

Better Buildings Neighborhood Program MWCOG IGBG and EAC Joint Meeting

Jonathan Cohen July 12, 2012

Better Buildings Neighborhood Program



Block by block, neighborhood by neighborhood, we will make our communities more energy efficient and help families save money. At the same time, we'll create thousands of jobs and strengthen our economy."

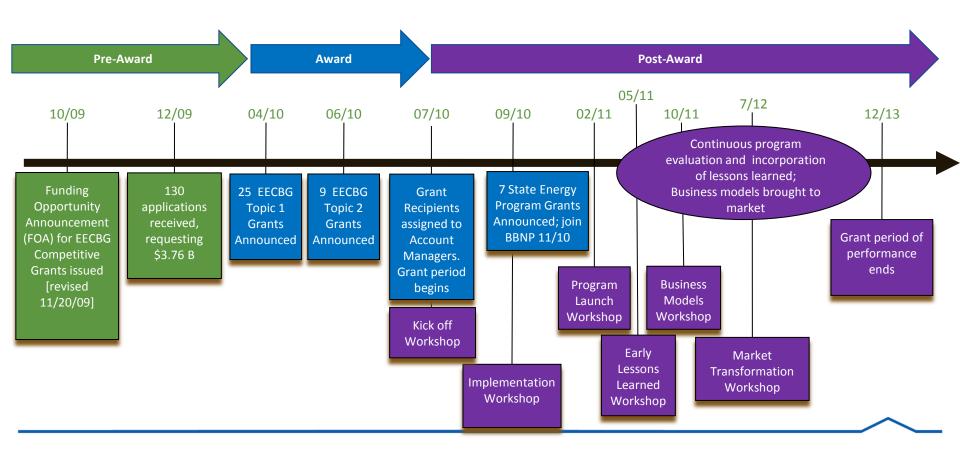
—Dr. Steven Chu, Secretary, U.S. Department of Energy



Timeline

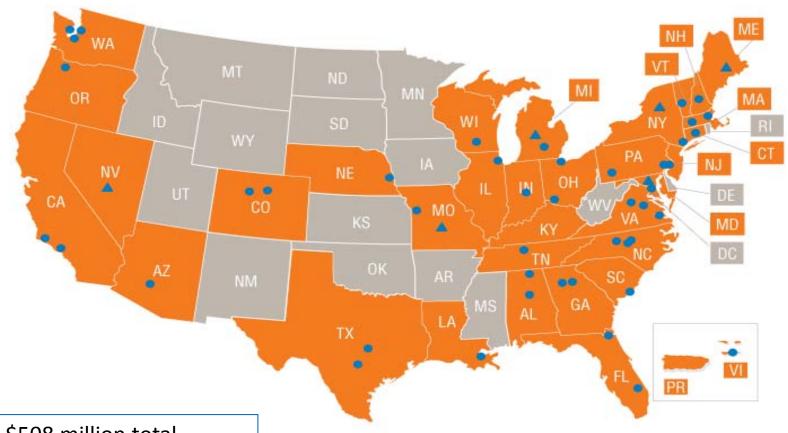


- Awards announced April September 2010
 - Periods of performance May 2010 December 2013
- EECBG competitive (ARRA) (34 awards)
- SEP competitive (FY10) "Strengthening Retrofit Markets" (7 awards)



Locations





41 grants: \$508 million total \$1.4M - \$40M each Recipients located in 32 states 24 locals, 13 states, 4 NGOs

- City/County Level Grant
- ▲ Statewide Grant
- States With Grant Activity

Intent of Grants



- Leverage \$508M in ARRA and FY10 funding to spur nationwide energy efficiency program innovation
- Target urban, suburban, and rural environments
- Capitalize on economies of scale
- Encourage industry partnerships and investment
- Emphasize sustainability beyond the grant
- Learn what is effective and replicable

Better Buildings is using federal support to promote program innovation and market investment

What We Will Accomplish



Grant Recipient Goals by Late 2013

- Retrofit >100,000 buildings (residential and commercial)
- Use the \$508 million grants to leverage \$1 to \$3 billion in additional resources
- Engage 10,000 to 30,000 contractors in work on energy efficiency upgrades
- Save consumers approximately \$65 million annually on energy bills

Goals to Leverage Grants for the Market

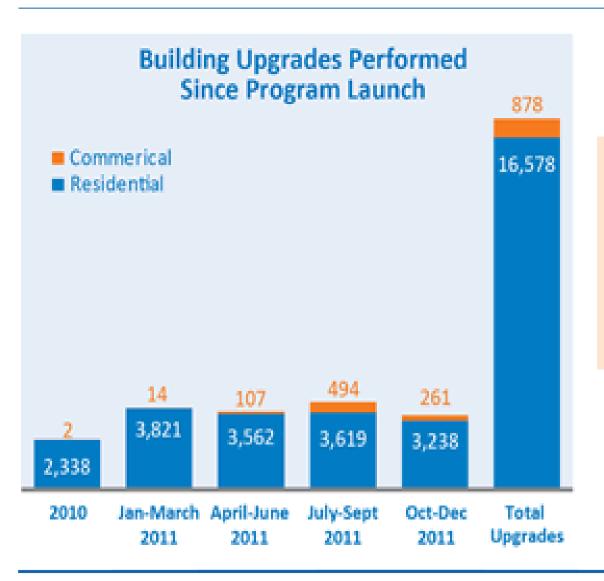
- Develop sustainable energy efficiency improvement programs
- Reduce the cost of retrofit program delivery by 20% or more
- Achieve 15-30% energy savings from energy efficiency upgrades

Vision

A self-sustaining market for building energy efficiency retrofits that results in economic, environmental, and energy benefits across the United States

Status through 2011/early 2012 (1 of 2)





Preliminary figures:

Jan-Mar 2012 >4,200 additional upgrades

>21,500 total upgrades ~20,200 residential ~1,300 commercial

Status through 2011/early 2012 (2 of 2)



Draft data through March 2012

- Audits
 - ~81,300 residential audits
 - ~2,500 commercial audits
- Paying for Upgrades
 - ~\$7,500 average invoiced cost (residential)
 - ~\$9,600 average loan amount (residential)
 - >3,300 loans provided (some missing data)
- Workers
 - >1,200 building contractors performing energy upgrade work
 - >1,600 trained (optional data field)

JUST IN:

Through Mar 2012 (draft)

>21,500 total upgrades
~20,200 residential
~1,300 commercial

Data through 2011

\$130 million in energy upgrade sales



TESTING INNOVATIONS

Testing New Approaches





Driving Demand	Financing	Data and Evaluation	Workforce Development
22 Different Approaches	21 Combinations	12 Evaluations Being Performed	9 Models Being Tested

Innovations in Driving Demand

Neighbor to Neighbor

Community Groups

Leaderboard

Westport



Connecticut employs an online leader board to track energy upgrade progress, instigating friendly competition among neighbors.

Bainbridge
Island's
energy
dashboard
displays the
island's
collective
real-time
energy use
on
commuter
ferries

Daily electricity use
(our demand peaks twice a day)

1. Property of the peak of the peak

The experiency to any part of the experiency to the first of the experiency to the e

The Southeast Energy
Efficiency Alliance's awardwinning elephant in the
room ads **use humor** to
increase EE awareness



Points 76.400

31,500

25,500

Total Energy USE for a typical year

Your Home:
179,962 kBtu
Average Home:
148,399 kBtu
Efficient Home:
73,030 kBtu

Average home energy use is calculated based on the homes in your community.

Charlottesville
has a
handheld
software tool
that
Americorps
volunteers use
to engage
homeowners
at events

Massachusetts equipped a hybrid SUV with a thermal imaging system to document evidence of wasted energy in homes



Innovations in Workforce Development



In Pennsylvania, contractors are being trained on building performance inspections, sales, and business development to augment their technical skills

Community Power Works' **Community** High-Road **Workforce Agreement** quides workforce standards, wages, hiring requirements, and quality standards for workers involved in the energy uparade program



EnergyWorks' "business incubator" in Kansas City will house 10 offices devoted to fostering growth for green start-ups

ENERGY IMPACT ILLINOIS RESIDENTIAL

Whole Home Energy Assessment and Upgrade Contractors

Find Participating Heating/Cooling Contractors

Community High-Road Agreement: for Seattle's Residential Retrofit Programs





Energy Impact
Illinois'
workforce
liaison will
connect
trainers with
contractors
and match
trained job
seekers to
businesses
looking for
certified
workers

Omaha and Lincoln, Nebraska, partnered with small businesses to purchase EE products in bulk and store them so contractors have a local one-stop-shop from which to obtain products

Kitsap County, Washington, provides
professional sales training to contractors to
better prepare them to promote their work
and the benefits of Kitsap's program

Innovations in Financing



Seattle's Community Power
Works assigns a dollar value to
the carbon emission reductions
from EE upgrades in commercial
buildings and gives the money
back to the building owner

Philadelphia
offers lowinterest loans
with interest
rates tied to
the degree of
EE attained.
The more EE
measures, the
lower the
interest rate





Better Buildings Greensboro combed through existing EE and RE lending programs for ideas on establishing their own incentives







For Energy
Impact Illinois,
Transcend
Equity
Development
Corporation
invests in a
building's EE
upgrades and
uses energy
savings to
recoup its
investment

Community Power Works and Energy Smart customers use **on-bill financing** to make loan payments with their utility bills.

EnergyWorks

ENERGY EFFICIENCY IMPROVEMENTS

Efficiency Maine's revolving loan fund allows owners to repay certain loans at a 4.99% fixed rate over 15 years

Innovations in Data Collection and Evaluation



Connecticut learned to listen to the voice of the consumer when evaluating their program and is now sharing advice with other communities on how to do the same

Neighbor to Neighbor Energy Challenge Listening to the Consumer **Behavior Analysis Workshop**



400 -

300 =

200 -

100 -

Michigan is using experimental design principles to learn from dozens of neighborhood **sweeps** that will inform future statewide EE efforts

pre-approvals

Energize Phoenix is partnering with researchers at Arizona State University to evaluate how inhome energy dashboards influence **residents**' energy use

behaviors



Portland uses a semi-customized CRM platform that enables the program, contractors, and consumers all to see where a customer is in the upgrade program process at any time, along with their next steps.

Austin's Best Offer Ever promotion returned great Best Offer Ever **Promotion Results** participation and nearly 600 564 564 594 upgrades, thanks in part to real-time customer tracking that enabled the program to identify and fix Energy Energy mismatches in evaluations1 upgrades contractor capacity vs expiring loan



Maryland's Be SMART Program: Financing for Energy Efficiency





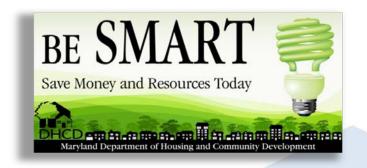
Maryland



\$20M GRANT

- Residential: Be SMART Home loan option; Residential Rebate
- <u>Multifamily</u>: Be SMART Multi-Family -- Revolving loan fund run by Maryland Department of Housing and Community Development
- <u>Commercial</u>: Be SMART Business -- \$25M from state for schools, only installation not audit, designs. DHCD gave MEA \$2M for it
- Agriculture: High energy users targeted; Goal of 8-16 farms
- <u>Contractors</u>: Pipeline of 63 contractor applications received and being re-evaluated for program.
- Code Training: To date, 18 trainings with 795 participants





Website and Information Line www.mdhousing.org/besmart

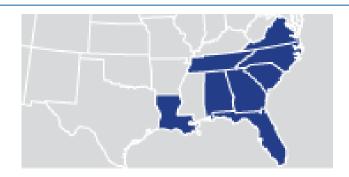
1-855-876-5717 or 410-514-7740



Virginia



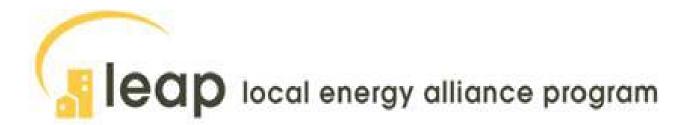




- EECBG AND SEP GRANTS
- EECBG: \$20M
 - 13 cities in 8 states and 1 territory
 - Atl. & Decatur, GA; Carrboro, Chapel Hill, & Charlotte, NC; Charleston, SC; Charlottesville & Hampton Roads, VA; Huntsville, AL; Jacksonville, FL; NOLA; Nashville, TN; U.S. VI
 - Partnerships with local nonprofit, Regional Energy Alliances (REAs)—to undertake projects in Charlottesville, Richmond, Arlington County in N. VA, Blacksburg and Roanoke

Virginia



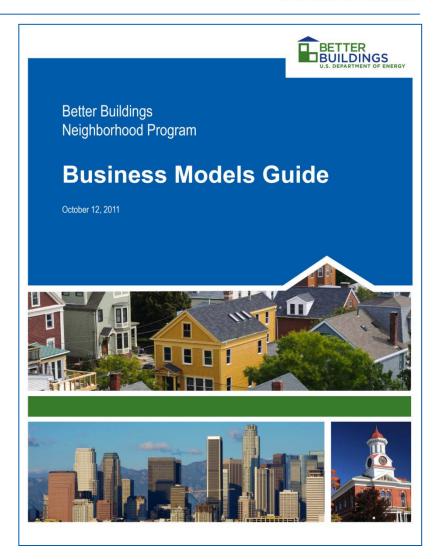


- EECBG AND SEP GRANTS
- **SEP**: \$2.9M
- LEAP is a 501c3 nonprofit; Serves central, northern VA
- Home Performance with ENERGY STAR; BPI certification, test out, and verification of energy savings required
- \$250 rebate on assessment, \$1,000 rebate for whole home improvements with 20%+ energy savings
- "1-stop-shop" IDs, bundles up to \$1,250 in other rebates

BUSINESS MODELS STUDY



- January through July 2011
- Interview and analyzed six key actors in the market:
 - Remodelers
 - HVAC Contractors
 - Home Performance Contractors
 - Retailers
 - Utilities
 - Non-utility program administrators
- What are their business models



Much more information available



Better Buildings Neighborhood Program

Better Buildings Neighborhood Program

SEARCH

Share

Search Help >

Printable Version

HOME

ABOUT

BETTER BUILDINGS PARTNERS

INNOVATIONS

RUN A PROGRAM

TOOLS & RESOURCES

NEWS

EERE » Building Technologies Program » Better Buildings Neighborhood Program



The Better Buildings Neighborhood Program is helping over 40 competitively selected state and local governments develop sustainable programs to upgrade the energy efficiency of more than 100,000 buildings. These leading communities are using innovation and investment in energy efficiency to expand the building improvement industry, test program

delivery business models, and create jobs.

Quick Links Better Buildings in Your Neighborhood Access Tools and Resources Government/Program Professionals Get Started Run a Program Better Buildings Partners Read About Better Buildings Learn About Energy Upgrades Home/Building Owners Get New Ideas Read About People Who Media Professionals

What's new with the Better Buildings Neighborhood Program?

Promising Approaches



Partners offer more attractive financing options and larger incentives to customers who pursue greater energy efficiency savings.

Have Upgraded Their

Buildings

Program partners are testing innovative ways of delivering energy efficiency upgrades:



New Materials and Resources

May 2012

 Read new Partner stories: Energize New York and Energy Upgrade California

April 2012

- Watch Seattle's Partner Spotlight video
- Read new Partner story—Indianapolis
- Explore new promising approaches see below

Make Connections and Learn From Colleagues!

Residential Energy Efficiency Solutions: From Innovation to Market Transformation

July 9-11, 2012 Arlington, VA

Learn more and register



Get Inspired!



THANK YOU