

**CLEAN ENERGY FINANCE GUIDE, THIRD EDITION**

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## Chapter 7.

# Path to Self-Sustainability

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Clean energy finance programs backed by funding from the American Recovery and Reinvestment Act of 2009 (ARRA) will support investments in clean energy projects and fill a financing gap in the market. These programs will create jobs, save energy, lower utility bills, improve energy security, and reduce greenhouse gas (GHG) emissions. They have an important additional objective: to create finance models that are commercially sustainable and scalable and that will continue even after ARRA grant funds are spent.

Grantees have a limited amount of time to use their ARRA funds to support energy efficiency (EE) and renewable energy (RE) lending projects. Although the federal government may provide funds in the future, it is unlikely the amounts will be at the level of the current State Energy Program (SEP) and Energy Efficiency and Conservation Block Grant (EECBG) Program ARRA grants. Therefore, it is important for all grantees and program partners to start thinking now about how to make their new financing programs sustainable for many years beyond the life of the original infusion of ARRA funds. This chapter addresses how to create self-sustaining clean energy finance programs by focusing on five strategies:

- Prove clean energy finance as a profitable line of business for financial institutions.
- Review and reset leverage ratios for the first generation programs and establish metrics.
- Arrange additional sources of loan loss reserve funds.
- Build the secondary market for EE and RE loan portfolios.
- Link clean energy finance programs to other state government development, finance, and financial system support/reform initiatives.

### A. Prove EE Finance as a Profitable Line of Business for Financial Institutions

To achieve sustained financing in the clean energy field requires financial institutions (FIs) to perceive clean energy lending as a profitable, creditworthy, and sizable business. At the moment, only a small number of FIs operate in the clean energy lending space. For example, AFC First in Pennsylvania has a successful business originating and servicing clean energy loans in many different states, and Wells Fargo and US Bank both offer home equity green lending products in several geographic markets. FIs need the comfort of knowing that two primary issues are resolved before they jump fully into the clean energy lending field. Those two issues are transaction costs and deal flow, as described below.

- **Transaction Costs:** The costs to originate a loan (verification of income, examination of credit scores, etc.) can range from \$200 to \$500 per loan. Loan servicing costs may be between \$7 and \$15 per loan per month. Those costs make it hard for FIs to make a profit on small loans of say, less than \$5,000 each. Loan origination processes must be easy, streamlined, and standardized so that FIs can review each loan quickly and with enough, but not too much, documentation. Most loans in the residential home improvement market can be closed on the basis of the borrower's credit scores, debt-to-income ratio, and proof of employment. Grantees can examine ways to work with their partner FIs to convince them to use a streamlined process that is based more on what FIs call "consumer finance" rather than mortgage finance or other more complex underwriting processes.

- **Deal Flow:** The clean energy lending market is still nascent with just a few successful loan products in existence to show FIs that it is well worth their while to establish a lending program to serve this market. Many lenders require a bare minimum \$1 million of potential new lending to even begin to consider setting up a program—but most FIs will not consider programs to be cost-effective until they reach annual levels in excess of \$3 million to \$5 million. Large national banks may prefer annual loan levels of closer to \$20 million before they develop a customized program.

A key lesson learned from past and current clean energy finance programs both at home and abroad is that financing alone is not sufficient to spur investment in clean energy and transform the residential market. Successful EE/RE finance programs combine (a) access to finance with (b) marketing, project development, and project delivery. Those last three services ensure that a steady flow of investment-ready projects are available to lenders to be financed. Without those services it would be entirely possible to develop a financing program that had little or nothing to finance. The absence of deals to finance (i.e., credit worthy property owners who *want* to make EE/RE improvements)—even in the presence of attractive financing terms—has been a major weakness of many early EE/RE finance programs. So, the finance mechanism has to be part of an overall program design that drives demand.

## Social and Community-Based Marketing and Neighborhood Focused Strategies

For the single-family residential sector, many new program marketing models are being developed that involve social and community-based marketing and concentrated neighborhood approaches, which aim to achieve high levels of market penetration—for example, 20% to 50% in a given area. Implementing them successfully is part of the pathway to self-sustainability. Merriam Fuller and colleagues at Lawrence Berkeley National Laboratory (LBNL) recently released a report on this topic, titled *Driving Demand for Home Energy Improvements*, available online at <http://drivingdemand.lbl.gov/>.

## Vendor/Contractor Network

Vendors and contractors in the EE/RE equipment and service sectors are key businesses that can drive the market. They stand to profit and grow from the work brought in under the clean energy loan program, and they can become program champions. Developing, nurturing, and expanding an effective vendor/contractor network is essential to program success.

## Successful History and Creditworthy Borrower

Although the current, small, energy efficiency lending programs have an excellent history, with default rates well below other comparable consumer credit products, not enough history exists for it to be readily apparent to FIs that the market for unsecured lending in EE/RE improvements is generally creditworthy. FIs need to hear about and understand that the vast majority of borrowers for clean energy lending products tend to have good credit and that a substantial market of such creditworthy borrowers exists.

As participating lenders around the country gain experience with the new EE/RE financial products and financing programs, they will keep records of the collections payment performance. Because energy-saving equipment is essential to the operation of a home or other building—it is what keeps the house warm, cool, comfortable, full of light, and inviting—the borrower’s willingness to pay is strong. This translates into lower default and loss rates, assuming proper collections practices are used. It is important that the grantees collect payment information from their FI partner in order to document a strong payment history on the EE/RE financing instruments.

One element of the U.S. Department of Energy’s (DOE’s) work on best practices in clean energy finance is to compile data on collections payment performance for various types of clean energy financial products, such as unsecured residential EE/RE loans, loan loss reserve fund (LRF) programs, and property-assessed clean energy

(PACE) transactions. Over time, the availability of data will help primary lenders and secondary investors assess risk and price their financing accurately. A chapter on reporting requirements is forthcoming.

## **B. Review and Reset Leverage Ratios for the First Generation; Establish Financial Metrics for Measuring Program Risks and Success**

Clean energy lending programs that rely on a credit enhancement from the grantee's ARRA funds can leverage modest amounts of grant capital into much larger amounts of lending capital. For example, Michigan SAVES has a \$3 million, 5% loan loss reserve with a leverage ratio of 20:1, enabling financial institutions to lend up to \$60 million. Some leverage ratios may be much smaller than this, however, because lenders are not yet comfortable with the new lending product or they perceive greater risk than did the Michigan lenders. For instance, one program in the southwestern United States has a 4:1 leverage ratio based on a 25% loan loss reserve.

The leverage ratios in the early stages of this clean energy lending market may be lower at first as lenders get comfortable with the market. As mentioned earlier, during the course of the DOE EE/RE finance program, FIs will be collecting data on loan payment performance, and grantees can use that data to reset leverage ratios if the evidence proves that borrowers are creditworthy and defaults are low.

As part of the LRF Agreement with the FI, the grantee can establish lending volume targets and include provisions to evaluate the collections payment performance data. If the collections payment performance hits a defined target, then the leverage ratio can be reviewed and reset. For example, if an FI starts with an LRF of 10% of the total loan portfolio, perhaps after 2 years of experience and evidence that actual loss rates are say, below 1.5%, then the size of the LRF relative to the loan facility could be reset at 5%. That would permit the same amount of loan loss reserve funds to support a doubling of the total lending amount. In fact, the incentives for the FI and the ARRA grantee are aligned in this regard. If the FI learns that EE/RE financing is a profitable business, then it will want to increase its lending and include more loans in the portfolio covered by the LRF. At the same time, the ARRA grantee will be interested in increasing total lending to meet its program goals and serve more homeowners.

## **C. Arrange Additional Sources of Funds for the LRF Program**

Another path for scaling up the clean energy lending program is to find additional sources of funds to supplement the LRF. Use of ARRA funds can seed a process and structure that can then be expanded by others. If the LRF can grow, the FI lending facilities can expand commensurately. Other potential sources of funds for the LRF include the following:

- **Vendors/Contractors:** It is a common commercial finance practice for equipment vendors and contractors to contribute a fee to an FI partner when it finances the vendor/contractor's sales. This fee could be 1% to 2% of the total sale or EE project amount. Although that increases the costs to the end-user (the property owner), which is a deterrent to program uptake, it also facilitates the financing. The fee can be contributed directly to the LRF, so it can scale with volume.
- **Utilities:** Many utilities have efficiency demand side management (DSM) programs. DSM is a term that utilities and utility regulatory commissions often use for funding energy efficiency programs. It typically means that utilities are allowed to collect funds from ratepayers to help pay for efficiency improvements in homes and businesses across the utility's service area. DSM programs offer financial incentives, rebates, funding for home or business energy audits, and other project development services. If the EE finance program proves effective in helping utility customers implement energy-saving projects, the utilities may consider contributing a portion of their DSM budgets to a loan loss reserve fund.

- **Emissions Allowance Revenues:** Some states, such as those participating in the Regional GHG Initiative (RGGI), have or are developing GHG emissions allowance auction programs. Revenues from those programs can also be devoted to clean energy finance programs, including those with LRFs. Delaware is one example of a state taking this action.
- **Other Donors:** Foundations, community investment funds, and not-for-profit organizations may also be willing to contribute funds to an LRF program; grantees should actively investigate all local and regional sources of extra funding for the LRF.

## D. Build the Secondary Market

Developing a secondary market for residential EE/RE loan portfolios is one DOE objective because a vibrant secondary market will provide a path to commercial sustainability of clean energy lending (after ARRA funds are expended). Some FIs will decide to originate loans, assemble portfolios, and then seek to refinance or sell the portfolios to a “secondary market” capital source. A typical target portfolio size for an early-stage secondary market transaction is \$20 to \$25 million although later transactions may be much larger, in excess of \$100 million. Availability of financing from the secondary market can drive development of the primary market and also lower the costs of capital. LRFs support the primary lender, but the benefits and risk coverage of the LRF should be made *assignable* to the secondary market capital source (provider) in the LRF Agreement between the grantee and FI.

ARRA grantees will need to be well informed about the standard underwriting guidelines and conforming residential EE/RE loan documents that are being developed as part of this secondary market initiative and work to incorporate the principles and best practices into their own lending programs. To facilitate the scaling up of clean energy lending programs in the future, grantees should allow participating FIs the option of selling their loan portfolios. Note that the standard underwriting guidelines may, in fact, become *minimum* guidelines; financial institutions could add additional underwriting criteria to make their guidelines more stringent than those minimums.

## E. Link EE Finance Programs to Other Development, Finance, and Financial System Reform/Support Initiatives

State governments throughout the nation are seeking new ways to increase lending for small and medium enterprises, sustainable and family/local agriculture, public transportation, low-income housing, municipal infrastructure, and other priority sectors consistent with a sustainability investment agenda. Economic development and job creation are the states’ main objectives. Clean energy finance programs can be linked to or become part of those initiatives, and clean energy investment can turn into a leading economic development strategy. As the first generation EE/RE finance and LRF programs are set up and become operational, grantees will want to explore opportunities to link with other development financing initiatives. For example, some state housing finance agencies have or are setting up low-income multifamily housing renovation finance programs; EE/RE investment can be incorporated into them.

Over time, the federal government and state governments may find opportunities to devote an increasing portion of the public resources currently being used to support the financial system through the economic crisis to directly engage in and support clean energy finance. In the United States, the Community Reinvestment Act (CRA) has been in place since the late 1970s, and CRA has defined local housing lending targets for commercial financial institutions. Given that precedent, financial institutions may be able to get CRA credit for making residential EE/RE loans. Alternatively, a green CRA-type policy could be adopted that sets lending targets for clean energy.

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