

Innovative Community Energy-Savings Success Stories

The Georgetown University Energy Prize (GUEP) challenged towns, cities, and counties nationwide to rethink their energy use and to implement creative strategies to increase efficiency. The initiative brought together local governments, residents, nonprofit organizations, and utilities to demonstrate success in reducing energy consumption between 2014 and 2016.

All GUEP participating communities, representing cities and counties with populations between 5,000 and 250,000, joined the Department of Energy's Better Buildings Residential Network (BBRN), which works with energy efficiency programs, utilities, financial institutions, nonprofit organizations, universities, as well as state and local governments by sharing best practices and lessons learned to increase the number of homes that are energy efficient.



The following select six profiles highlight innovative approaches that programs in different parts of the country implemented to increase energy efficiency in their communities. Overall, the creative strategies that increased efficiency implemented by participating communities in GUEP reduced energy consumption by 11 trillion BTUs, and saved nearly \$100 million. For more information about the Georgetown University Energy Prize, visit their website, <http://www.guep.org/>

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Arlington, VA: Money Talks: Arlington’s Home Energy Rebates

To increase energy efficiency in their community, program planners at the Arlington County, VA Initiative to Rethink Energy (AIRE) created a home energy rebate program that provided incentives for ambitious efficiency projects.



Rebates of up to \$575 per calendar year were offered for air sealing, duct sealing, and insulation projects, as well as for HVAC and water heater replacements. The program was designed to complement the once-and-future federal energy tax credit, and participants are allowed to claim incentives from both sources.

To fund the rebate program, Arlington staff decided to use a portion of the money that had been earmarked for outreach. This shift was based on the idea that rebates are more effective at compelling purchasing behavior, and that they provide homeowners an extra incentive to invest in a more efficient system or whole-house project. Additionally, this structure offered their team a more robust data set through participant applications and other means of feedback.

The rebate program worked well in concert with the AIRE program’s outreach efforts: rebates made it easier to capture the community’s attention, and the AIRE program’s extensive outreach experience equipped them to get the word out quickly. Residents were targeted with a variety of tools, including the AIRE listserv, paid advertising, and various public events. Staff designed a creative “dollar bill” graphic to create memorable branding. With over 700 projects completed in less than two years, the program successfully ramped up quickly.

RESULTS

Since the June 2016 launch, the rebate program has resulted in:



728 rebate projects – 236 envelope, 64 water heaters, 421 HVAC, 7 duct sealing



\$152,900 estimated annual savings



\$222 estimated savings per household

To learn more about this program, contact the AIRE program at: energy@arlingtonva.us



Bellingham, WA: Start Saving! Right Meow! Bellingham Energy Prize

The city of Bellingham, WA worked with 9 community partners that reduced community energy use through a frisky social marketing campaign known as the “Bellingham Energy Prize” that consolidated and built upon the good work of several existing efficiency programs. A centralized website was developed that offered energy efficiency tips and gave residents the ability to schedule a home energy assessment or create a personal energy saving plan. The “Kilowatt Kitty” mascot was created and sparked recognition and excitement around program initiatives. Program leaders herded these community cats together and offered a collection of initiatives:

- ▶ A utility-led initiative offered rebates and free energy assessments.
- ▶ A local university distributed over 100 water-saving kits and 200 LED light-bulbs to off-campus students.
- ▶ Non-profits provided whole-house assessments for residents of all income levels and distributed LED bulbs.
- ▶ Local business efforts helped build awareness of the Bellingham Energy Prize with progress meter displays, brewery “Happy Hours of Power,” themed graphics on garbage trucks, and a bike shop that gave away a bicycle to one lucky winner.



RESULTS (2014 – 2016)



7,546,038 kWh of electricity saved



2,000 free home energy assessments performed by Puget Sound Energy



1,200 people signed up to the program's website, Bellingham Energy Center, and 200 people linked their utility accounts with the website to track their energy use

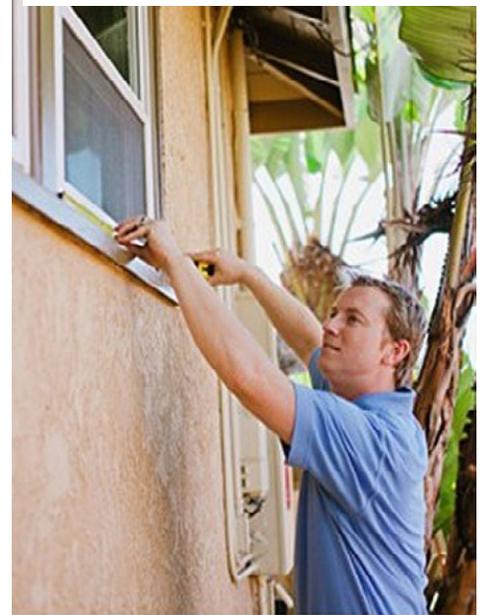
To learn more about this program, visit the Bellingham Energy Prize website.

Chula Vista, CA: Breathing New Life into Existing Programs for Increased Savings

The city of Chula Vista, CA leveraged connections between existing residential energy efficiency programs by using customer referrals and public outreach that increased participation across all initiatives. The project connected homeowners with specialized resources based upon their unique upgrade needs:

- ▶ Chula Vista staff participated in various community events and encouraged people to write down three energy-saving commitments. This gave the City the opportunity to offer tailored advice based on residents' planned upgrades and needs.
- ▶ Chula Vista's Home Energy & Water Check-Ups Program conducted 240 no-cost home assessments that included a 15-minute walk through and provided residents access to resources and additional assistance.
- ▶ Residents were connected with existing resources such as the Energy Upgrade California Program and the Property Assessed Clean Energy (PACE) financing program.
- ▶ Chula Vista made 120 direct referrals to the City's investor-owned utility (IOU) that supported deeper energy upgrades.
- ▶ The program's marketing built on the community's concern about droughts by linking water conservation to energy-efficiency.

As a result of these efforts, more than 90% of households that received assessments went on to implement energy-saving actions. Chula Vista also promoted energy efficiency through a dedicated "Smart City" Education Center at its public library. As of 2018 all existing programs continued operations, and new outreach efforts will be created based on additional city energy and sustainability goals.



RESULTS (2015– 2016)



240 home energy and water check-ups conducted



120 direct referrals to investor-owned utility and other programs that supported energy efficiency upgrades



622 billion BTUs of energy saved



To learn more about this program, visit [the Chula Vista website](#).

Madison, WI: Making Sustainability Fun through Gamification and Parties

To inspire citizens to reduce household energy use, the Green Madison initiative implemented two engagement programs: Gamification and Energy House Parties. The gamification program was implemented by the nonprofit Cool Choices and used an online game-based program where people earned points for sustainable actions. The program targeted city staff and partnered with local businesses to engage the general public. The game engaged more than 1,000 residents and led to immediate reductions in energy consumption. Recruitment occurred primarily through workplaces, first at municipal agencies and then via local businesses, which signed up to be part of the city-wide game.

Additionally, Green Madison used well-established and active community listservs to promote Energy House Parties. By hosting these events in the homes of community members, the program generated peer momentum for energy efficiency upgrades ([see video](#)). The house parties contributed to the program's success and resulted in the completion of 183 energy efficiency assessments and 97 energy efficiency upgrades in single family homes in 2015–16. In 2017, the City of Madison committed to 100% clean energy goals and actively focused citizen engagement to that end.



RESULTS

2015 – 2016:



Completed 255 energy efficiency assessments



51% conversion rate from assessment to upgrade



Completed 132 upgrades

2015 – 2017:



Total electric savings was 216 MWh



Of the 880 city-wide participants, 721 reported at least one sustainable action



Participants reported 21,324 unique actions that reduced energy, water, and waste across Madison homes

To learn more about this program, visit: <https://greenmadison.org/> and <https://coolchoices.com/>

Takoma Park, MD: Using Competition and Teamwork to Reduce Electricity and Gas

Takoma Park tackled residential energy use head-on with a Neighborhood Energy Challenge and public outreach.

Takoma Park, Maryland canvassed every door in the city to spread the word about the Energy Challenge. The city held a series of large public events that focused on energy efficiency and the Neighborhood Energy Challenge, which included hosting the Montgomery County GreenFest in the city in 2015 and 2016 and a series of workshops for residents and energy professionals.

The city also hosted the Proof is Possible Tiny Home Tour that focused on deep energy efficiency retrofits in a fun and novel way.

The Neighborhood Energy Challenge ran from 2015 to 2016 and included 18 neighborhood teams that competed for a \$2,000 prize. During the competition, teams had access to free energy coaching as well as rebates and incentives, and they held neighborhood meetings with the city's Sustainability Manager that discussed how to save energy in their homes. As a result teams engaged in more energy efficient behaviors, as well as implemented significant upgrades in their homes. Takoma Park's competitive spirit led to big energy savings due to participation by 20% of the city's homes in the challenge. The winning teams of the Neighborhood Energy Challenge planted trees in the community with their winnings.



RESULTS (2015 – 2016)



101 billion BTUs of energy saved (equivalent to energy use in 579 homes for a full year)



25% reduction in residential gas used



3% reduction in residential electricity use



441 energy assessments completed

For more information, visit the Sustainable Takoma Park website.



Walla Walla, WA: Energy Efficiency for All Ages: Walla Walla Power Play

The Sustainable Living Center of Walla Walla, Washington, a non-profit organization, focused on resource conservation that included energy resources, and teamed with local partners that engaged the community in a range of program offerings and competitions. One flagship initiative was Walla Walla Power Play, a Bingo contest with monthly prize drawings that encouraged residents to take energy saving actions. The city engaged over 1,500 elementary and middle school students through energy-savings education and prizes for taking action at home and also conducted free Home Energy Quick Checks for veterans and seniors as part of its outreach efforts. These "Quick Checks" walked homeowners through a checklist designed to increase comfort and decrease energy use. In addition, staff and volunteers offered 'on the spot' improvements like programming a thermostat, replacing weather-stripping, and adding window film. Other program offerings included utility education, rebates, and free energy savings kits.

For Walla Walla, engaging in a national competition was an exciting step that helped validate ongoing energy saving activities and programs and provided an opportunity to rally the community around a common goal. The community will continue to target energy savings with the tools and resources developed during the competition.



RESULTS (2015 – 2016)



Over 9% reduction in residential and municipal energy use



600 home energy assessments and 250 retrofits completed



Over 166 billion BTUs of energy reduced



65 Home Energy Quick Checks completed for veterans and seniors

To learn more about this program, visit: www.slcww.org

