## The Better Buildings Neighborhood View

How energy efficiency is improving lives, neighborhoods, and the economy

From the U.S. Department of Energy Better Buildings Neighborhood Program



Progressing Toward a Better Future Driving Demand Forward-Thinking Financing Building a Better Workforce Benefitting From Energy Efficiency: A Success Story

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"This program is creating jobs. It's created my job, it's created some of my colleagues' jobs, and hopefully it's helping businesses maintain those jobs that they already have."

-Kenny DeBauche, Commercial Energy Advisor, Boulder, Colorado

Watch the video to learn more!

### **Progressing Toward a Better Future**

Happy new year from the Better Buildings Neighborhood Program! 2011 was a great year for our program and partners as we reached some important milestones:

- By the end of September 2011, Better Buildings Neighborhood Program partners achieved upgrades in more than 13,000 homes and more than 600 commercial buildings across the country.
- As of November 2011, more than 25 partners established agreements with financial institutions to help provide financing for energy upgrades.
- Partners have launched energy efficiency upgrade programs in more than 40 Better Buildings neighborhoods.

We look forward to continued success among <u>Better Buildings Neighborhood</u> <u>Programs</u> throughout 2012. The *Better Buildings Neighborhood View* will not only share these ongoing successes, but also provide you with valuable information and resources for creating or enhancing your energy efficiency program. Watch for the *View* in your inbox every month.

#### Consumer Energy Tip

Pass it on: In a typical home, 43% of the utility bill goes toward heating and cooling. Small steps can make a big impact on these bills. Keep the south-facing window draperies and shades open during the day in winter to allow the sunlight to enter your home and closed at night to reduce the chill from cold windows. Connect with

## **Driving Demand**

#### A Calculated Approach to Saving Energy

DOE's Office of Energy Efficiency and Renewable Energy has equipped the building industry with a new cost and energy savings tool: <u>EnergyPlus v7.0</u>. This tool calculates the energy used for heating, cooling, ventilating, and lighting to aid in the design of more efficient residential and commercial buildings. The wide-ranging parameter updates include various HVAC system types, windows and daylighting data, zone and surface models, and new mechanical ventilation controls based on ASHRAE Standard 62.1. Learn how <u>EnergyPlus v7.0</u> can provide useful energy modeling data for your next building upgrade.

the Better Buildings partner in your region to learn how.

## **Innovation Nation**

Mooove over energy bills! The <u>Missouri Agricultural</u> <u>Energy Saving Team – a</u> <u>Revolutionary Opportunity</u> (<u>MAESTRO</u>) is saving farmers substantial amounts of energy after implementing new, efficient equipment, such as air compressors for milking cows, and installing more efficient lighting.



### **Related Events**

ACI National Home Performance Conference March 16–30, 2012 Baltimore, Maryland

### Are You Targeting Middle Income Households? Maybe You Should!

One-third of all U.S. residential energy goes to middle income households—the 38.5 million families that make between \$32,500 and \$72,500 per year. This important sector of the American public is the subject of a new Lawrence Berkeley National Laboratory (LBNL) study, <u>Delivering Energy Efficiency to</u> <u>Middle Income Single Family Households</u>, which looks at the steps that energy efficiency program managers and policymakers can take to deliver significant savings on these families' home energy bills. <u>Read the full report</u> to learn more.

#### Take a Full Spectrum Approach to Your Program's Marketing Strategies

Everyone engages with the world differently. Some people are avid practitioners of sustainable living, while others want to be better environmentalists but aren't sure how. Some are actively resistant to greenthemed marketing, and others just don't care. How do you touch on these various segments of the consumer population without isolating anyone? The Shelton Group recently released a white paper, <u>Full Spectrum Insights: A New Way to Motivate Sustainable Behaviors</u>, which provides an analysis of how to create targeted marketing for the green crusader to the green-ambivalent and resistant. <u>Read the full paper</u> to get some deeper insights into how to reach all of your target audiences.

#### **Use Outreach To Create Energy-Efficient Cities**

In late October 2011, the Center for Energy and Environment (CEE) released the <u>results</u> of its latest initiative—the Energy-Efficient Cities project—a one-stop, whole-house approach to energy efficiency for 6,000 homes in eight Minnesota cities. Leveraging a community-based outreach strategy to drum up a high level of participation, the program exceeded its original participation goals. A total of 6,922 households have completed a home energy visit, and 1,474 homes completed major energy efficiency upgrades from July 2009 through June 2011. What worked for this program? The report details city-by-city program results through June 2011 and is available on the <u>CEE website</u>.

#### New Tool Will Help Homeowners Score Energy Savings

In 2011, DOE conducted a Home Energy Score pilot program with 10 partnering organizations that provided feedback and recommendations on the Department's new Home Energy Score Tool. The tool works similarly to a vehicle's miles-per-gallon rating, providing a ranking of 1 to 10 on how well the home is performing and what steps can be taken to improve or upgrade the home's energy score.

Although the tool is not yet available to the public, you can <u>view webinars</u> to see how it will work and engage with an interactive example of what a home assessment's label looks like.

Home Energy Score is also actively recruiting partners for a national launch. Partners will include state and local energy offices, energy-related organizations, utilities, and co-ops. Qualified assessors under these programs must be Building Performance Institute certified or a Residential Energy Services Network Provider and must take DOE's online training and tests. Partners are asked to commit, at a minimum, to scoring 200 homes in 12 months and fulfilling quality assurance requirements. Interested in signing on as partner? Please email <u>Home Energy Score</u> with the subject header "Interested Partner" as soon as possible.

#### **Forward-Thinking Financing**

#### **Utilities Are Plugging in to Financing Programs**

Southwest Energy Efficiency Project (SWEEP) has published <u>Energy Efficiency</u> <u>Finance: Options and Roles for Utilities</u>, a report that describes different approaches to energy efficiency finance taken by utilities. The report suggests some solutions to the financing challenges that energy efficiency programs and utilities face, including providing better terms or conditions, or more convenient access to capital. Eleven case studies of energy efficiency finance programs implemented by both large and small utilities are included in the report, along with detailed program descriptions and data on program results. The report concludes that a variety of approaches to energy efficiency financing can be effective for expanding major energy efficiency projects in both the residential and small commercial building sectors.

#### What's Working With On-Bill Programs

Although energy efficiency projects are often associated with large upfront costs, a <u>new study</u> reveals that on-bill financing may help alleviate this burden. On-bill financing refers to a partnership between the homeowners and the utility, whereby the utility pays for energy efficiency improvements upfront, and the building owner repays the utility through monthly payments that are tacked onto the regular utility bill. This method can reduce first-cost barriers in several buildings markets, some of which have traditionally been underserved by energy efficiency finance options. A new report from the <u>American Council for an Energy-Efficient Economy (ACEEE)</u> details how on-bill financing programs work and analyzes the key elements for their success, while examining potential barriers to obtaining optimal results. The report also addresses what obstacles might stand in the way of adopting this new financing mechanism from the utility, consumer, and financial industries' perspectives. <u>Read the ACEEE report</u> to learn more.

#### **Building a Better Workforce**

#### **Energy Professionals Can Help Homeowners Breathe Easy**

Remodeling may seem like a dirty job, but it shouldn't create indoor air quality or safety risks. EPA has released its new <u>Healthy Indoor Environment Protocols</u> for Home Energy Upgrades to help the home energy industry identify, manage, and reduce health risks during home energy upgrades and remodeling projects. Gina McCarthy, EPA Assistant Administrator for the Office of Air and Radiation, notes that, "Homeowners, occupants, and the energy services industry will benefit greatly from this simple and clear guidance for addressing critical indoor air quality risks during home energy upgrades. Following these protocols will help families save money on utilities while safeguarding their health." The protocols serve as a companion document to DOE's <u>Guidelines for Home</u> <u>Energy Professionals</u>. The guidelines are intended to foster a skilled workforce that will boost homeowners' confidence in the retrofit industry while increasing demand for home energy retrofits. Together, the DOE guidelines and EPA protocols will help facilitate increased home energy efficiency, improve the quality of work performed, and provide healthier homes for America.

Explore <u>DOE's Guidelines for Home Energy Professionals</u> and learn about <u>EPA's</u> Healthy Indoor Environment Protocols for Home Energy Upgrades.

#### **Benefitting from Energy Efficiency: A Success Story**

# Making an Impact on Energy Use in Illinois

For building owners and contractors, making energy efficiency improvements to a property is a good idea, right? Check. How about making cost-effective energy efficiency improvements that reduce operating and maintenance costs and provide comfortable apartments for tenants, all made possible by low-cost financing? Checkmate.

As a seasoned property manager with more than 25 years in the business, John Brauc of Checkmate Realty and Development saw the value in making such energy efficiency improvements. That's why Brauc worked with Energy Impact Illinois and the Energy Savers program to upgrade his 23-unit apartment building on South Essex Avenue in Chicago. Energy Impact Illinois aims to demonstrate that each of us has the power to reduce our energy consumption to make our homes, neighborhoods, cities, and the world a better place immediately. For singlefamily homeowners in Northern Illinois, Energy Impact Illinois developed MyHomeEQ, an online calculator that helps estimate annual natural gas and electrical costs and then recommends energy improvements that will help reduce energy use. Learn more about this free, online tool.

Energy Impact Illinois helped connect Brauc with the Energy Savers program, an Energy Impact Illinois program for multifamily building owners, to identify the best energy efficiency investments. CNT Energy inspected the building and provided Brauc with a written report recommending cost-effective improvements that could reduce annual electricity and natural gas bills by 33 percent. Additionally, Community Investment Corporation, an Energy Impact Illinois lender, provided Brauc with a low interest loan of \$85,000, allowing him to invest in several important improvements to the building.

Today, thanks to the expert guidance and financing options through Energy Savers and Energy Impact Illinois, Brauc has equipped his building with a new, energy-efficient boiler and water heater, new boiler controls, and insulated heating and hot water pipes. Brauc was also able to air seal and insulate the building, which can have a big impact on energy bills, and, according to Brauc, has made a big difference in tenant comfort. The Energy Savers program "did everything from inspecting the building and recommending the upgrades that could save the most money, to helping find qualified contractors and checking to make sure that work had been done right," Brauc says.

Learn more about working with the Energy Savers program, and check out

<u>Energy Impact Illinois' Energy Bills Web series for an entertaining and informative look at home energy efficiency.</u>

#### Share the Savings

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