

# Can On-Bill Financing Become a Replicable Solution for Rural Electric Cooperatives?

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## ABSTRACT

Rural Electric Cooperatives (co-ops), which serve 12% of the U.S. market, are showing a growing interest in energy efficiency financing. Many on-bill financing (OBF) programs have emerged in the last few years, but only a few have achieved significant volume. What would it take to scale up OBF programs, particularly for co-ops that are typically less regulated and more flexible than investor-owned utilities (IOU's)?

This paper summarizes two programs that provide low-interest loans tied to the premises, not the occupant, eliminating the need for a credit check. Both programs require no down payment and support projects in which energy savings exceed annual loan repayments.

The award-winning HowSmart<sup>®</sup> program at Midwest Energy, a Kansas gas and electric co-op, has lent over \$4 million for about 700 projects since 2007. The program now includes commercial buildings and has spawned HowSmart programs in co-ops in Georgia and Kentucky.

South Carolina replicated features from HowSmart<sup>®</sup> in a 2011 pilot that included eight co-ops, the wholesale electricity provider and the statewide association marketing partner. The pilot retrofitted 125 homes, documenting participation, costs, savings and process along the way. It attracted attention because of recent state legislation enabling OBF, and for pioneering the use of loan funds from the US Department of Agriculture (USDA) Rural Economic Development Loan and Grant (REDLG) program.

The authors, who are deeply involved in these two programs, explain structure and outcomes. They will draw upon the experience of other OBF programs around the country, explain lessons learned and suggest ways that OBF programs could achieve greater scale.

## Introduction

Energy efficiency is not new to co-ops. Almost all of them provide information to their members about efficiency and 96% offer some weatherization or efficiency service (NRECA website). “However, the country’s REC (rural electric cooperative) and G&T (generation and transmission) organizations greatly lag investor-owned utilities in funding DSM programs and capturing cost-effective energy savings as a percent of total electric sales.” (Freischlag 2011)

Interest in energy efficiency appears to be growing among the nation’s co-ops, some of it by choice and some of it mandated by regulation. Eighteen states have some type of energy efficiency resource standard. (FERC 2011) Co-ops in many of these states, including Arizona, Colorado, Michigan, Minnesota and Washington, are subject to at least some provisions of these standards. Co-ops have energy efficiency intentions: “73 percent ... plan on significantly expanding existing efficiency programs in the next two years” (NRECA 2012).

Co-ops are often reluctant to incur debt to finance programs, but many are receptive to the idea of energy efficiency loan programs in spite of this reluctance. A quick search of the Database of State Incentives for Renewable Energy (DSIRE) data base showed that roughly a quarter of the utilities offering loan programs are co-ops (DSIRE 2011).

Energy efficiency loan programs have been around for more than 30 years, but have typically not been wild successes. A report in 2008 reviewed over 150 residential energy efficiency loan programs. Most reached less than 0.1% of potential customers (Fuller 2008).

The lackluster history does not mean that financing programs cannot be successful today. Access to financing is more difficult since the mortgage crisis of 2008. Financial institutions have increased their scrutiny over loan applications just as falling home values have left many potential borrowers with little or no equity to borrow against. As a result, lack of financing has become a larger barrier, which opens the door for innovation solutions.

This paper will discuss the appeal of OBF and then describe a pilot program in South Carolina and a 5-year old program in Kansas. It will address the issue of scalability before concluding with ideas on whether OBF programs will grow and replicate.

## **The Attraction of On-Bill Financing**

Financing programs break down the first-cost barrier. These programs have the potential to achieve energy savings with a lower utility investment. Some financing programs offer low-interest, long term loans, reducing the monthly payment and enabling borrowers to see immediate positive cash flow for efficiency projects.

On-bill financing makes it convenient for borrowers to make loan payments as part of the utility bill. It's convenient for the utility to use the utility bill and their relationship with the consumer to promote on-bill financing. Utilities, especially co-ops, can often offer attractive interest rates because default rates tend to be low, especially when they have the power to disconnect for non-payment. In 2010, less than one-quarter of 1% of co-op electric bills were not collected. (CFC 2011) Programs that have the power to disconnect for non-payment and that enable the utility to tie the loan repayment obligation to the meter can forego the traditional credit check. This enables the program to serve those that are not credit-worthy, which is important to co-ops. The "average household income in the service territories of our member co-ops lags the national average income by over 14%." (English 2011)

The source of funds for on-bill financing programs can vary. The utility can provide the capital or it can be provided by a 3<sup>rd</sup> party. The utility may choose to provide an incentive such as an interest buy-down. (Brown & Braithwaite 2011)

On-bill financing is growing in popularity. A recent ACEEE study identified 31 programs around the country and examined 19, most of which have emerged in the last few years. (Bell, Nadel & Hayes 2011)

Policymakers are helping the growth of on-bill financing. On the national stage, the Rural Energy Savings Program Act, sponsored by Congressman James Clyburn of South Carolina, which proposed nearly \$5 billion in loan authority for on-bill financing, passed the House in 2010 with bipartisan support. (Office of Congressman James Clyburn, 2010) The legislation has resurfaced in the 112<sup>th</sup> Congress, in 2011 and again in 2012. (Cavey 2012)

Progress has been made on the federal level through executive action. The USDA Rural Utility Service (RUS) is now allowing REDLG loans to be used for OBF. And the department is preparing rules that would open up RUS financing to on-bill financing programs at rural electric

cooperatives. (Brady 2012) The National Rural Electric Cooperative Association (NRECA) “is working with Congress and the Rural Utilities Service to develop a national loan program that would provide electric cooperative consumers with low-cost financing for energy efficiency improvements to homes and businesses. These loans would be paid back through energy savings on the electric bill.” (NRECA 2012)

State governments are creating opportunity for on-bill financing. At least 9 states now have legislation supportive of on-bill financing. State regulatory agencies have also acted to enable or at least explore the feasibility of programs. (Bell, Nadel & Hayes 2011)

An impressive list of advocacy groups and nonprofit organizations are supporting the idea of on-bill financing, including the Natural Resources Defense Council, Environmental Defense, the Southwest Energy Efficiency Project and the Alliance to Save Energy.

Support is growing for OBF programs, but questions about the effectiveness and the scalability of these programs remain. Answering these questions requires a deeper look at how OBF programs work.

## **South Carolina Help My House Pilot**

South Carolina’s co-ops, which serve more than 1.5 million consumers, conducted the Help My House Loan Pilot Program in 2011 to examine OBF. Central Electric Power Cooperative (Central), the wholesale power provider for the state's 20 distribution co-ops, is interested in energy efficiency as a cost-effective strategy to help meet growing electrical demand. Member co-ops have been pursuing peak demand reduction for years and have installed more than 150,000 switches to control water heaters. Central and The Electric Cooperatives of South Carolina (ECSC) — the trade association for the state’s co-ops — have also led state and national energy efficiency initiatives with the US Department of Energy and the State Energy Office.

Central’s Board adopted energy efficiency objectives in 2010 to increase energy efficiency in the residential sector, to reduce wholesale power costs and to maintain or increase member satisfaction. Central estimated, before this pilot began, that a full-scale, fully implemented financing program for all 20 co-ops in the state could save their members \$270 million per year in electricity costs and produce up to 1500 new jobs. [Ecova 2012b] The pilot was made possible by a few key developments:

- The South Carolina legislature passed a law in 2010 enabling utilities to offer OBF to homeowners, to tie the repayment of the loan to the meter and not the borrower, and to disconnect power if loan payments are not made. (South Carolina General Assembly 2010).
- The USDA-RUS provided a REDLG loan to Central Electric, so that the pilot could offer 2.5% financing for energy efficiency measures, the first time this type of loan was used for energy efficiency.
- The Environmental and Energy Study Institute (EESI) in Washington, DC received funding from the Doris Duke Charitable Foundation to assist with program design and outreach and to report to key stakeholders, including Congress and state and national opinion leaders.

The startup of the pilot received attention not only from EESI, but also from Congressman James Clyburn and other policy makers. This provided yet another justification for the pilot – it could serve as a model for the implementation of federal policy.

Central and ECSC developed an initial plan and hired Ecova, a firm that implements energy efficiency programs for utilities, to assist with program planning, management and analysis. Ecova partner Integral Analytics used its expertise in energy efficiency and demand response to analyze cost-effectiveness. Carton Donofrio Partners, a marketing and consumer research firm, developed messaging, created marketing materials, conducted surveys and reported on the views of program participants.

Two other organizations played key roles. 1st Cooperative Federal Credit Union prepared and processed loan documents and KW Savings, a new non-profit created by Central and ECSC, paid contractors and will manage loan repayments.

Ten of the 20 SC co-ops expressed initial interest in participating in the pilot. Planning was done with six advisory groups that had representatives of the participating co-ops and a steering committee that included representatives from all 20 SC co-ops.

Eight co-ops (Aiken, Black River, Broad River, Horry, Palmetto, PeeDee, Santee and Tri-County), ranging in size from 17,000 meters to over 65,000 meters (ECSC 2012), completed implementation plans, which explained roles and responsibilities and outreach approach. One co-op planned to do all the field work with their own staff, another planned to utilize Ecova as a turnkey service provider, and the remaining co-ops employed a mix of their own staff and third party support. The program implementation plan called for retrofitting 100 homes, providing 2.5% interest rate loans for up to a 10-year term, and collecting data on the costs and savings of efficiency measures such as insulation, replacement heat pumps, and air and duct sealing. The plan detailed consistent processes for data collection and analysis, participant screening, audits, measure identification and quality assurance.

Independent energy auditors certified by the Building Performance Institute were selected and trained to use consistent procedures and REM Design modeling software. Co-ops conducted outreach and screened participants, looking for homes with higher than average energy bills that would make good prospects for a loan. A co-op energy adviser conducted a walk-through audit and reviewed the energy usage history with Central. If a project looked feasible a comprehensive energy audit was then conducted to identify projects in which predicted energy savings exceeded the estimated loan repayment. (Ecova 2012a)

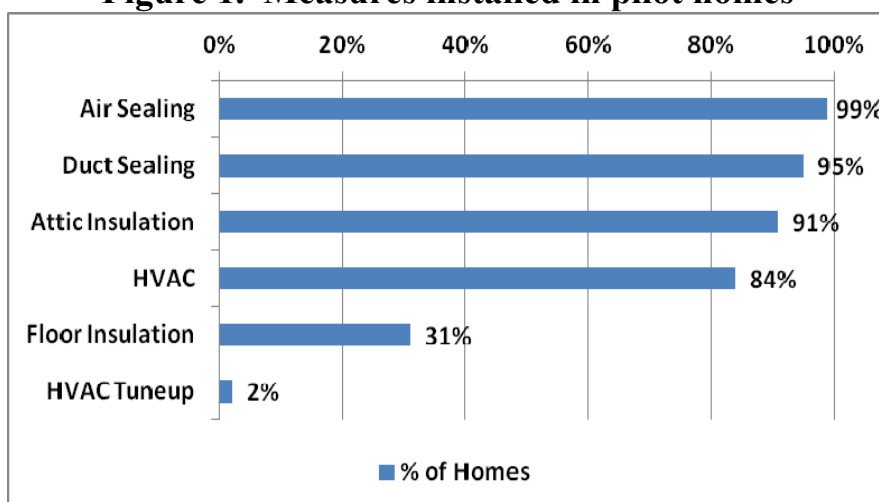
A select group of contractors, all of whom received training and agreed to quality standards, competed to win bids. After the applying member selected a contractor, program staff reviewed the bid, the Credit Union prepared loan documents and the energy adviser presented them to the applying member for signature. Contractors installed efficiency measures in all 125 homes. The auditors returned to the site to ensure that measures were installed correctly.

When work was completed and approved, program staff sent a Notice of Meter Conservation Charge to be recorded at the county register of deeds so that subsequent purchasers or renters would be notified of the loan. Landlords are required by the state statute to give new tenants notice of the meter conservation charge. The Notice of Meter Conservation Charge is not a lien and does not cloud the title.

## Results

Installations were completed in February. The pilot exceeded its goal, completing retrofits on 125 homes. More than half were mobile homes, slightly more than expected. More than 350 data fields were collected on each home. An interim analysis showed that homes selected for the pilot provided an ample supply of efficiency opportunities. Figure 1 shows that over 90% of the homes required attic insulation – 89 homes had R11 or less (R38 is commonly recommended). Over 90% of homes needed air sealing, duct sealing and attic insulation (Integral Analytics 2012). Nearly half of the homes had forced-air electric furnaces. HVAC upgrades, which were usually new heat pumps, were the most costly and least cost-effective measure but they passed the positive cash flow cost-effectiveness threshold.

**Figure 1. Measures installed in pilot homes**



Source: Integral Analytics, 2012

The average loan was over \$7000. (Ecova 2012b) Energy savings are predicted to average over 11,000 kWh's/year, as shown in Table 1, which is over 35% of the average total electric use. Actual energy use will be monitored through the end of 2012.

**Table 1. Energy savings from average pilot program home**

	Monthly	Annual
Projected electric Savings (kWh)	933	11,191
Projected \$ Savings	\$103	\$1,240
Loan Repayment	\$73.22	\$878.64
Net (Savings - Loan)	\$33.62	\$403.44
Carbon savings (Mtons)	0.74	8.94

Source: Integral Analytics, 2012

## Help My House Lessons Learned

This program provided some answers to questions it was designed to answer, and provided some additional lessons relevant to the original goals of the program sponsors.

- There is an ample supply of cost-effective (positive cash flow with a 10-year, 2.5% interest loan) energy efficiency opportunities in the homes of South Carolina co-op members.
- Participants were happy with the program. The vast majority (96%) of participants were satisfied or very satisfied with the work performed. (Ecova 2012b)
- The pilot has already served as a model for national policy in one respect, as the first program to access REDLG loan money for an on-bill financing program. There is substantial interest around the country – the CEO’s from both Central and ECSC have received inquiries from policymakers in D.C. and invitations to speak about the pilot.
- The most telling result may be the actions of the participating cooperatives. As the pilot began, none of the co-ops expressed any intention to offer an ongoing OBF program. At the end of the pilot seven co-ops expressed interest in starting a program in 2012.

## Midwest Energy’s HowSmart® Program

Midwest Energy, Inc. (Midwest) is a vertically integrated electric and natural gas cooperative serving 41 counties in western Kansas. Midwest serves an aging and slowly decreasing population, yet facing significant load growth. Midwest serves approximately 49,000 electric customers and 42,000 natural gas customers. The gas and electric service areas do not completely overlap, but result in approximately 60,000 unique customer locations.

HowSmart® is Midwest’s meter-based energy efficiency investment program. HowSmart® is patterned after the Pay-As-You-Save® (PAYS®) model developed by the Energy Efficiency Institute of Vermont (EEI). Although the PAYS® concept has been around for years, Midwest Energy is the first utility to voluntarily and comprehensively apply the concept. HowSmart® has some fundamental differences from the PAYS® model as envisioned by EEI<sup>1</sup>.

Midwest began developing the HowSmart® program in late 2006. In early 2007, tariffs were filed with the Kansas Corporation Commission (KCC) requesting approval of a HowSmart® pilot program in four counties served by Midwest Energy. Approval of the one-year pilot came in July of 2007. [KCC 2007a, 2007b] By September of 2008, the program was made permanent and available to customers in all 41 counties.

Since 2007, 698 HowSmart® projects have been completed with over \$4 Million in loans. Over 1,500,000 kWh and 180,000 therms of gas/propane are saved each year.

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<sup>1</sup> For example, PAYS® requires that contractors provide guarantees through the program and that customers not be required to pay for improvements if equipment is broken. The utility essentially guarantees contractor work. Midwest elected not to play this role, and, for this reason, was not allowed to name its program PAYS®. The name HowSmart® was registered instead.

**Table 2. HowSmart® progress since program inception**

	Projects Completed	Annual kWh Savings	Annual Gas Savings	Utility Investment
2007*	13	26,030	2,250	\$49,587
2008	93	208,076	19,267	\$478,574
2009	227	376,071	60,971	\$1,237,873
2010	185	321,741	56,495	\$1,152,366
2011	165	525,618	45,558	\$1,040,719
2012**	15	54,140	3,705	\$90,421
Total	698	1,511,676	188,246	\$4,049,541

\*The pilot project was approved by the Kansas Corporation Commission on July 12, 2007.

\*\* 2012 totals are through February.

Source: Midwest Energy 2012

Midwest invests its own funds to pay for efficiency improvements but has succeeded twice in finding zero or low-cost funds. Midwest accessed funds from the Kansas Housing Resources Corporation which provided 50% of the project costs at 0% interest rate. Next, in an attempt to create programs similar to HowSmart® at all utilities in Kansas, the State Energy Office created “Efficiency Kansas” which utilized stimulus funds to provide 0% financing for HowSmart® projects.

When low interest funds are available Midwest lowers the interest rate embedded in the customer’s on-bill charge. This interest rate has varied over the years from 0% to 8.3%. KCC regulations allow Midwest to charge up to its allowed rate of return as approved in its most recent general rate application. Midwest is now following the lead of the South Carolina co-ops and applying for REDLG funds.

Midwest recovers program costs in three ways: (1) Up to 5% is added to the loan amount, or; (2) Interest rates are increased above the incremental cost of the debt used to finance the HowSmart® project (i.e. an interest rate spread on the debt cost), or; (3) Some combination of program fees and interest rate spread.

### **HowSmart® Program Steps**

The HowSmart® program is a five step process: the customer contacts the utility (usually via a contractor recommendation or a high bill complaint); after screening, an audit is scheduled and a Conservation Plan (audit with recommendations) is completed; approved contractors complete the improvements; after a follow-up inspection, forms are signed and contractors are paid by Midwest Energy; and finally, charges are added to the customer’s bill.

HowSmart® is different than a simple loan. It is tied to the premise (meter) rather than the occupant. Therefore, with proper notification<sup>2</sup>, the loan automatically transfers to the incoming customer at the premise. Customers can be disconnected for non-payment.<sup>3</sup> Finally, Midwest Energy is the source of funds, not just a bill collector. In this way, Midwest “invests” in energy efficiency and is allowed to earn the same rate of return as it would with other utility

<sup>2</sup> Per tariff, seller provides written notification to the buyer or the obligation will follow the seller. Landlords must notify the tenant in writing of the loan or they are obligated to pay the charge.

<sup>3</sup> I.e. subject to the same terms and conditions as regular utility service. This includes the Kansas Cold Weather Rule which limits disconnection for nonpayment during winter months.

investments. These features make How\$mart<sup>®</sup> a regular utility service, comparable to a line extension but going beyond the customer meter.

### **How\$mart<sup>®</sup> Key Attributes**

**Upfront capital is optional.** How\$mart<sup>®</sup> removes the first cost barrier by providing a 100% loan for cost-effective energy efficiency improvements. If a project can't be fully justified by the energy savings the customer may buy down a portion of the total cost. To date, roughly two-thirds of the projects completed have had some buy-down from customers. On average, customers pay a little over one-fifth (\$1,600) of the total project costs.

**Charges are on the utility bill.** Repayment to Midwest for the energy efficiency investment is made on the utility bill. Terms are generally 15 years for residential projects and 10 years for non-residential projects.

**Charges are less than the savings.** Every How\$mart<sup>®</sup> project starts with a comprehensive energy audit by Midwest's own auditors (another difference from PAYS<sup>®</sup>), who are RESNET and BPI certified. Energy modeling software and a financial model are used to develop the Conservation Plan (CP), estimate savings and calculate the maximum investment Midwest is allowed to make under the KCC approved tariff, which is 90% of the estimated savings.

**Repayment tied to the meter.** Rental properties have always been difficult to reach because landlords have little incentive for making improvements to their property when they are not paying the utility bill. Since the How\$mart<sup>®</sup> repayment is tied to the building (i.e. the meter) rather than to the occupant, it is able to overcome the "split incentive" barrier. Landlords are not obligated to repay the loan once a new tenant moves in, and they are not obligated to make loan repayments if they disconnect the utilities while waiting for a new tenant.

### **How\$mart<sup>®</sup> Lessons Learned**

The How\$mart<sup>®</sup> program was started as a pilot program in 2007. Since that time, a number of improvements have been made and in some instances painful lessons learned:

**Minimize free riders.** The audit required to complete a Conservation Plan is expensive. In Midwest Energy's service area, the pre and post retrofit audits require over two hours of driving time in addition to 4 hours or more for measurement, data input, and analysis used in the creation of a CP. Initially, the Company provided CPs free of charge but many were not implemented. Customers are now charged for the audit if they do not complete the How\$mart<sup>®</sup> project within eight months. Currently, the completion rate is over 50% of all CPs completed.

**Strengthen notification of a new tenant or buyer.** How\$mart<sup>®</sup> customers must agree to provide written notification to incoming tenants or buyers. Unfortunately, landlords and sellers often forget and fail to meet this commitment. Midwest has found two solutions to this problem. For rental property the program recommends that landlords include provisions in their leases that require acceptance of the How\$mart<sup>®</sup> obligation. For customer-owned property, an effective,



albeit labor-intensive, solution has been to file a lien on the property which ensures that notification is provided to buyers when a title search is completed.

**Keep the program simple.** A key to the program's success has been its administration. The Program Administrator acts as a concierge for the customer, explaining the program step by step, providing information on contractors, explaining any forms or agreements that need to be signed, and answering any questions the customer may have.

### **HowSmart® Success**

The HowSmart® program is a successful model for providing capital for cost effective investment in energy efficiency. The program has met the Company goals to:

1. Provide customers better control over the size of their energy bills;
2. Tear down barriers preventing sound investment in energy efficiency – particularly the first-cost and split incentive barriers;
3. Improve customer comfort (and other secondary benefits such as safety);
4. Improve customer satisfaction with the cooperative.

The last point in particular is worth noting – 97% of HowSmart® participants are satisfied with Midwest Energy compared to only 85% of all members. This is notable because about one-third of program participants enter the program as a high-bill complaint.

Midwest is demonstrating their view of the program's success by expanding it beyond its original scope, allowing residential customers up to 30 years for repayment of investment in a Geothermal Loop, and allowing C&I customers to invest in lighting upgrades. Midwest is currently evaluating a motors option for electric powered irrigation or oil field pumps.

### **Key Drivers of Scalability**

Most financing programs have achieved only modest scale. (Fuller 2008) Previous studies have suggested a number of solutions for increasing the scale and impact of financing programs. The program experiences in South Carolina and Kansas, described above, inform some additional solutions offered by the authors of this paper.

### **Commitment of Program Sponsors**

For energy efficiency financing programs, commitment depends upon the benefits of offering the program, which can take the form of energy savings, demand savings or enhanced member satisfaction. Program costs are equally important, of course. Costs are influenced by the source of program financing, the administrative approach, and the scale and efficiency of program delivery. The commitment of program sponsors to the SC Help My House Pilot and the HowSmart® programs grew out of a desire for energy efficiency as a resource and enhanced member satisfaction.

## Source of Program Financing

The availability and the terms of the program funding will shape the design of the program. Co-ops have several sources of program funds.

USDA offers funding now through REDLG but soon, when it adopts a new rule, RUS loans could be used for energy efficiency. (OMB 2011). Federal legislation could provide a large influx of funding, as described earlier in this paper.

The federal financing sources work if the co-op or intermediary is willing to have debt on their balance sheet, but this is a barrier to some co-ops. This problem can be avoided if the co-op provides their member with access to private financing, perhaps a local bank, and processes loan repayments through the utility bill.

Another possibility is for the co-op to purchase the energy savings and peak reduction from an intermediary using an Energy Services Agreement. This agreement can then be used by the intermediary as security to obtain financing. Energy Services Agreements have been used before, typically for large commercial or industrial projects. They are modeled after Power Purchase Agreements, which are often used for generation projects. (Kats et al. 2011)

## Full Cost Recovery

Midwest Energy, as noted earlier, recovers its costs for HowSmart® through a marked up interest rate or program fees. Other programs around the country receive at least partial cost recovery in this way. (Brown & Braithwaite, 2011) If all program costs could be supported by interest or fees attached to each loan it would free the co-op to operate on a longer time frame, independent of the annual budget cycle, in an ongoing, self-funded effort. .

## Ease of Administration

This is key to keeping costs and transaction time down.

- The loan process should be simple and straightforward. (Hayes et al. 2011) Loan programs can easily become multi-step processes mired in paperwork.
- Measure screening could be simplified. The selected measures must provide a strong rate of return to each borrower. This is a high standard, but requiring full audits with a building simulation software analysis is expensive and time consuming. A carefully qualified list of prescriptive measures that are proven to be cost-effective for each co-op's specific climate zones and housing types could be developed.
- Set up automated systems. Organizations of all kinds have discovered the merits of automated information management systems. OBF programs often require multiple parties to be involved and even the simplest program has several steps, which makes the programs good candidates for automation. These systems provide easy data entry, solid data management and transparency. They automate day-to-day monitoring and report generation.

## **A Broad Pool of Eligible Participants**

Tying the loan to the meter and not the borrower could require legislation or regulatory approval but it pays big dividends, expanding eligibility and reducing the need for a credit check.

## **Educated and Motivated Contractors**

Enthusiastic, well-informed contractors make the process easier for participants and reduce marketing expenses. (Fuller 2008)

## **Low Interest Rates and Attractive Terms**

Low interest rates with at least 10-year terms provide a positive cash flow to a wide variety of energy efficiency measures, producing bigger projects, more contractor interest and deeper savings.

## **Conclusion**

The support for OBF is growing as the success of recent programs is being demonstrated. But will programs scale up? There are several positive indications.

**Many co-op members need relief from high bills.** Many co-op members live in inefficient homes, earn below average income and need this program. Co-op members in both profiled programs showed strong satisfaction, which encourages the co-op to continue the program.

**On-bill financing overcomes difficult barriers.** OBF is showing some success in overcoming the split-incentive barrier in rental housing. The average size of the projects in both programs was over \$6000. The Help My House projects the average savings for each participant to be 35%, or over 11,000 kWh's/year. OBF may be more successful than other programs in achieving 'deep impact' savings of 20% or more.

**Sources of program financing are available.** Federal loan programs available to co-ops are becoming sources of OBF program funding. Expanded federal funding and private funding are also possible sources.

**Support for on-bill financing is growing.** Policy makers and advocacy organizations are taking action in support of OBF. Consultants and think-tanks are conducting studies. New programs are sprouting. Midwest Energy and the South Carolina co-ops have had positive experiences and are making efforts to continue their programs.

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