

**CLEAN ENERGY FINANCE GUIDE, THIRD EDITION**

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## Chapter 8.

# Clean Energy Lending From the Financial Institution Perspective

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Lending for energy efficiency (EE) and renewable energy (EE) projects is a new activity for many financial institutions. As a result, state and local governments with grant funding from the American Recovery and Reinvestment Act of 2009 (ARRA) seeking to partner with such institutions will be in a stronger position if they understand the questions lenders are likely to ask them and why. In this chapter, the term “financial institutions” (FIs) includes not only the primary (or initial) lenders that provide loan capital to residential borrowers and hold on to the loans they make until maturity, but also investors (the secondary market) that purchase the loans from the initial lenders.

This chapter is divided in two sections. The first covers primary investors—the lenders; and the other focuses on the secondary market—the investors that might purchase loans from lenders. The first section presents a series of questions that FIs of all types will likely ask grantees about new clean energy lending products, a loan loss reserve fund (LRF), and other credit enhancements. Under each question is an explanation of why the answer is important to lenders.

The second section presents the information required by investors in the secondary market and a brief discussion of several challenges facing clean energy lending programs. Attachment A shows a sample program term sheet focused on the residential sector. Grantees may wish to use this as a tool to guide them through the decision-making process as they prepare for meetings with financial institutions.

## A. The Needs of Financial Institutions

*The following are among the first questions that lenders will want answered at the beginning of their discussions with grantees.*

### **What is the size of the EE loan program?**

FIs need to know that they are devoting time and energy to a new program that is likely to generate new deals exceeding, in the initial phases, a few hundred thousand dollars of lending. It is rarely worth the FIs’ time to conduct negotiations and assemble the infrastructure needed to roll out a new loan product if it is only going to generate a small number of loans. That said, FIs understand that it may take some time to generate a lot of clean energy loans—there will be a period of growth—but having the reassurance up front that they, as lenders, will eventually have a market of at least a few million dollars is very important to them.

### **What is the size of individual loans to homeowners?**

FIs need to understand that most lending in the residential sector for energy efficiency projects involves small loans that are usually less than \$15,000 (unless the projects include solar photovoltaic installation). Grantees will want to make it clear to FIs that the business proposition involves a large number of small loans, which means the FIs will need to think creatively about ways to reduce their transaction costs for processing individual loans. In most cases, EE loan programs will fall under the financial institutions’ consumer lending departments, which already have expertise in providing small loans to consumers.

### **What are the characteristics of the target market?**

FIs will want to know the likely credit characteristics of the target market, meaning the expected credit scores and other similar measures of credit quality of the borrowers to be supported by the loans.

## **What are the loan origination expectations?**

Grantees must explain to FIs that these small EE loans are very often point-of-sale transactions that are typically marketed by a contractor and originated over the phone or the Internet. They require very fast response times. Failure to provide a fast response will often lose the deal. Imagine a contractor trying to convince a customer with a broken furnace in mid-January or a broken air conditioner in mid-August to purchase the high-efficiency furnace or air conditioner through a special financing program—yet telling the customer that the wait time for loan approval is more than a few hours.

Describing a clean energy loan as analogous to a used car loan will be helpful when talking with FIs. Used car loans close at the car dealership, require fast closing, and are often for a similar dollar amount, around \$7,500 average per loan. One crucial difference between EE loans and used car loans, however, is that the lender has the ability to repossess the car in the event the borrower defaults. Energy efficiency loans are usually “unsecured”—meaning the lender has limited or no ability to repossess the insulation, duct sealing, or other home efficiency measures. That is one reason to propose a loan loss reserve fund to make lenders more comfortable with the unsecured nature of these loans.

## **What are the expected roles of the financial institutions and the grantees?**

FIs need to understand what grantees expect them to do and what the FIs’ legal responsibilities will be under an EE loan program. Typically, FIs do not want to be responsible for making sure that the loans do, in fact, cover “qualified measures” as defined by the U.S. Department of Energy (DOE) or the grantee. FIs will expect contractors to make that type of assurance to the grantees. Financial institutions will want to know their reporting requirements, any loan marketing requirements, and other expectations. That includes knowing the level of flexibility FIs will have to accept or reject loan applications, along with a clear understanding of the grantees’ expectations for loan denial/acceptance. A chapter on reporting requirements is forthcoming.

## **Who bears the risk and for what? What is the size of the credit enhancement and how is it structured?**

FIs must be told how much risk they will bear for loan defaults and how much risk the grantee is willing to assume. For instance, an EE/RE lending program that puts aside a 10% loss reserve fund (LRF) is willing to cover up to 10% of the losses on an entire portfolio of loans. But in the case of an individual loan defaulting, the FI needs to understand three things: (1) the definition of default (usually 90 days overdue); (2) the percentage of the outstanding loan value that the FI must recover (80%–100% is typical); and (3) the process to follow when a loan is declared “in default,” but the borrower subsequently pays the overdue portion and brings the loan current again. Grantees must make it clear to FIs that the LRF is by definition a reserve account, not a guarantee; DOE funds cannot be used to establish loan guarantees in this case. The reserve is capped at a predetermined amount, and the FI will be responsible for any losses in excess of that predetermined amount.

## **What are the expected rates, terms, and other conditions of the EE loans?**

FIs need to know the grantees’ expectations for interest rates and loan terms. This information will allow the lenders to understand how profitable the EE loan program will be, at least on the basis of the interest earnings from the loans.

## **Are the FIs that make the initial loans to residential property owners as part of the grantee’s EE program allowed to subsequently sell those loans to other investors?**

Some FIs will choose to hold their loans in their own portfolio until maturity. Others may want the option of selling the loans to an investor, using the proceeds of that sale to make other loans. The model for this type of secondary transaction is similar to one in the home mortgage industry, whereby an investor purchases a number of

mortgages from the primary mortgage lender(s) and then bundles those mortgages to create a mortgage-backed security for sale to other investors.

## B. The Needs of the Secondary Market Investor

This section presents information that secondary investors will need to have as they consider whether or not to purchase a group of clean energy loans from the primary lender.

A prudent investor considers several key issues before putting money into loans. In fact, many of these considerations are the same no matter whether the investor is using the money to invest in an energy efficiency lending project or a project having nothing to do with energy efficiency. The investor's questions typically focus on two major issues: credit risk and comparable products.

**Credit Risk:** "What is the likelihood that I will receive the principal amount of my investment back, and then what is the likelihood that I will earn the promised interest rate on this investment? How do I price the risk that I may *not* receive either the principal or the interest back?"

**Answer:** This risk is quantifiable. It is a calculation of the "risk" of not getting the money back, over the term of the loan or loans. A short-term (i.e., 3-month) United States Treasury note represents the least risk of any financial product in the U.S. market. Typically, the "pricing" of any other credit risk is compared to that of the Treasury note. At the opposite end of the risk spectrum is the long-term junk bond (10 years), a security with a very high likelihood of failure. It would incur the highest pricing against the risk. Grantees and primary lenders will need to convince the secondary market investor that the EE loan purchase is closer in risk to a Treasury note than a junk bond.

**Comparable Products:** "How does this particular financial product or set of products compare in terms of credit risk to other like products?"

**Answer:** If the financial instrument that the investor is purchasing has the full faith and credit of the United States backing it, like a term U. S. Treasury note, the loan could be compared to a Treasury product. Energy efficiency loans, for example, would carry a slightly higher credit risk for the investor, which would be covered by the higher interest rate return required by that investor. For example, instead of 0.025% return typical on a short-term Treasury note, the investor may require a 1% return.

Investors use fairly common systematic reviews to compare "like" products. In that way, packages of credit card loans or Fannie Mae securitized mortgages offered to an investor can easily be compared to other transactions involving credit cards or mortgages of a precisely similar nature. An investor's review of similarities typically covers the following investment attributes:

- **Conforming nature of the loan product:** This means that loan product delivered from California looks exactly like and contains all the same treatments and approaches that loans from Maine, Colorado, New York, Iowa, and every other state possess or will possess.
- **Rate to the consumer:** The interest rate that the borrower (homeowner) is paying or will pay and whether it is fixed or adjustable.
- **Rate to the investor:** The interest rate the investor will receive during the term of the investment.
- **Tenor of the underlying, primary loans:** The length of the payback period.
- **Term of the security that holds the loans for sale to the investors:** In essence, the point at which the secondary investor gets back all of its principal and interest.

- **Loan default terms and collection options:** The systems in place in the clean energy lending program to ensure loan payments are received and to deal with borrowers who get behind on or stop payments.
- **Experience of the financial institution servicing the primary loans:** History of collecting payments and enforcing the terms of similar loans.
- **Senior/subordinate tranches:** A secondary investment can be split. One investor can purchase the whole investment, or several investors can divide the purchase of the loans held by the primary FI. If the purchase is split, and one investor is more “important” (senior) to the others, all of them will need to know the benefits to each and the terms of the differences.
- **Loan loss reserves and/or additional collateral that accompanies the loans sold to an investor (or set of investors):** The reserve or collateral can be cash; it can be a “subordinate tranche (participation)” held by an investor who only receives payment if the senior investor is paid first; or it can be insurance of any kind on the loans, on the security, or on the performance of the loans (i.e., mortgage insurance that covers the top 25% of the loan if it defaults, or an insurance policy on the performance of the security containing the loans, such as a Fannie Mae “wrap” that uses the Fannie Mae balance sheet (the United States government) to guarantee performance, etc.)
- **Liquidity:** If the investor needs to sell the loans quickly to another investor so as to use the money for another purpose, the next set of investors must understand the EE loan product and/or the loan security that holds those loans. Otherwise, the investors will hold up the deal and the investment will not be considered to have the right liquidity level.
- **Pipeline:** This refers to whether the proposed investment is a “one off” (one of a kind) or will generate an ongoing pipeline of similar investments. To satisfy investors, grantees must demonstrate that the clean energy lending activity associated with the investment will continue to produce loans of exactly the type that is for sale.
- **Loan performance of a large number of similar loan products over an extended period of time:** The investor needs to see how differences in geography affect the EE loans and how the loans have performed through different economic situations.

Among the characteristics listed above, the loan performance of very similar loans or loan products is *the* most important attribute that investors consider. This tells them how similar products were priced and how they performed. It also allows them to make faster and more data-driven decisions on how to “price” their risk (i.e., the interest rate they will require for the investment being purchased).

## **Two Challenges for Energy Efficiency Finance Products from the Investors’ Perspective**

**Lack of Historic Activity.** Clean energy lending has a short history, and unsecured EE/RE residential loan products that are pooled together and then sold to investors (in the secondary market) are an entirely new kind of product. As a result, investors who might be interested in buying the loans may see them as risky investments and require a higher return right now than they would once the track record of the clean energy loans proves them to be of high credit quality. Another consequence of the newness of this loan product is that any investor that purchases the loans might require a credit enhancement that is more generous now (a larger LRF, for example) than it might need to be after the loans have demonstrated their high credit quality. Grantees and their partner FI(s) have to be prepared to deal with those demands from wary investors.

**Ratings.** The capital markets (secondary markets) have suffered an enormous contraction in recent years from having purchased highly rated securities which, as it turned out, were not the low-risk, conservative products they were marketed to be. Investors are now more cautious and more demanding. Rating agencies are required to offer high category ratings on any investment that institutional investors (i.e., insurance funds, pension funds, etc.) with large amounts of capital to invest are considering. The short history of clean energy lending activity makes securing a high category rating from a rating agency very difficult and expensive. Rating agencies are paid to analyze and rate financial products, typically using a standard application and process. Being new, a clean energy lending product requires a new (meaning “nonstandard” from the rating agency’s perspective) type of application and rating analysis process. That, in turn, means the rating agencies will spend more time on each rating, thus driving up the cost of a rating.

Grantees and all who support them during the ARRA-funded EE/RE loan program period need to understand that, at least initially, sales of energy efficiency investments on unrated securities will not be possible to some institutional investors. That limits the number, size, and type of potential investors in clean energy lending. However, there are forward-thinking private investors and others—state treasury offices, for example— that will step up and participate in these lending programs.

## **Attachment**

### **A. Sample Residential Program Term Sheet — DRAFT**

## Attachment A: Sample Residential Program Term Sheet — DRAFT

### Introduction

\_\_\_\_\_ is seeking to develop an energy efficiency loan product for \_\_\_\_\_ [name sector and sub sector] customers. The product would be offered under the sponsorship of \_\_\_\_\_ [name sponsor]. The sponsor will provide a \_\_\_\_\_ [Name primary sponsor financial contribution here such as “credit enhancement in the form of an assignable loss reserve account, while a partnering financial institution will originate and service loans.”]

Program Overview	Detail
<b>Program Goal</b>	Show finance program goal. For instance: “To offer a loan product to residential customers that will enhance customers’ ability to pay for energy efficiency measures while eliminating up-front costs to the customer.”
<b>Program Sponsor</b>	Product will be marketed under the sponsorship and name of _____.
<b>Program Administrator</b>	Define who will market program, originate loans, etc.
<b>Eligible Borrowers and Properties</b>	Define eligible borrowers. For instance: “Owners of owner-occupied, single-family homes (1-4 units).”
<b>Grantee Role</b>	Define major role of the grantee. For instance: “_____ will market program in collaboration with the program administrator, provide credit support, and train contractors.”
<b>Partner Lender Role</b>	Define major elements of partner lender role. For instance: “A partner lender will be selected to originate and service loans and to provide loan capital. The lender partner will serve as the implementation partner for financial aspects of the loan program, under the terms of a loan loss reserve agreement and subject to standards set by the grantee.”
<b>Loan Facility Size</b>	Total loan facility size in the first year is estimated to be _____ [show total amount of loans expected to be made on both an annual and total basis].
<b>Maximum and Typical Loan Size</b>	Show projected max/min loan sizes. For instance: “Maximum loan size will be \$15,000 with unsecured loans, with average loan size expected to be approximately _____.”
<b>Program Launch Date</b>	Show when program is expected to launch.

Loan Product	Proposed Structure / Minimum Standards
<b>Loan Amounts</b>	Show dollar value of loans expected, in terms of minimum, maximum, and typical.
<b>Loan Terms</b>	Show expected length of loan term. Typically subject to negotiation.
<b>Loan Rates</b>	Show expected interest rates or show a range of rates. Typically subject to negotiation.
<b>Definition of Default</b>	Show definition of default, e.g., 90 days/120 days. May be subject to negotiation.
<b>Secured / Unsecured</b>	Show whether loans will be unsecured or unsecured. If secured, show how loans will be secured.

<b>Loan Product</b>	<b>Proposed Structure / Minimum Standards</b>
<b>Eligible Measures</b>	Energy efficiency measures include_____. For instance: “Measures as defined through an energy audit” or “specific measures such as duct sealing, air sealing, attic insulation, high efficiency replacement heating and cooling equipment. For electric utilities also include shade screens.”
<b>Eligible Borrowers</b>	Define eligible borrowers. For instance: “Residential homeowners” or “Small commercial entities as defined by ____.”

<b>Underwriting Standards</b>	
<b>Underwriting Procedure</b>	Define desired characteristic of underwriting. For instance: “Underwriting to take place quickly, with a goal of conditional approval within 1 to 2 hours of application.”
<b>Minimum FICO</b>	Define a minimum FICO credit score that the sponsor would like to see. For instance: “640 FICO or better.”
<b>Foreclosure / Repossession</b>	Define foreclosure/repossession as related to borrower qualification.
<b>Unpaid Collection Accounts, Judgments, Tax Liens</b>	Define. For instance: “No unpaid collection accounts, judgments, or liens outstanding allowed.”
<b>Income Verification Required</b>	Define whether income needs be verified and under what circumstances.
<b>Debt-to-Income Ratio</b>	Define acceptable debt-to-income ratios. For instance: “50% debt-to-income ratio or better.”

<b>Sources of Capital and Credit Enhancements</b>	<b>Details</b>
<b>Credit Enhancement Structure</b>	If program is based on a credit enhancement, define that credit enhancement. For instance: “A loan loss reserve in the amount of ____% of the value of either the outstanding loans or the loan commitment will be provided to a participating lender, and available to that lender subject to the terms established in a Loan Loss Reserve (LRF) Agreement. This LRF Agreement shall specify underwriting standards, definitions of default, collection methods, and other related requirements. The lender will be authorized to withdraw ____% of the value of an individual defaulted loan after payment is ____ days late.”
<b>Loss Reserve Segregation</b>	If program is based on a loss reserve, define the tracking mechanism and who holds that loss reserve. For instance: “Loss reserve to be held in an interest-bearing account at the participating financial institution.”

<b>Loan Product Marketing and Contractor Network</b>	<b>Details</b>
<b>Marketing</b>	Define who will market the product. For instance: “Loan product to be marketed through a network of contractors who will be trained on loan product features.”
<b>Contractor Network</b>	Contractor network to be trained and monitored by _____.
<b>Marketing Materials</b>	Define who will be responsible for marketing the program. For instance: “Sponsor to develop and assist in development of marketing materials to be provided by contractors.”