

Florida Solar Energy Center

Overview of Energy Efficiency Financing

Why Should A Lender be Concerned with Financing Energy Efficiency?

David Carey, Director of Energy Finance for Fannie Mae said, "This ground-floor opportunity promises to be one of the more attractive new product offerings in recent times." Today's mortgage market is becoming more competitive. Mortgage lenders are looking for ways to bring in more customers. Becoming involved with Energy Efficiency Financing is a new and exciting way for lenders to increase their market share. The following are a list of reasons why lenders should be interested in financing energy efficiency:

- **Larger & More Profitable Loans.** Energy efficient homes generally cost more than conventionally built homes. This results in a larger loan with higher loan origination fees, etc. When underwriting FHA and VA energy efficient mortgages, lenders can exceed the statutory federal loan limits up to the amount of the energy improvements. Energy efficiency is no longer a problem.
- **New Business From Trade Ally Partnerships.** A whole residential energy services industry has emerged that actively promotes residential energy efficiency financing. Developing relationships with home energy rating programs, energy efficient builders, utilities, and vendors of energy efficient products can result in new business opportunities for lenders. These groups are very eager to actively promote lenders who offer energy mortgages. Your lending institution can expand its market through active partnerships with these residential energy services providers.
- **Lenders Can Qualify More Buyers.** Since the advent of energy mortgages (see discussion in next chapter) more people can qualify to purchase an energy efficient home than could qualify for the same house if it were not energy efficient or roll the cost of the energy upgrade of an existing home into the mortgage loan.
- **No Great Increase in Paper Work.** Under the new Fannie Mae, Freddie Mac, FHA and VA guidelines, the underwriting process is reasonable and straight forward. Only one new form is required and that form is prepared by a home energy rating program.
- **Lower Utility Bills Can Lead To Lower Client Defaults.** Since your customers will have lower utility bills, they will have more financial resources to put towards their mortgage. This should result in fewer defaults.

There are many reasons for you a lender to become interested in financing energy efficiency. Let's find out first what Energy Efficiency Financing is all about.

What Is Energy Efficiency Financing?

The whole concept of Energy Efficiency Financing began when builders started building homes in response to the rising energy costs of the 1970's. Those cutting edge builders who added extra insulation, spent extra effort tightening their homes, upgraded their windows, and/or installed a higher efficiency heating and cooling system were now at a price disadvantage competing with the average builder. The homes looked the same, but the initial cost was now a couple thousand dollars more. Builders tried long and hard to explain that their homes would be less expensive to own on a monthly basis than the traditionally constructed home, but in most cases the energy upgrades were not recognized in the mortgage loan or credited in the appraisal.

Another problem was that by increasing the first cost of their homes, fewer people could qualify to purchase them. They now had a smaller market to sell to. Lenders only considered principal, interest, taxes and insurance when figuring debt-to-income qualifying ratios. Lower energy bills were not part of the standard equation.

The energy mortgage was born in 1979 when President Jimmy Carter signed an executive order directing federally sponsored secondary market institutions to offer consumers incentives for energy-efficient homes. Fannie Mae & Freddie Mac responded by expanding the qualifying ratios by what has become known as the "two percent stretch." This "two percent stretch" allows a lender to stretch both the housing debt-to-income ratio and the total debt-to-income ratio by two percentage points. These ratios are typically 28% and 36% respectively. This two percent stretch increases those qualifying ratios to 30% and 38% respectively.

How Do You Determine "Energy Efficient?"

This was good, but the problem was the ever present question, "What is energy efficient?" To solve this problem, a new energy efficiency evaluation tool was developed called a home energy rating. A home energy rating uses independent and certified residential energy professional to determine the energy efficiency level of a home. The home energy rating industry working with the housing and mortgage industries have developed standards for energy ratings. These guidelines call for a home to be rated on a 100 point scale with the higher the number the more energy efficient the home. It has been determined that a home that scores an 80 out of 100 is considered to be "energy efficient" by the major lending groups.

Home energy ratings are an outgrowth of the National Shelter Industry Steering Committee that was composed of the leadership of the nation's shelter industry. In 1983 the Industry Steering Committee created Energy Rated Homes of America. Energy Rated Homes of America has member rating systems in the states of Alaska, Arkansas, California, Colorado, Indiana, Iowa, Louisiana, Mississippi, Oregon, Rhode Island, Utah and Vermont. Their ratings are recognized by all the major secondary mortgage institutions. Energy Rated Homes of America rates homes on the 100 point scale and then converts them to star ratings. Homes are rated from one (*) to five-and-a-half stars (*****+), with five-and-a-half (*****+) being the optimum energy efficient. Homes that meet the four star (****) level (80 points on the 100 point scale) are considered "energy efficient" and qualify for an Energy Efficient Mortgage.

Besides Energy Rated Homes of America there are independent rating programs in the states of California, Florida, Illinois, Kansas, Maine, Michigan, Ohio, and Virginia. For a listing of home energy rating systems, please view the home energy rating system directory in the National Residential Energy Services Network web site.

The best thing is that you as a lender do not have to worry about determining "energy efficient." You can leave that up to an home energy rating system that is recognized by the secondary mortgage marketer. You can concentrate on what you know best financing. Today there are several energy efficiency financing products offered by the federally sponsored secondary mortgage institutions to handle different situations. The following sections discuss each product in detail.

Energy Efficient Mortgages

What is an Energy Efficient Mortgage (EEM)? The EEM was developed by the lending industry to give the builder/buyer of an energy efficient home credit for the fact that the home will have lower energy bills than a typical home. The program is typically used for new energy efficient homes, but can also be used for existing homes that are already energy efficient.

An EEM allows a lender to stretch both the housing debt-to-income ratio and the total debt-to-income ratio by two percentage points. These ratios are typically 28% and 36% respectively. This two percent stretch increases those qualifying ratios to 30% and 38% respectively. Let's look at an example of the effect that this has.

You have clients that come in and want to purchase one of the nice new three bedroom homes at the edge of town. They have a choice of two different builders. One builds a good house but with little effort to make it energy efficient. The second builder has invested time and materials to provide clients with homes that can be documented as more comfortable and energy efficient through a home energy rating. The conventional home costs \$100,000. The energy efficient home costs \$105,000 (stretched for effect, energy efficiency typically add 2-3% to the cost of a new home). Both look about the same and have the same amenities. The customer will probably be drawn to the home that costs five thousand dollars less, but is that their best investment and will they be able to qualify?

Looking at the table below, we see that the monthly PITI for the energy efficient home goes up \$33 per month. However, when we compare energy bills, the energy efficient home has \$37 dollar lower utility costs. It costs your clients less each month to own the energy efficient home right from day one. Four dollars isn't exactly winning the lottery, but their mortgage payment will remain the same for the next thirty years. Can you guarantee their utility bills will remain the same for thirty years? And their positive cash flow will be even greater when you consider that mortgage interest is tax deductible and energy costs are not!

The bigger difference shows up in the income needed to qualify. The conventional house requires a monthly income of \$3,013, whereas the energy efficient home only requires a monthly income of \$2,922. That's over \$90 less per month or over \$1,100 per year less income needed to qualify. Energy Efficient Mortgages open new houses up to more and more people.

Typical Home	Component	Energy Eff Home
\$100,000	Home Price	\$105,000
\$10,000	Down Payment	\$10,500
\$90,000	Mortgage Amount	\$94,500
8%	Interest Rate	8%
30	Term (Years)	30
\$660	Monthly Mortgage Payment	\$693
\$167	Taxes	\$167
\$17	Insurance	\$17
\$844	PITI	\$877
\$109	Monthly Energy Bills	\$72
\$953	PITI + Energy	\$949
\$3,013	Monthly Income Required	\$2,922
\$36,159	Annual Income Required	\$35,070

Increasing the number of people who qualify to purchase an energy efficient home is one benefit of an EEM. Another benefit is qualifying clients for a bigger mortgage. Using the same example, if your client had an annual income of \$36,159, they would only qualify for a \$90,000 mortgage. However, if the home is energy efficient, the client would qualify for a \$98,213 mortgage. Purchasing power would increase by \$8,213. Since the extra cost for energy efficiency measures is typically only \$2,000-\$5,000, they would have an additional \$3,000-\$6,000 to spend on other amenities like a whirlpool tub, a larger kitchen, better flooring, or that enormous deck that they want.

Private national primary mortgage lenders like Norwest Mortgage, GMAC Mortgage and PHH Mortgage are now offering mortgage incentives such as reduced closing costs, interest rates and free appraisals for the purchase of high energy efficient rated homes. This trend is expected to continue as consumer demand for energy efficient homes continues to grow.

This is great for new homes that are built to be energy efficient, but what about all the existing homes out there that are not energy efficient? There is a mortgage product for them also. It's called the Energy Improvement Mortgage.

Energy Improvement Mortgages

What is an Energy Improvement Mortgage (EIM)? The EIM was developed by the lending industry to give the buyer of an existing home the opportunity to borrow more money at the time of sale or refinancing to make their dream home more energy efficient. Again, the lending industry recognizes that saving energy reduces the cost of home ownership and frees up more money to assist in paying the mortgage, besides increasing the comfort and durability of the home.

The extra dollars borrowed to add additional insulation, replace the old heating/cooling system, or tighten the home are rolled into the new mortgage and spread over the mortgage term (usually 30 years). Let's look at an example:

Typical Home	Component	Energy Improved
\$100,000	Home Price	\$100,000
\$10,000	Down Payment	\$10,000
	Energy Improvements	\$4,000
\$90,000	Mortgage Amount	\$94,000
8%	Interest Rate	8%
30	Term (Years)	30
\$660	Monthly Mortgage Payment	\$690
\$167	Taxes	\$167
\$17	Insurance	\$17
\$844	PITI	\$873
\$120	Monthly Energy Bills	\$80
\$964	PITI + Energy	\$953

If your client bought the energy improved home, they would have a total monthly housing cost of \$11 less (\$964 - \$953) than if they had purchased the typical home. As energy prices rise, they will be further "insulated" from the rate increases.

If you were in the market to purchase a home and could get a tighter, more comfortable home while paying less each month, what would you do? How would your clients respond to you if you helped make that happen for them? Do you suppose they'd tell their friends about you?

Energy Improvement Loans

What about those who aren't purchasing a home, but want to make their existing home more energy efficient? What's available for them? Fannie Mae just launched a new program called the Residential Energy Efficiency Improvement Loan program. Fannie Mae has set up the program so they can purchase these loans on the secondary market, freeing up local funds. See the Fannie Mae Residential Energy Efficiency Improvement Loan flyer in the Fannie Mae section of this handbook.

Setting up an Energy Efficient Financing Program

Establishing a successful Energy Efficiency Financing program is like designing any new successful business. The following are the keys to being successful with Energy Efficiency Financing:

1. **Make a Commitment to Energy Efficiency.** Make a long term commitment to creating a market for energy efficiency homes in Iowa.
2. **Contact Energy Rated Homes Of Iowa.** Energy Rated Homes of Iowa (ERHIA) is your key contact for establishing an Energy Efficiency Financing Program. ERHIA maintains a list of lenders who are willing to process EEMs and EIMs.
3. **Contact Your Local Utility.** Many utilities in Iowa, both investor owned, municipals and RECs have new construction programs that would qualify participating homes for an Energy Efficient Mortgage.
4. **Align Yourself with Trade Allies.** Identify those local builders, real estate agents, and HVAC contractors who are dedicated to energy efficient housing. These allies will bring you new business if they know that you are willing to work with them on promoting energy efficiency. Working with the local trade allies will also promote economic development for your community.
5. **Set Energy Financing Program Procedures.** You need to establish internal policies based on the national programs that you plan to participate with. If you are processing FHA loans you need to set procedures that follow their guidelines. If you plan to sell your mortgages on the secondary market, establish your guidelines according to the Fannie Mae or Freddie Mac guidelines. If you plan to keep the mortgages in house, it is still a good idea to follow the national guidelines.
6. **Train Staff.** To establish a successful Energy Financing Program you must instill a degree of enthusiasm in your loan processing staff. They must know why you are interested in processing Energy Efficiency Financing loans and most important, they need to know how to process the loans. Training of staff is critical to a successful program.

Energy Efficiency Loan Processes

Providing Energy Efficiency Financing to your clients is not a difficult or cumbersome process. There are only a few extra steps required in the loan process. The best part is there are no special approvals required by FHA, VA, Fannie Mae, and Freddie Mac and the time required to bring underwriters up to speed is minimal. The following steps should get you through the loan process with minimal effort:

1. Locate certified "Energy Raters" that are near your community (a list is provided in the back of this handbook).
2. Make sure that an energy rating and financial analysis of savings is included with the loan application process before sending the loan package to the underwriter (there are different forms for FHA/VA/Conventional stretch loans).
3. Obtain normal loan underwriting approvals, internally, and externally.

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