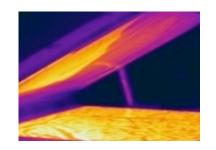


# Designing for Customer-centric Residential DLC DR Utility Programs













Joana Abreu, Fraunhofer CSE Brenda Pike, National Grid





# Agenda

- ConnectedSolutions Overview
- Goals of the Demonstration Project
- Customer Insights
- Recommendations
- Program Changes
- Next Steps





## ConnectedSolutions Overview

## For National Grid Electric Customers with Central A/C

#### Do you have a Wi-fi Thermostat?

Great! Get paid \$251 for signing up for Connected Solutions (www.ngrid.com/ma-connectedsolutions), an energy management program from National Grid and get \$25 every year you participate2, while supporting your community!

#### Don't have a Wi-fi Thermostat? No Problem.

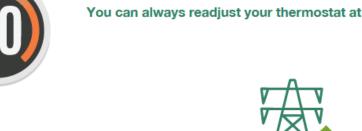
You can upgrade and earn a rebate of up to \$1003 from Mass Save® (www.masssave.com/rebates). Then sign up for ConnectedSolutions to get paid \$251 plus \$25 every year you participate<sup>2</sup>.

## nationalgrid



By allowing your Wi-fi thermostat to be automatically adjusted during days of exceptionally high energy use. An automatic adjustment would be only up to 3 °F, for up to 3 hours.

You can always readjust your thermostat at anytime.









<sup>\$25</sup> signup incentive for Honeywell and ecobee thermostats. \$40 for Nest thermostats (visit www.nest.com/nationalgrid to learn more). 2 Available your first year and in following years, if you participate in at least 75% of the summer days of high energy use.

Vi-fi thermostats can cost between \$60 - \$250 (by taking advantage of Mass Save® discounted prices)



# **Goals of the Demonstration Project**

- Identify attitudes and barriers to residential customer enrollment in DR programs, in Massachusetts
- Recommend program changes to significantly increase enrollment
- Best practices



Massachusetts Department of Energy Resources





# **Customer Insights [Focus Groups]**

- March and April, 2017
- Three focus groups (3-6 people each)



- Elicit participant's attitudes and opinions
  - What is the group's understanding of the program?
  - Willingness to interrupt or postpone the activities (targeted by the Program?)
  - Beliefs about ConnectedSolutions's reach out strategies?
  - What are the participants attitudes and concerns about participating in events?
  - What improvements should be made to the program?





# **Customer Insights [Usability Studies]**

- May, 2017
- Four usability study sessions
- Task based evaluation of utility email and ConnectedSolutions enrollment platform
  - Read a utility email.
  - Perform tasks on the ConnectedSolutions website: ex.: find information about peak energy events.
  - Create an account in the ConnectedSolutions portal.
  - Connect a thermostat to the account.
  - Find information on the dashboard.
  - Troubleshoot connection.



**Usability test setting** 







## A few recommendations...

## Program design related

- Include testimonials of users on the ConnectedSolutions website
- Users expected to save money with CS. Raised issues regarding the need for pre-cooling before an event

## Enrolment platform

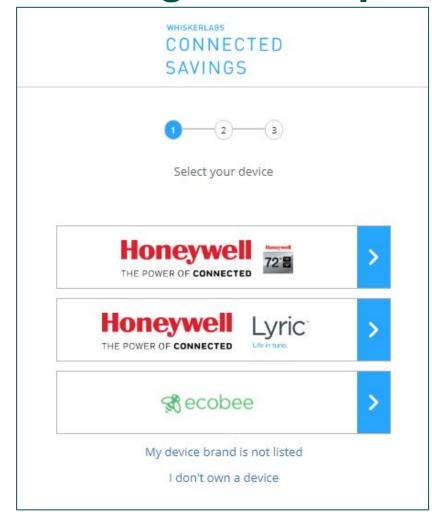
- Remove reference to multiple brands because it confuses users
- Simplify program description: focus on benefits for users instead on the benefits for the grid
- Include instructions for troubleshooting thermostat enrolment

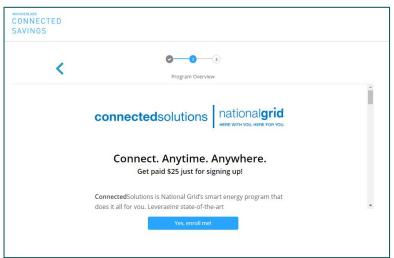
## Dashboard related

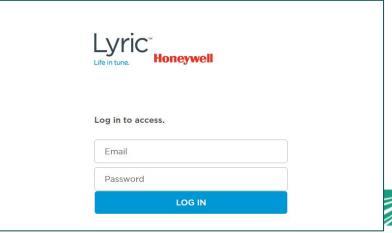
- Users expect to be able to adjust thermostat directly from the dashboard
- Increase dashboard functions with time, as users get familiar with the dashboard



# **Program Changes – Simpler Enrollment**











## **Program Changes – Customer Benefits**



Program Overview

### Your Benefits:



#### SIGN-UP BONUS

Get \$25 for **each** Wi-Fi thermostat you enroll into this program! Businesses will enjoy a \$40 sign-up incentive per Wi-Fi thermostat.



#### PARTICIPATION INCENTIVE

During a period of high energy demand, the temperature on your Wi-Fi thermostat will increase by just 3° F. It will automatically return to its prior temperature following the three-hour peak energy event. By making brief, limited adjustments to your central air conditioner's settings during the summer, we can reduce demand on our electric

Yes, enroll me!





## **Program Changes – Customer Testimonials**

CONNECTED SAVINGS





Program Overview

## What Customers Are Saying:

"I think that the program is exactly as it was described to me. They're doing a wonderful job." "I am completely satisfied with the entire experience. I would recommend others to participate."

"It's working great. It's not too uncomfortable [when my home's temperature increases by 3° F during a peak energy event] and I'm happy." "I am proud to participate in this program."

Yes, enroll me!





# **Next steps**

2017

**Eliciting Customer Beliefs** 

**User Studies** 

Recommendations to Improve Program Design

Pre-field program design testing in Rockland

2018

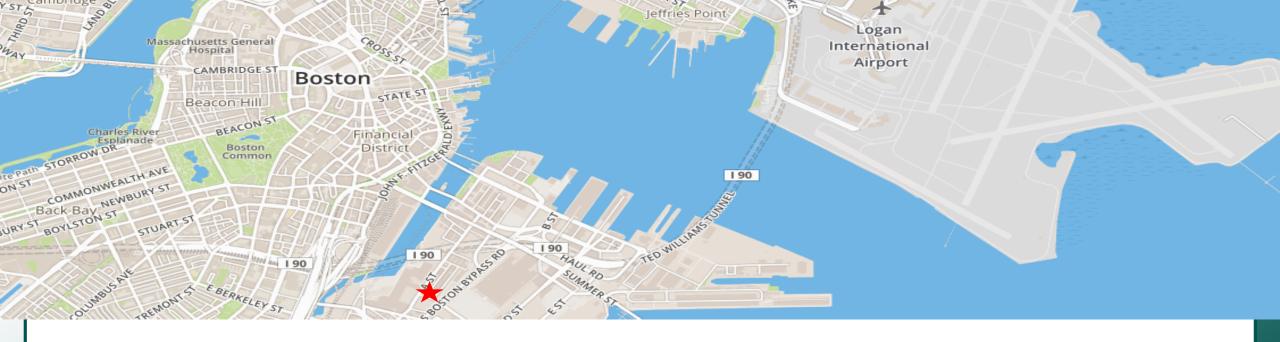
Benchmarking with other programs in US

Field Experiment

**Best Practices** 







## **Contact**

Joana Abreu Brenda Pike

jabreu@cse.fraunhofer.org brenda.pike@nationalgrid.com

617-575-7265 781-907-1717

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