy reductions
- Energy literacy and its role in homeowner energy behavior
- The impact of energy information in real estate internet search
- Innovative levers for technology adoption in the residential energy market including employer incentives
- Keeping homeowners engaged after an energy audit

Each LIT HoMES project team member is partnered with a chapter writing group and is participating in the authorship process.

The editorial team is targeting a tentative launch date for the volume in September, 2015.

Figure 2: The energy efficient "home"

Team Members

Faculty
- Brian Southwell, RTI, Energy Initiative
- Laura Richman, Psychology & Neuroscience

Graduate
- Liz Bloomhardt Doran, Earth & Ocean Sciences, Phd Candidate
- Nicholas Garafola, Master of Environmental Management
- Amitpal Singh, Master of Environmental Management

Undergraduate
- Jordan Thomas, Environmental Science & Policy
- Lauren Harper, Civil & Environmental Engineering
- Brandon Ellis, Mechanical Engineering