

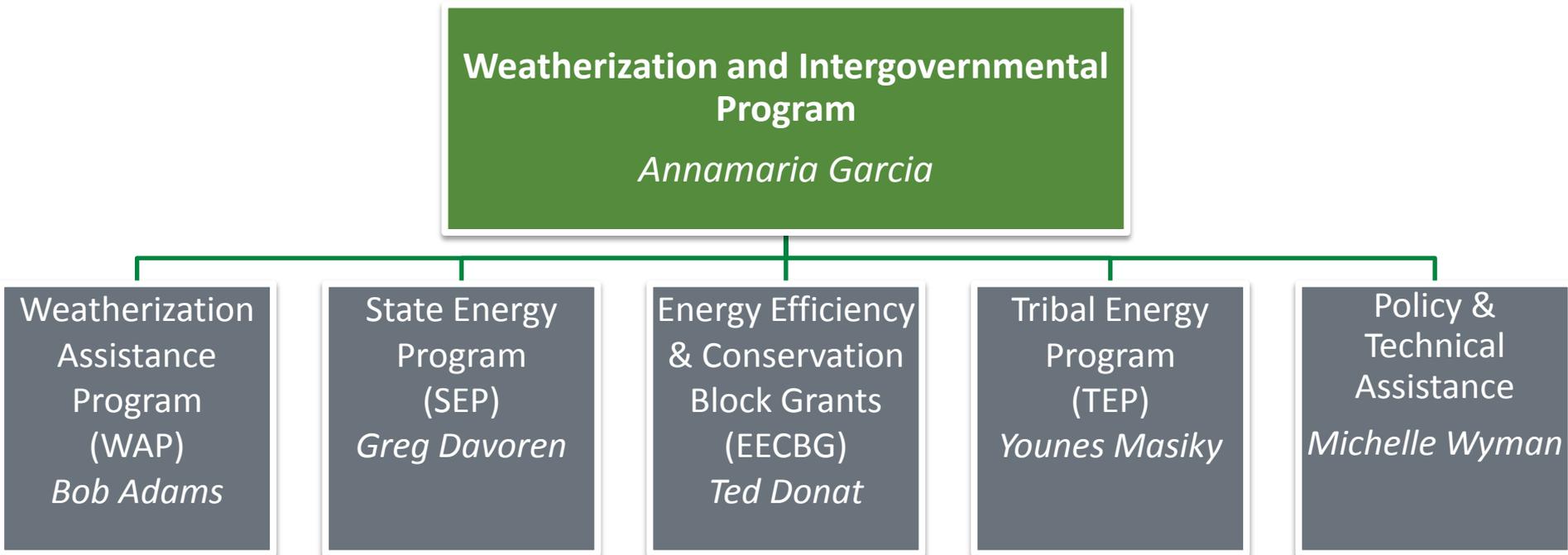
2013 STEAB Board Meeting

Update from DOE's Weatherization & Intergovernmental Program (WIP)

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WIP Structure

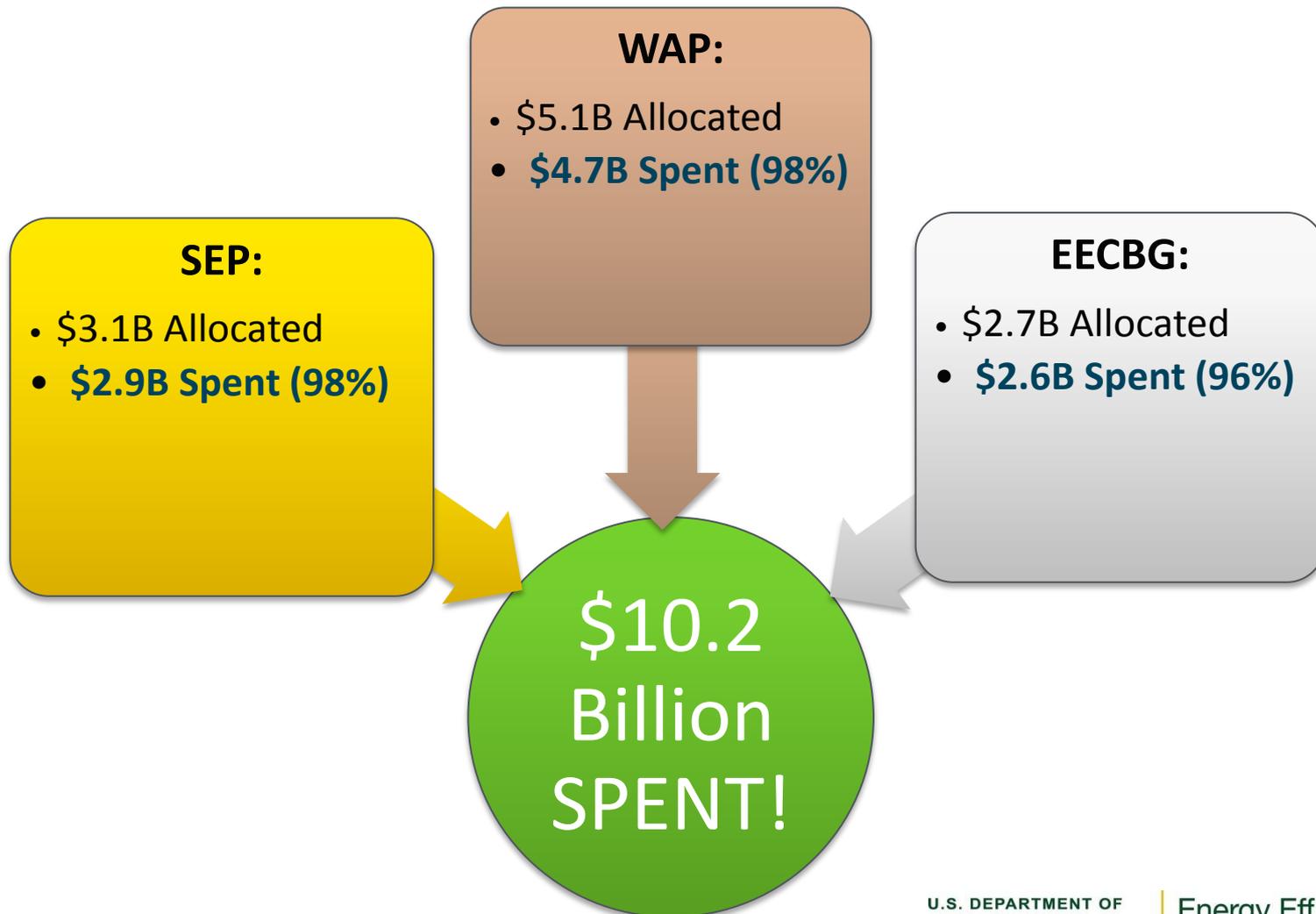


DOE/WIP goals:

1. **Save Energy!**
2. Collaborate with grantees to create successful energy efficiency programs
3. Understand what makes a successful program
4. Share this information with State Energy Office networks and stakeholders like NASCSP
5. Replicate successes across the country

Recovery Act: What Was Spent?

Total Spending as of March, 2013



Recovery Act: SEP and EECBG Success

Select achievements through December 31, 2012:

- **Retrofit of 190,000 Buildings for Energy Efficiency (1.4 billion square feet)**
- **Installation of Renewable Energy Systems with a total capacity of 800,000 kilowatts**
- **Installation of 300,000 energy efficient traffic signals**
- **Installation of more than than 200,000 energy efficient streetlights**
- **More than 10,000 Jobs Created or Retained during a peak Recovery Act period (January 1 – March 30, 2011)**



Weatherization Snap Shot: 2009 to Present

Recovery Act and Base since 2009: Weatherized more than **ONE MILLION homes**

Job Creation: Weatherization created the seventh largest jobs market throughout the Recovery Act – supporting as high as **15,400 living wage jobs**. It now ranks second in the portfolio while supporting over 5,000 direct jobs

Estimated Energy Savings:

- Based on an annual energy savings of 29 million British Thermal Units (Btu) per home weatherized, the weatherization of more than one million homes has contributed to a total annual energy savings of **28.7 trillion Btus** to date
- Based on a Green House Gas (GHG) savings of 2.65 metric tons of Carbon Dioxide per home retrofit, the weatherization of over one million homes has contributed to **over two and a half million metric tons of GHG emissions avoided** through reduced energy consumption to date

A 2005 evaluation conducted by Oakridge National Laboratory calculated the estimated annual energy savings in Btus and Greenhouse Gas (GHG) savings in metric tons of Carbon Dioxide per home weatherized. (<http://weatherization.org/reports/ORNLCENL483.pdf>)

SEP Competitive Awards: A New Opportunity

SEP Funding Profile FY08-12

	FY 2008	FY 2009*	FY 2010	FY 2011	FY 2012
Formula	33	25	25	39	30
Competitive	7	7	21	5	14
Technical Assistance	4	18	4	6	6
TOTAL	44	50	50	50	50
*ARRA not included - All amounts shown in millions of dollars					

- SEP's Competitive Funding allows DOE and State partners to invest in high value projects to advance State-level energy efficiency policy initiatives.
- Your programs will yield models that can be replicated across the U.S. supporting our shared goal of saving energy.

FY10 Competitive: Strengthening Building Retrofit Markets

- \$25.5 million to assist 7 states in developing targeted building retrofit markets in the residential and commercial sectors
- As of March, 2013, **\$11.9 million (46%) is spent** and more than **600 residential retrofits** are completed

MA, AL, VA, WA \$11.1 M <i>Residential Retrofits</i>	NV \$5 million <i>Residential Retrofits</i>	ME \$4.5 million <i>Multi-family Retrofits</i>	MI \$4.9 million <i>Commercial Retrofits</i>
<ul style="list-style-type: none"> • 12,150 retrofits across all 4 states by 2013 • Reach 75,000+ homes by 2021 • Energy modeling and benchmark implementation 	<ul style="list-style-type: none"> • Retrofit 5% of state's single-family residences by 2021 • Innovative incentive and financing mechanisms 	<ul style="list-style-type: none"> • Reduce energy consumption by 25% in 2% of eligible units by 2013 • Sustainable financing models to reach 19% of buildings by 2021 	<ul style="list-style-type: none"> • EE retrofits in 2% of retail food businesses, convenience stores & restaurants by 2013 • Sustainable financing models

FY10 Competitive: Setting Energy Savings Targets

\$3 million to assist 4 states in generating the necessary policy and program frameworks to support short and long-term investments in energy efficiency.

	TARGET SAVINGS	PARTNERS	MILESTONES COMPLETED	MODELS/ BEST PRACTICES
ALASKA	15% of 2010 use levels by 2020	<ul style="list-style-type: none"> state and federal government utilities state legislative offices statewide non-profits Universities and tribes 	<ul style="list-style-type: none"> End Use Study Policy Report Needs Assessment EE Map Stakeholder Engagement 	<ul style="list-style-type: none"> EE Policy Recommendation for Alaska (Policy Report) Public Education and Outreach
TEXAS	1% of market served by the selected LOUs in TX	<ul style="list-style-type: none"> 72 cities Electric cooperatives River authorities Small, joint action electric agencies 	<ul style="list-style-type: none"> Presentation to TX Public Power Authority Interviews with MOU reps 	<ul style="list-style-type: none"> EE Best Practices Guide EE Budget and Saving Estimate Calculator
MISSISSIPPI	1% over 3-5 years. PSC to set actual target. TBD	<ul style="list-style-type: none"> MS Public Service Commission Office of the Governor MS Energy Institute 25x'25 Attorney General MS State Univ. 	<ul style="list-style-type: none"> EE is a cornerstone of MS's Oct. 2012 Energy Plan The influence of the potential study on the PUC EE goal to be set in 2013. 	<ul style="list-style-type: none"> Collaborative and one-on-one stakeholder engagement. Creative integration of EE into parallel policy and program initiatives.
KENTUCKY	1% annually statewide by 2016; 18% by 2025	<ul style="list-style-type: none"> Electric and gas utilities and cooperatives 	<ul style="list-style-type: none"> Voluntary agreement by utilities to share data. 	<ul style="list-style-type: none"> The use of both collaborative and one-on-one stakeholder engagement.

FY11 Competitive: Setting Energy Savings Targets

New Hampshire: \$379,330

<p>TARGET AND SCOPE:</p> <ul style="list-style-type: none">• SB 323 of 2010: Required PUC to contract for an independent study of energy policy issues and submit the results to the Energy Efficiency and Sustainable Energy Board.• Achieve 1% EE improvement statewide based upon an to-be-established baseline.	TBD
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OBJECTIVE:

Establish a specific and measurable goal or set of EE goals for the State of New Hampshire within the electricity and natural gas sectors, and non-regulated thermal fuels. Once goal(s) are established in Phase I, NH will oversee a process to ensure that the state begins to implement the plan in Phase II.

<p>PROGRESS ON AWARD:</p> <ul style="list-style-type: none">• Activities noted in NH's PMP timeline have been accomplished this program year. These include participation at PUC hearings, stakeholder meetings, and establishment of an Energy Efficiency Working Group.• The next Fiscal meeting will be in January (no date yet) and OEP will be in the queue for that one.• The consultant has been contracted and will start work as soon as Fiscal and G&C approvals are secured.
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FY11 Competitive: SEEP Grants

Initiating a State Energy Extension Partnership (SEEP) - \$621,000 for 3 states to establish and maintain partnerships with State Agricultural Cooperative Extension Services for accelerating adoption of energy efficiency and renewable energy to address U.S. energy use.

- Wisconsin has revitalized the previously dormant Energy Independent Communities Program with their SEEP grant. This funding is critical to assisting the University of Wisconsin Extension in educating the 142 “communities” (school districts, tribes, counties, cities, towns, and/or villages) and helping develop Energy Management Plans that will create a roadmap to reducing WI’s dependence on foreign energy resources by 25% by 2025
- Kentucky is working through its network of extension agents to provide education outreach to residential, commercial, and 4-H youth clients
- Nebraska is expanding its Agricultural Water Management Demonstration Network to include a co-benefit of quantified water and energy savings, and augmenting its training on adoption of the 2009 International Energy Conservation Code

SEP FY12 Competitive: The Numbers

Leading by Example

Develop cost-saving whole-building retrofit programs across a broad segment of their public building portfolio

AZ, HI, IL, IA, MD, MA, MI, MO, NJ, NM, NY, RI, WI

Setting Energy Savings Targets

Generate the necessary policy and program frameworks to encourage cost-effective energy efficiency investments and establish or increase statewide energy savings goals by 2015

WA, AK, TX*, KY*, MS*, NH***

Sustainable Financing Programs

Develop, improve and implement comprehensive programs that can finance energy upgrades to public facilities, including state and municipal buildings, National Guard assets, school districts and water and wastewater treatment facilities

CA, AK, NV, WA, MN, NC, VA, KY

SEP FY12 Competitive Awards

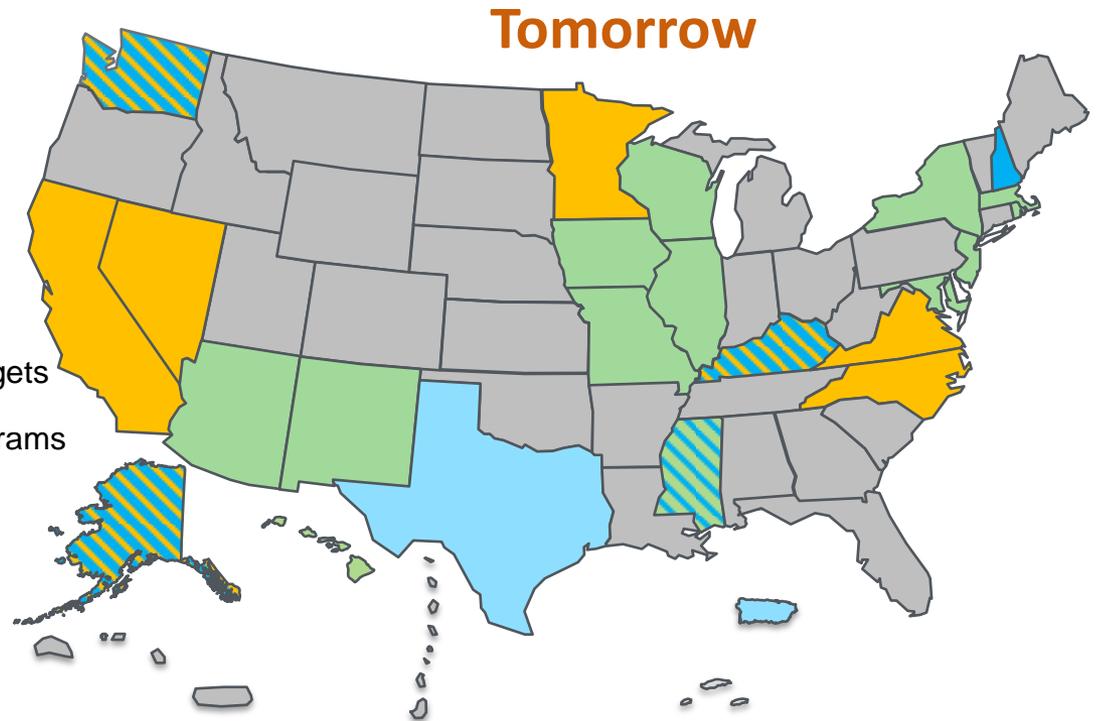
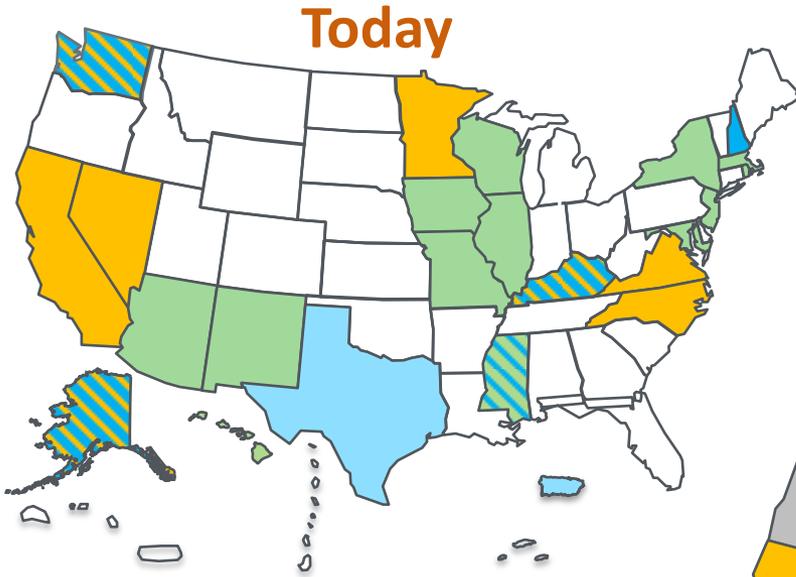
Area	No. of Awards	Funding Levels
1	13	\$8,000,000
2	1	\$500,000
3	8	\$5,000,000
Total	22	\$13,500,000

**SEP FY '10 Competitive*

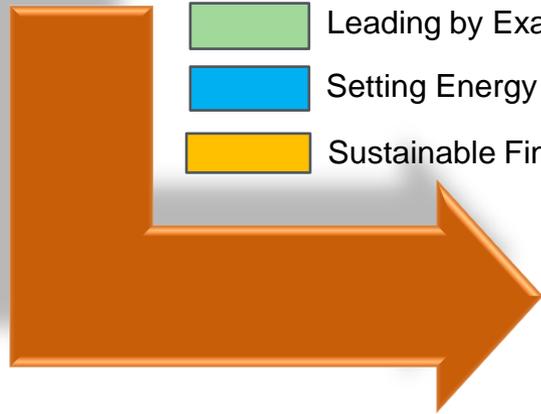
***SEP FY '11 Competitive*

Our Shared Goal: Increased Efficiency Across the U.S.

If we can work together to find the best policy solutions to today's energy needs, we can implement these ideas across the nation for a more energy efficient tomorrow.



- Leading by Example
- Setting Energy Savings Targets
- Sustainable Financing Programs



DOE and State Goals

DOE Goals:

1. *Save Energy!*
2. *Collaborate* with the Competitive Cooperative Agreement awardees to create successful energy efficiency programs
3. *Understand* what makes a successful program
4. *Share* this information with the SEO networks and stakeholders like NASEO
5. *Replicate* successes across the country

State Goals:

1. *Save Energy!*
2. *Develop* easy and effective energy efficiency policy frameworks
3. *Implement* them successfully
4. *Learn* through the process
5. *Share* lessons learned with peer states, cohorts and DOE

How We Get There: Teamwork

All States:

AZ, HI, IL, IA, MD, MA, MI,
MO, NJ, NM, NY, RI, WI, WA,
AK, CA, MN, KY, NV, NC, VA,
AK*, TX*, KY*, MS*, NH**

Area 1: Leading by Example

Area 2: Setting Energy Savings Targets

Area 3: Sustainable Financing Programs

Project Officers

Policy Advisors

*SEP FY '10 Competitive
**SEP FY '11 Competitive



Weatherization Assistance Program: Investing in the Future

WAP continues investing in the foundation for high quality energy upgrades in America's homes.

- The Guidelines for Home Energy Professionals - *Summer 2013*
- The WAP Standardized Training Curriculum - *Available Now*
- National Weatherization Training Portal - *Available Now*
- Multifamily Suite of Resources - *Fall 2013/Winter 2014*
- Weatherization Plus Health Initiative - *Ongoing*

The **Weatherization Plus 2015** Initiative is an expanded focus on whole-house energy usage and whole-community efforts.

WAP is reviving the initiative started in 1999 and carried through mid-2006 with strategic planning efforts to reach the goals of four subcommittees:

- Leverage assistance through training centers
- Developing new markets
- Improving quality
- Messaging of program

Guidelines for Home Energy Professionals

With Recovery Act funds, WAP is developing guidelines for work quality, training effectiveness and professional certifications that will form the basis for the residential energy upgrade market

Standard Work Specifications

Doing the work right

- Defining the desired outcomes for any weatherization or home performance task to be effective, durable and safe. The SWS online tool will go live in March, 2013.

Accreditation of Energy Efficiency Training Programs

Training others to do the work right

- Verifies that organizations training workers in the industry are qualified to teach to national standards and develop a highly skilled workforce



Home Energy Professional Certifications:

Proving that you can do the work right

- National roll-out of the certifications will begin between May and August, 2013

Weatherization Plus Health



Voluntary initiative sponsored by DOE to enable the comprehensive, strategic coordination of resources for energy, health, and safety in low-income homes



Outcome: enhanced collaboration among public agencies and private organizations, yielding safer and more energy efficient homes, lower home energy costs, and healthier families

Looking Ahead: Weatherization Plus 2015 Initiative

An expanded focus on whole-house energy usage and whole-community efforts.

Since 1999, Weatherization has engaged in a strategic process to outline 5-year goals for the Program to achieve.

The Wx Plus 2015 initiative faces challenges for planning for the program in a diminished resource environment while creating a framework that will support expansion and revitalization as resources are available.

A Committee report published in Fall of 2012 outlines the following topics :

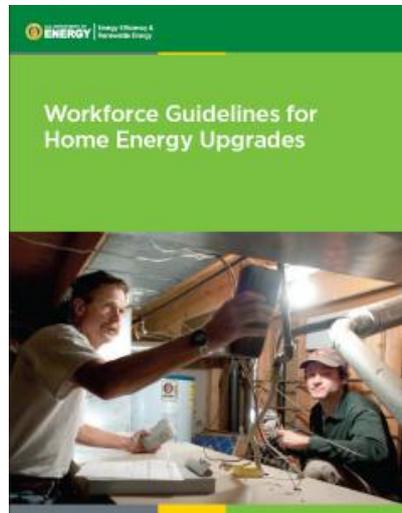
- Streamline the Program
- Improve the Quality of Services
- Leverage Additional Resources
- Take the Communications Initiative
- Encourage New Market Development



How DOE Will Continue to Help You

- **With Training and Technical Assistance**
 - The Solution Center: > 600 resources such as webcasts, toolkits, guidebooks, calculators, databases, curricula, blog, etc.
 - Community Energy Strategic Planning Academy: an interactive and collaborative workshop forum

- **National Residential Retrofit Guidelines**
 - Workforce Guidelines for Home Energy Upgrades



Looking Forward: Energy Efficiency is Top Priority



***A Growing
Energy
Efficiency
Industry***

*All of our programs grow stronger
when we exchange our best ideas and
lessons learned!*



QUESTIONS?

Thank You

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Energy Efficiency &
Renewable Energy

Better Buildings Challenge:

Goals

1. Make commercial & industrial buildings 20% more efficient by 2020
2. Save more than \$40 billion annually for US organizations
2. Create American jobs

Partners and Allies:

100+ public, private and non-profit organizations:

23 Commercial Partners

10 Better Buildings, Better Plants Partners

36 Community Partners

17 Education Partners

13 Financial Allies

2 Utility Allies



BBC set up to drive replicable, applicable business solutions

Partners / Allies	Decision Frameworks	Barrier Breaking Strategies	Services/ Best Practices	Supporting Resources
Commercial real estate Retail Food service Hospitality Healthcare Government Communities Industry Financial Utilities	Savings targets Energy management Continuous improvement (SEP)	Set-aside funds Metering strategies Executive compensation Facility energy champions Green Leasing	Performance contracting RCx Energy services High efficiency retrofits Lab savings program Utility programs with data access	Training materials Professional certifications Assessment tools Building efficiency scoring tools Design tools Measurement protocols



Implementation Models

A replicable process that an organization has used to achieve its energy reduction goals

- ▶ Replicable solutions from leaders in the marketplace
- ▶ Provides specific strategies and actionable tools that other organizations can adopt
- ▶ Will be integrated into the BBC Solution Center – for the common barriers in the market
- ▶ It may be an organizational/ business decision or process, financing or implementation strategy that has addressed a barrier within the organization and/or within the market.

Examples:

- ▶ 3M established a special fund devoted solely to EE projects so they don't get approved via normal budgeting process. Overcomes financial barrier – worthwhile efficiency projects often go unfunded due to competing demands on capital
- ▶ Delaware State University secured construction financing via the Delaware Sustainable Energy Utility's Energy Efficiency Construction Bonds for an energy services performance contract across 26 buildings that will result in 25 percent energy savings
- ▶ University of California, Irvine's Smart Labs program has successfully reduced energy consumption in lab space by more than 50 percent



Development of New Financing Models

- ▶ Demonstrate to the market that there are better ways to create value through innovative finance structures
- ▶ Growing new markets is slow when it has to be one transaction at a time
- ▶ By highlighting successes through the Better Buildings Challenge precedents are established for the market to follow, increasing lead generation and deal flow

Successful Transactions:

- ▶ Citi completed a private funding of a Sustainable Energy Utility for \$73 million
- ▶ Green Campus Partners has funded 13 upgrade projects worth over \$43 million since June 2011
- ▶ Transcend Equity did the first Managed Energy Services Agreement in NYC
- ▶ Abundant Power has a new public/private partnership with Alabama; already over \$3 million in new projects
- ▶ Renewable Funding launched Commercial PACE financing in San Francisco with a \$100 B capacity

DOE highlight actions of Challenge Partners and Allies

➤ BBC Website

- www.betterbuildings.energy.gov/challenge
- Highlights partners commitment and progress
- Will grow to include showcase projects, implementation models

▶ BBC Events and Recognition

▶ Solutions Center