

## THE SUSTAINABILITY INSTITUTE

Sustainable communities. One person at a time.



building the <u>knowledge</u>, <u>awareness</u>, and <u>workforce</u> for the energy efficiency economy of charleston







## **Project Overview**

- Conduct community outreach to educate residents on the value of energy efficiency in the home
- <u>Gather data</u> on the condition of our homes, best practices for efficiency improvements, and the real potential for energy savings
- Grow the capacity of our workforce to provide quality service and good customer experience

## Intentional Learning

## The purposes of the intentional learning component of the Charleston WISE Impact Project are to help:

- Align the Core Team
- Systematically Test Key Assumptions About What Works,
   Barriers, And Solutions
- Pursue Continuous Improvement By Tracking and Acting on Key Performance Indicators (KPIs)
- Document Lessons For Others Through Products, Reports, and Case Studies

## Intentional Learning

Home > The City Program > SCI Pilot City Program > Charleston, SC

# •Share Lessons Learned that could inform other communities' energy efficiency initiatives

- Weekly Reflections
- Blog Posts
- Meeting Minutes

#### CHARLESTON, SC



JULY 06, 2012



Population: 123,737 City Sustainability Director: Brian Sheehan Non-profit Partner: The Sustainability Institute

City Sustainability Plan: Began in Oct. 2007 and adopted Feb. 2010 with these areas of focus: Better Buildings, Cleaner Energy, Sustainable Communities (incl. adaptation), Improved Transportation, Zero Waste and Green Education. The plan includes quantified measures to reach over 99% of the 2030 midterm GHG reduction goal (30% below 2006).

Pilot City Initiative: CharlestonWISE: A city-wide energy efficiency initiative dedicated to providing energy efficiency services to all property owners in the City of Charleston, CharlestonWISE provides a complete suite of resources and services to assist property owners with 1) unbiased energy saving recommendations, 2) certified contractor selection, 3) quality assurance and verification and 4) expert knowledge of rebates and financing. Goals include: 600 building retrofits by 2013. CharlestonWISE is a key component of an overarching goal of the Charleston Green Plan - Better Buildings.

Pilot City Project: The CharlestonWISE Impact Project is dedicated to building the resources and support for a strong energy efficiency industry in Charleston. The Impact Project will 1) explore outreach and education measures that

#### Let's Get the Show on the Road



Since the Impact Project wrapped up our public efforts to raise awareness about our goals and findings, we've been working on a variety of ways to reach out to our peers to share our results. Next week we have our first chance share our story with our fellow building science professionals, at the Department of Energy's Better Buildings Conference, Residential Energy Efficiency Solutions: From Innovation to Market Transformation. The conference is an opportunity for Better Buildings programs from across the country to come together and share their stories and learn from each other's successes. While the Impact Project is not at Better Buildings program, one of our key goals is to support the work of our sister program, CharlestonWISE, which is a Better Buildings Program.

#### www.sustainablecitiesinstitute.org

### **Outreach Outcomes**

- Conducted outreach to over8000 people
- Over 300 expressed interest and support
- Received participant questionnaires from 227



#### Rank order of outreach tactics:

- Media coverage (65)
- Neighborhood associations (52)
- Direct mail (32)
- •Word of mouth (29)
- •Electronic newsletters (23)
- Community presentations (11)
- Social Media (0)
- •Unknown (19)

### Selection Process

 Purpose – select a cross section of homes and households representative of the Charleston community (housing and population)

- Criteria
  - Geography
  - Age of home
  - Square footage
  - Fuel types
  - Building Type
  - Household income
  - Occupancy



 U.S. Census Data (American Home Survey 2005-2010), Charleston County Assessors Data

## What We've Learned About Our Process

- Surveys are given after Energy Assessments and Retrofits
  - Changed from bid process to assignments
  - Customer facing reports simplified
- •Everything takes longer than you think!
  - Communication between multiple parties is challenging
    - Participants, Auditors, QA, Contractors
  - Participants have no skin in the game

## What We've Learned About Our Buildings

- Auditors benefit from Specialized Training
  - Third Party QA is beneficial, but time consuming
  - Historic Structures class

- Retrofit Process Has to Change
  - Majority of low income homes need major retrofits
  - No low income homes need basic retrofits
  - \$8,000 per house won't cover it

### Historic Structures Curriculum



BPI Reviewed Curriculum to Train
Energy Auditors and Home Improvement Contractors
in Best Practices for

Energy Efficiency Improvements for Historic Homes in a Warm and Humid Climate

Earn 3 BPI CEU's

July 18th-20th at the Preservation Society of Charleston

- Historic Preservation Theory and Regulation
- Building Science Review
- Reversible Approaches to Weatherization

## Stay Tuned...

Blog: www.sustainablecitiesinstitute.org

Facebook: www.facebook.com/CharlestonWISE-impact-project

Twitter: <a>@ChaWISE\_Impact</a>

Website: <a href="https://www.charlestonwise.com/lmpact.aspx">www.charlestonwise.com/lmpact.aspx</a>

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