EESI

**Environmental and Energy Study Institute** 

# Fact Sheet

## **On-Bill Financing:**

### Helping Homeowners Implement Energy Efficiency Improvements

#### July 2012

In the past several years, on-bill financing programs have been gaining attention around the country as a way to finance residential energy efficiency improvements. On-bill financing programs are operating, or under development, in a number of states to eliminate the upfront cost of residential energy improvements for the homeowner by providing a low-interest rate loan. Rather than having a traditional loan from a bank or lending institution, the on-bill financed loan is with the utility and the loan's repayment is added onto the customer's monthly utility bill.

It is often difficult for many homeowners to come up with funding or to obtain an affordable loan from a bank or lending institution to implement energy efficiency improvements, even more so in these challenging economic times. Rebate programs have definitely helped, but large segments of the residential sector do not have the financial resources to participate in traditional rebate programs. Plus, rebate programs often fall short of encouraging the comprehensive whole-house retrofits involving HVAC replacement, insulation, and other measures that are needed to achieve significant "deep impact" energy savings (20 percent or more).

This is where on-bill financing programs are gaining steam. Along with the convenience of having both energy savings and loan payments on the same bill, the loan's repayment term is structured to be longer than the payback period from the expected energy savings, resulting in a positive cash flow for the customer.

#### **TYPES OF ON-BILL FINANCING**

On-bill financing has generally been grouped into either tariff-based systems or on-bill loans. However, the programs can differ widely due to varying utility and regulatory structure and state legal requirements.

Often in a tariff-based financing program, the cost of the energy efficiency measures are tied to the meter, not the homeowner, which allows the repayment period to extend beyond the current homeowner to the new buyer should the house be sold. The next customer at that meter continues to pay the financing. This is one of the few EESI, with funding from the Doris Duke Charitable Foundation, has been partnering with South Carolina co-ops to implement an on-bill financing pilot program for their member homeowners. Central Electric Power Cooperative, the Electric Cooperatives of South Carolina, and eight South Carolina cooperatives launched the "Help My House" program in 2011 with a loan from the USDA Rural Economic Development Loan and Grant program, enabling the pilot to offer attractive 2.5 percent financing, the first time this type of loan was applied to energy efficiency. By February 2012, 125 homes had received "whole house" retrofits with an average loan of approximately \$7,700 and average energy savings predicted at nearly 11,600 kWh/year (6.0-year payback). The net benefit (net savings minus loan payments) to the participating homeowners is anticipated to average over \$400 annually. This meter-based on-bill financing pilot demonstrated a level of projected energy savings (35 percent on average) substantially higher than many traditional utility rebate-focused residential retrofit programs are achieving. The Pilot homes are currently undergoing a year-long measurement phase to confirm the projected results.

financing options that can also successfully address the split incentive issue of landlords and tenants in rental properties, with the tenant paying the utility bill and the energy efficiency investment loan repayment.

On-bill loans, however, usually operate like personal or business loans in which the loan is non-transferable and must be paid off at the time ownership changes hand. However, some more recent on-bill loan programs have been tied to the building meter and operate as an energy services agreement.

While residential on-bill financing programs are relatively recent, successful on-bill financing programs for the municipality, university, schools and hospital markets and small commercial markets have been around for a decade or more. In both residential and non-residential markets, the utilities can target the heavy energy users and direct marketing and outreach to eligible, up-to-date bill-paying customers in order to maximize the savings impacts and minimize risk on potential loan defaults. Plus, as loan payments are received, additional loans can be issued to set up a sustainable revolving on-bill financing program.

#### ADVANTAGES AND DISADVANTAGES

According to the U.S. Department of Energy, there are several issues to consider in developing an on-bill financing program:

Advantages	Disadvantages
<ul> <li>Savings paired directly with repayment on the same bill</li> <li>Can use capital from a variety of sources</li> <li>Can be structured to meet the needs of different markets</li> <li>Provides a secure revenue stream since failure to pay is often tied to disconnect</li> <li>Can use past bill repayment as a proxy for credit</li> <li>Allows for longer term investments and can address rental properties (on-bill tariff only)</li> </ul>	<ul> <li>Utilities are often reluctant to take on the role of a financing entity; potential exposure to consumer lending laws and alterations to billing systems are required</li> <li>Can be extremely complicated to set up (on-bill tariff especially)</li> <li>Limited short-term financing (on-bill loan only)</li> <li>Businesses or homeowners must pay off entire loan upon sale of property, which could result in not all of the energy savings being realized (on-bill loan only)</li> </ul>

Source: U.S. Department of Energy: On-Bill Repayment Programs

On-bill financing can be an effective way to attract smaller customers who usually do not have the initial capital to implement comprehensive energy efficiency projects. This unique financing strategy can help many customers with financing barriers, and can lower operating costs and make utility bills affordable—including in rental properties—while achieving the "deep impact" project retrofits that yield 20 percent or more in energy savings.

For more information:

ACEEE Toolkit: On-Bill Financing for Energy Efficiency Improvements Alliance to Save Energy Brief: Paying for Energy Upgrades Through Utility Bills

#### Author: Brian Henderson, Consultant Editor: Carol Werner, Executive Director

The Environmental and Energy Study Institute (EESI) is a non-profit organization founded in 1984 by a bipartisan Congressional caucus dedicated to finding innovative environmental and energy solutions. EESI works to protect the climate and ensure a healthy, secure, and sustainable future for America through policymaker education, coalition building, and policy development in the areas of energy efficiency, renewable energy, agriculture, forestry, transportation, buildings, and urban planning.

This fact sheet is available electronically at <u>www.eesi.org/papers</u>.