

“When we take care of our home, it takes care of us.”

- DC Housing Authority Resident

Group14 was selected to provide technical assistance to District of Columbia Housing Authority (DCHA) through Enterprise Community Partners and the Better Building Challenge for Multi-Family partners in 2015/2016.

## DCHA'S CREATING HEALTHY & SUSTAINABLE COMMUNITIES RESIDENT ENGAGEMENT PROGRAM

### BACKGROUND

DCHA is an award-winning, independent public agency that provides affordable housing for low-income families, seniors, and people living with disabilities within the DC district. This effort includes providing livable housing that supports healthy and sustainable communities and improves the quality of life for residences.

As part of this vision, and to showcase their leadership in the development of sustainable communities, DCHA became a member of the Better Buildings Challenge (BBC) for Multifamily Partners - a government-led leadership initiative working to make building portfolios 20% more efficient over the next decade. The actions that BBC partners take will reduce greenhouse gas emissions & pollution, save money, and create jobs.

Being one of the first affordable housing providers to sign up for the BBC, DCHA is leading the way in their commitment to being an efficient, healthy, and sustainable organization. To help them fulfill this goal, DCHA applied for a

Technical Assistance grant through HUD and the Department of Energy (DOE). Through this grant, DCHA received support in developing a Green Operations and Maintenance program as well a comprehensive Resident Engagement program – together, creating the **DCHA Healthy & Sustainable Communities** program.



DCHA worked with Group14 Engineering, PBC of Denver, CO to develop and pilot the program. Group14 Engineering served as the sub to Enterprise

Communities Partners (the technical assistance provider) and worked closely with DCHA's partner, the Department of Energy & Environment (DOEE).

## THE HUMAN FACTOR



When we think about sustainability, we tend to focus on infrastructure, technology, and systems of the built

environment. However, experience demonstrates that the efficiency and performance of these components are highly dependent on the **people** using and operating them. Therefore, our approach to creating a sustainable future must be more comprehensive than focusing on the built environment alone. We must also consider the human factor.

### **35-50% (or more) of our energy use in the home is directly related to human behaviors.**

Not how efficient our home is, but how efficiently we use it. Everyday actions, such as turning off lights, using cold water to wash clothing, time spent showering, and the unplugging of electronics when not in use, have a great impact on our energy use.

Not only do we greatly impact the energy use in our home, but we spend a lot of time in our homes as well. We are indoors 90% of our day, and most of that is spent in our homes. Our home environment is very personal. It is where we eat, sleep, recover, and hopefully thrive. The choices **we make** in our homes can impact our ability to thrive – psychologically, physically and emotionally.

Recognition of the connection between behavior and the ability to thrive at home, the stressors that low-income residences face on a daily basis, and the growing evidence showing positive gains from a connection to our built and ecological

environment, were the foundation for developing this program.

The DCHA Healthy and Sustainable Communities program was developed in a way to provide awareness, education, and an emotional connection to the cause; to provide an opportunity for residents to engage in healthy and green living actions & behaviors; and to build a network of community support with a long-term goal of creating a culture of sustainability.

DCHA, Group14 Engineering, Enterprise Community Partners, and DOEE (the Team) then collaborated to develop and carry out the following at 3 pilot sites within the DCHA portfolio:

- 1) An Energy Competition
- 2) A Green Living workshop series
- 3) An incentive/rewards program, and
- 4) A Resident Engagement Toolkit

The 3 pilot sites consisted of 2 multi-family high-rise apartment buildings (Sibley & Greenleaf) and one row-type housing community (Langston).

## PROGRAM DEVELOPMENT

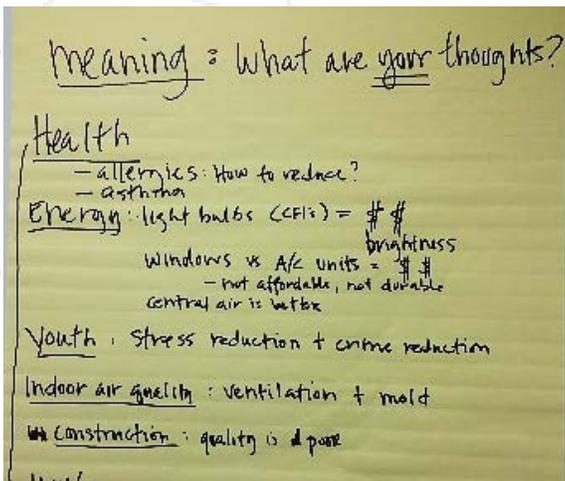


In order to develop the campaign, the Team hosted stakeholder roundtables with DCHA management, on-site staff, and residents. The Team carried out site and in-unit audits & behavioral audits and sought continuous feedback from the stakeholders throughout the pilot.

These efforts, combined with industry best practices, established the resources, content, and design of the program.

## MESSAGING

The Team recognized that truly knowing the audience (i.e. community) was going to be the foundation for success of this or any other program DCHA wished to execute. The team was dedicated to designing activities and events that were a reflection of residents' and community member's values. We wanted to know and relate to their ideals and motivators; how they communicate with one another; what activities they enjoy participating in; what residents are already doing to be "green"; what challenges they face living day to day; what their barriers were to engaging in conservation behaviors; and what they'd like to see their community become.



More often than not, people's greatest concerns and motivators do not revolve around conserving resources and saving the environment. This is especially true for low-income residents as their time and resources are severely taxed by more pressing stressors. However, there are many things that people do identify as core values and motivators that are connected to green living. Our job is simply to make these connections more apparent.

Some of the more common values identified include:

- *Improve health and wellbeing*
  - Example: as we save energy, we release less pollutants into the air, this improves air quality and reduces asthma, allergens, and respiratory diseases.
- *Beautify home / Enhance community pride*
  - Example: as we reduce litter and waste, manage pests, provide greenspace, and improve lighting, reports of crime go down, pride in community increases, and connectivity between residences over a common cause enhances.
- *Care for future generations / Youth*
  - Example: if we conserve non-renewable resources such as water and fossil fuels, we increase resiliency, maintain a supply of resources for future generations, and potentially reduce climate change impacts.
- *Increase self-sufficiency*
  - Example: As we conserve resources and increase our capacity to take care of our homes, we gain essential skills in home management that become increasingly useful as we transition to owning our own homes, including saving money on utility bills and increasing the durability of personal property.

For the DCHA Healthy and Sustainable Communities program, the efforts for the residents became less about simply saving

energy and water, and more about improving their own lives on a deep and meaningful level.

## ENGAGEMENT & OUTREACH

Throughout the four month pilot, each of the three properties participated in a series of workshops most relevant to their property, a pledge/commitment program, and an energy competition.

The workshops focused on:

- 1) Energy
- 2) Water
- 3) Waste Reduction
- 4) Healthy Living, and
- 5) Green Jobs



The workshops provided residences with resources, information and an increased awareness of green living opportunities, they worked to build community through hands-on activities and games, and they provided incentives for resident participation. Each of the properties held one workshop per month encouraging a specific energy or resource conservation behavior.

Along with the monthly workshops, residents were encouraged to take pledges - further committing them to making green living actions become habits. Residents took pledges at the

monthly workshops or through the site's resident leader.

Throughout the pilot, the three sites also competed in a **district-wide PowerDown Multifamily Energy & Water Challenge**, in which buildings competed to reduce energy and water use by 5% compared to a previously established baseline.



The competition scoring was based on a combination of actual energy savings as well as participation from residents (number of people that participated in workshops and/or took the pledge). The winner of the competition received a \$1000 cash reward to be used by that site's resident council.

When carrying out the workshops, pledges, and competition, site leaders used the Resident Engagement toolkit. The toolkit outlined best practices for engaging residents and increasing participation including behaviors to target, tips on increasing participation and establishing persistence, templates for flyers, door hangers, prompts and more as well as an extensive activity guide for both adults and youth.

Example activities included how to make your own green cleaning products, energy trivia, healthy living bingo, light switch covers, poster competitions, and making 'draft snakes.'

A "I PLEDGE TO:" form from DCHA (District of Columbia Housing and Community Development Administration). The form lists three pledge options: "I will not use a space heater", "I will turn off the lights when I leave the room", and "I will turn off the TV when I am not watching". It includes fields for Name (Print Please), Signature, Phone, and Address.

Each of the participating pilot sites grew support and interest from the community. One family site focused on healthy living and brought in a vegan chef. At another site they

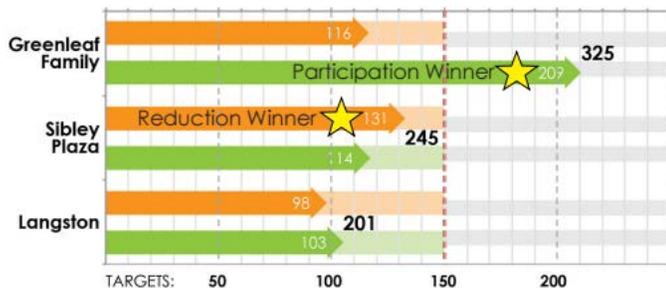
held a workshop focused on making green cleaning supplies. Yet another community was interested in green jobs. That site brought in speakers whose careers have been excelled through the “green” jobs arena focusing on ways young people could enter into the industry and gain life-long career skills.

The workshop supplies, resources and implementation were greatly supported by DOEE, the Housing Authority’s partner.

## RESULTS & NEXT STEPS

Upon conclusion of the pilot program, all three sites decreased their energy use, saving more electricity month to month as the pilot period continued. Participation from each of the sites increased throughout the pilot as well.

The results below showcase the scoring for all three pilot sites in the PowerDown competition. The orange lines represent energy savings and the green lines represent resident participation. The dotted line represents the savings goal.



While Sibley Plaza reduced their energy use the most over the four month period, Greenleaf – Family, with a combination of energy savings and participation, received the most points.

Sites saved between 2 and 4% on their total electricity consumption throughout the pilot period. Savings were based on the property’s master metered electricity consumption. Access

to individual utility usage was not possible within the scope of this project.

As DCHA moves forward supporting healthy and sustainable communities, they plan to apply the lessons learned from the pilot and the resources provided in the toolkit to carry out their mission. DCHA staff will continue to provide the resources and capacity for their residents to thrive and are looking to continue expanding the program beyond the pilot sites to encompass all of their properties.

If you have questions regarding this program or resident engagement in general, please contact:

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