

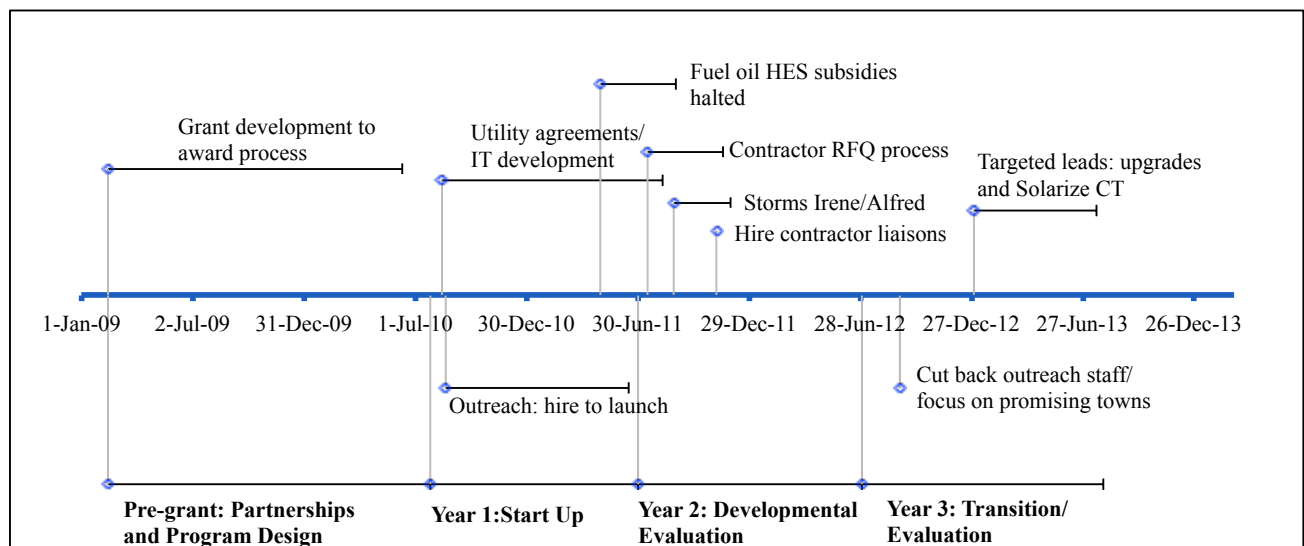
The Empower Efficiency team was a key member of the Connecticut Neighbor to Neighbor Energy Challenge (N2N) project team. N2N was a \$4.2 million dollar grant awarded by the DOE's Better Buildings Neighborhood Program, implemented between July 2010 and December 2013. Working with the Connecticut Green Bank (CEFIA at the time), we created innovative community mobilization and messaging campaigns supported by a robust technology platform. Empower Efficiency team members tested a series of behavior change outreach and marketing strategies to systematically overcome participation barriers to residential clean energy and energy efficiency programs. We also conducted ongoing evaluation to improve program efficacy, producing several best practice guides and academic publications.

Final Results of the Connecticut Neighbor to Neighbor Energy Challenge (N2N)¹

Quick Facts:

- \$4.2M DOE Grant in 14 Towns Across Connecticut
- Focus on home energy upgrades greater than 15% energy savings
- Research Playground
 - Chose different and difficult target audiences
 - Worked within and outside the confines of regulated programs
 - Built technology backbone for partnership development with program administrators, program regulators, energy contractors, government and local partnerships, and the lifetime customer
 - Developed a test/learn/adapt approach to project implementation for continuous process improvement

Figure 1 N2N Timeline (January 2009 to December 2013)



¹ Final report can be downloaded here: <http://www.osti.gov/scitech/biblio/1114148>

Figure 2 Overall Regional Pilot Program Design

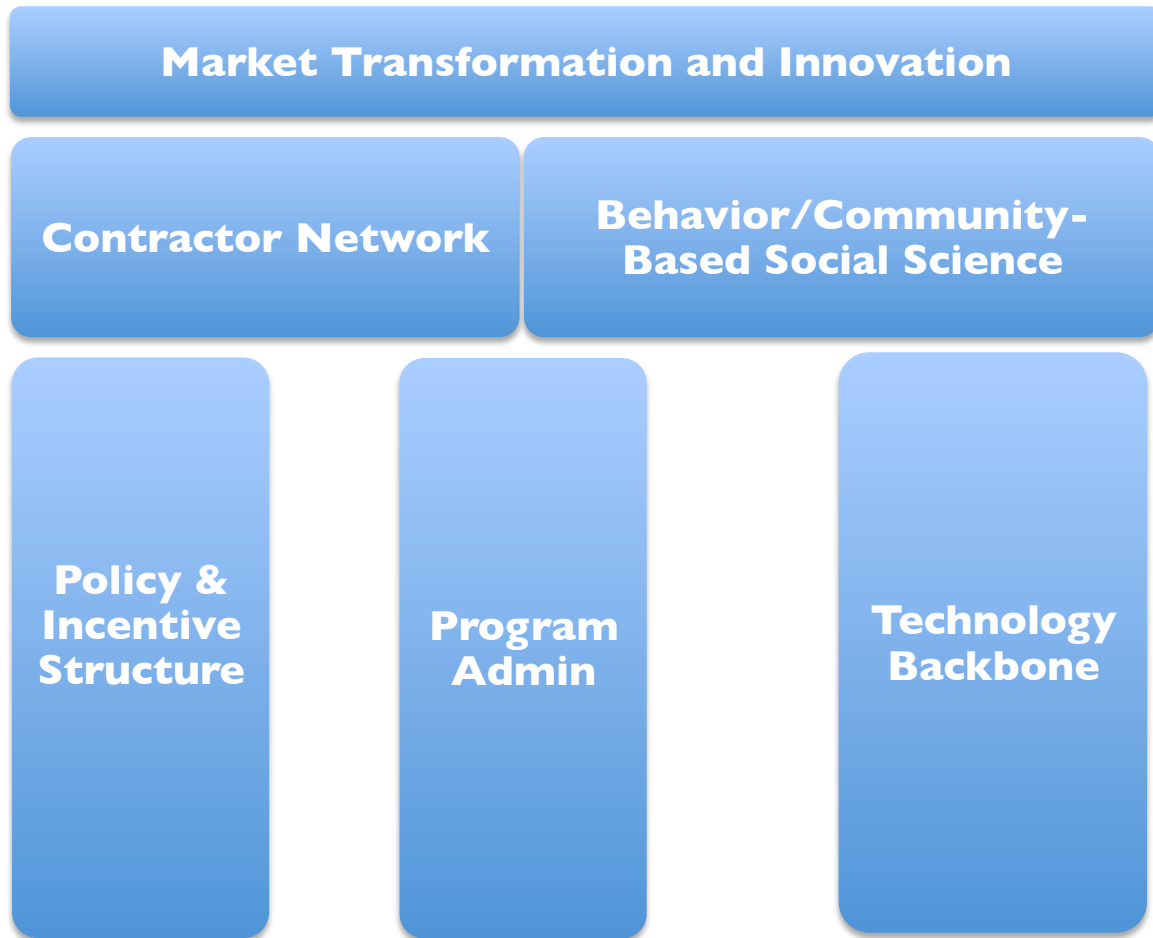


Table 1 N2N Estimated Annual Energy Savings (Per Year)

ENERGY SAVINGS METRIC	ENERGY SAVINGS VALUE
kWh Electricity	5,255,890
Therms Natural Gas	63,285
Total MMBTU	60,438
Average % Savings per Upgrade	17.14%
Number of Upgrades	1,246
Average % Savings per Assessment	10-12%
Number of Assessments	3,571
Total Energy Cost Savings	\$2,137,626

Table 2 Notes:

- Method of savings prediction: Contractor spreadsheet and deemed savings.
- Does not include spillover into non-participating towns, and unreported Do-it-Yourself savings.
- Also saved 250,797 gallons of oil and 14,777 gallons of propane.

Table 2 N2N Partnership and Outreach Program Results

PARTNERSHIP AND OUTREACH METRIC	PROGRAM TOTAL
<u>Partnership Results</u>	
Coalition partner meetings	294
Coalition partnership agreements signed	134
Number of Outreach events	1284
Workshops held	99
Workshop attendees	1226
<u>Customer Results</u>	
Facebook Fans	469
Email List	7296
Solar Leads Generated	995
Solar Installs Completed	108
<u>Contractor Results</u>	
Home Energy Solutions (HES direct install) signups	6214
HES assessments completed (% of participants)	3571 (57%)
Data Releases Signed (% of HES assessments)	3300 (92%)
Post-HES bids delivered (% of HES assessments)	923 (26%)
Upgrades completed (% of HES assessments)	323 (9%)

Table 3 Notes:

- Solar programs were run between January to July 2013
- Note that contractors did not have proper incentive for (or penalty for not) providing customers with bids and effective home energy reports after the assessment.

Table 3 Tested N2N Innovative Approaches

Program Name	Barriers Addressed	Benefits	Results
Portfolio Program	Customer confusion, individual customer needs	Provided customers multiple entry points, clarified existing program options	With more program options in one place, it was easier to find the right program for each resident's needs
Partnerships with Local Orgs	Lack of trust for utility programs and contractors, No one else is doing it	Used trusted source messaging and modeling, such as testimonials and lead by example strategies to help customer overcome program distrust	Residents were more receptive to programs and messaging coming from trusted sources, and once they saw that others were also taking action
Tracking Database	Issues in the customer pipeline (especially utility and contractor holes)	Provides transparency to program administrators and identifies problem areas, allowed N2N to handhold customer through each step	Improved HES and upgrade completion rates
Multi-touch Marketing	Lack of consumer awareness and motivation to take action	Helps raise customer awareness by touching customers multiple times with specialized calls to action	Increased awareness and visibility in participating communities, "we see you everywhere"
Town and Organization Rewards, Town Leaderboard	Motivation for quality lead referrals	Provides incentives for communities to engage in outreach to their social networks (while raising funds for the organization)	Increased sign up rates through local organizations. Towns had buy in and reacted positively to competition
Contractor Liaisons and Participant Energy Advisors	Contractor sales pipeline issues	Contractors received back office support and improved internal processes and business models resulting in their ability to scale up and retain more customers	Contractors were accepting data transparency and contractor scorecard. They supported by N2N staff which made them more willing to address internal problems (resulting in higher completion rates)
Action Research/ Developmental Evaluation	Overall program issues	Continual program evaluation and refinement	Improved program processes, community outreach and collateral materials, which resulted in increased program effectiveness

Using Scenario Modeling to Determine where we can take this.

Table 4 N2N Actual and Scenario Model of Upgrade Conversions

	N2N Actual (March 29, 2013)	Scenario Model
Assessment leads completing assessment (HES leads)	3,571	3,571
HES leads completing upgrade	323	1,071
Conversion ratio from HES assessment to lead	9.0%	30%

*Table Notes: 1) N2N actual numbers include program to date (July 15, 2013) for Home Energy Solutions (HES) and HES-IE assessment programs, including N2N spillover towns.
2) Approximately 30 percent of N2N leads do not complete a HES assessment.*

Figure 3 N2N Present Value of Energy Savings by Quarter (Year 2012)
(DOE Reported Data Only)**

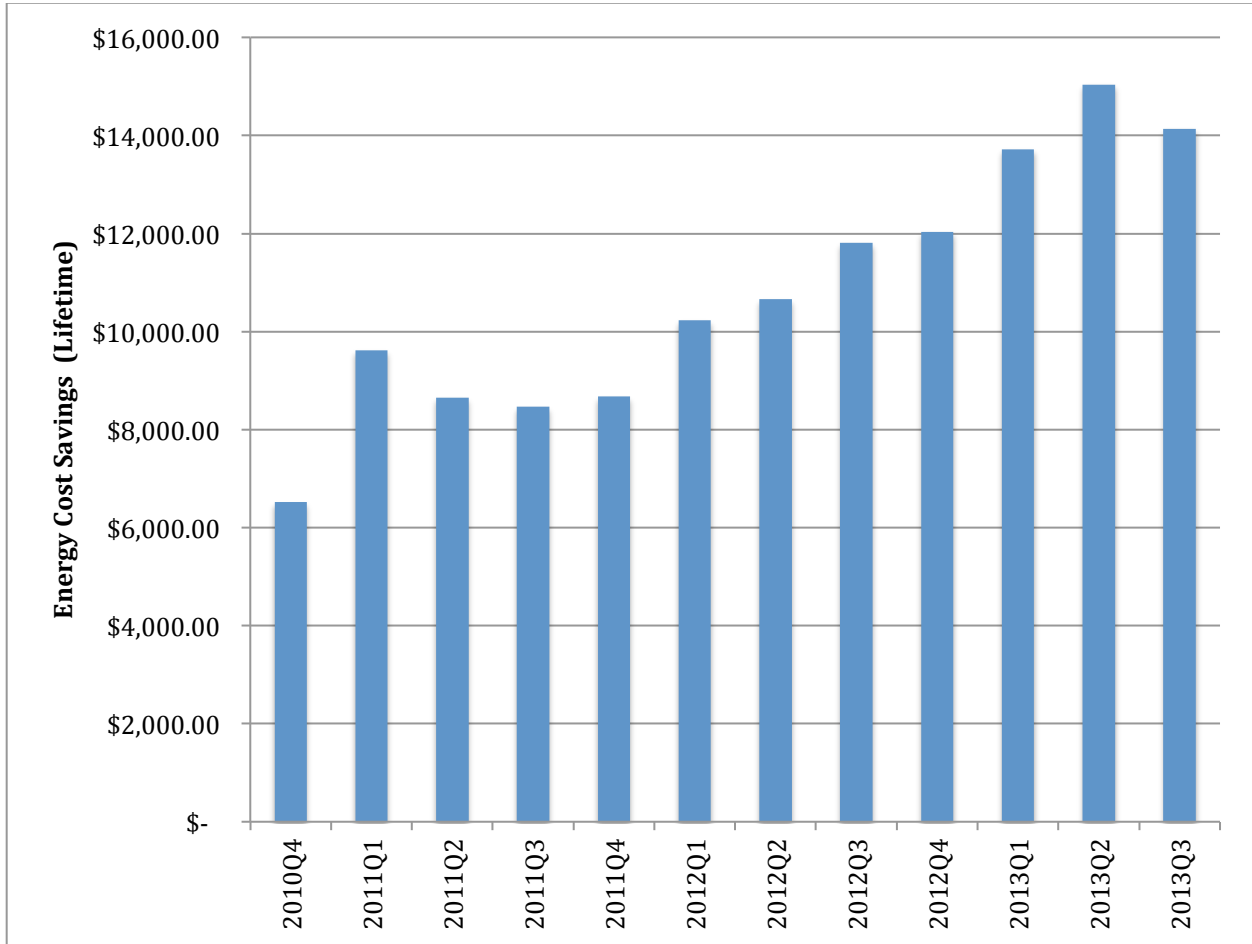


Figure 3 Notes:

- Does not include spillover into non-participating towns, and unreported Do-it-Yourself savings.

Table 5 N2N DOE-Counted Upgrades Only Results

Quarter	Energy Cost Savings/Upgrade/yr	Total Energy Cost Savings/Upgrade	Total Energy Cost Savings/yr	Count
2010Q4	\$446.30	\$6,526.71	\$4,463.00	10
2011Q1	\$657.93	\$9,621.55	\$26,975.00	41
2011Q2	\$591.99	\$8,657.34	\$85,247.00	144
2011Q3	\$578.90	\$8,465.91	\$53,838.00	93
2011Q4	\$593.19	\$8,674.87	\$77,115.00	130
2012Q1	\$699.56	\$10,230.33	\$163,696.00	234
2012Q2	\$728.90	\$10,659.43	\$106,419.00	146
2012Q3	\$807.81	\$11,813.39	\$83,204.00	103
2012Q4	\$822.89	\$12,034.00	\$83,112.00	101
2013Q1	\$937.94	\$13,716.43	\$148,194.00	158
2013Q2	\$1,028.33	\$15,038.29	\$135,739.00	132
2013Q3	\$966.32	\$14,131.48	\$21,259.00	22
Average	\$752.86	\$11,009.89	\$989,261.00	1,314

Table 5 Notes:

- DOE only allowed program credit for Upgrades that got an average of 15% savings or higher during the grant period.
- The table above illustrates the total tracked program savings (not including spillover into non-participating towns and unreported Do-it-Yourself savings).