



Using Federal Loan Guarantees for large-scale deployment of Comprehensive Energy Efficiency in New and Existing Residential Buildings

Title XVII of EAct authorizes the Secretary of Energy to provide loan guarantees for projects that “avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases.” The Loan Guarantee Solicitation Announcement issued on August 8, 2006 by the US Department of Energy further explained that a principal goal of Title XVII is to encourage early commercial use of new or significantly improved technologies. Unfortunately, the list of project types that were eligible for the loan guarantees did not appear to include residential energy efficiency. This, notwithstanding the fact that it is a sector primed for a market mechanism to deliver large energy savings at a very low cost. DOE may be able to move this issue administratively and provide federal loan guarantees for Energy Efficient Mortgages (EEM’s) within a structure of state, utility or authority sponsorship, to finance high performance new and existing homes.

While currently available EEM’s offer a number of advantages over conventional mortgages, allowing borrowers to qualify for a larger loan, lowering monthly energy costs, and increasing the potential resale value of a home, they unfortunately have failed to attract customers because they are more difficult to access, take longer to close, and do not offer an advantage on interest rates compared to conventional mortgage products. This proposal will seek to align a number of existing initiatives to create the consumer demand, competent infrastructure and quality assurance to deliver energy efficiency as an **inherent builder and contractor sales attribute and a consumer purchase value.**

The Proposal: Title XVII of the Energy Policy Act allows the Secretary of Energy to guarantee up to 80% of the amount of the project costs of a wide range of energy saving projects and technologies. This proposal requests loan guarantees for energy efficiency mortgages to support the large scale deployment of Home Performance with ENERGY STAR (HPWES) and ENERGY STAR Labeled Homes (ESLH) in their respective markets. The guarantee would insure only up to 25% of the principal of the mortgage, thereby allowing lenders to issue these mortgages at a lower interest rate and providing an added incentive for borrowers to assure their homes meet the aggressive energy efficiency targets set as standards by the Sponsoring Entities.

The availability of low interest rate financing for residential housing which meets strict energy efficiency criteria will allow both programs to significantly accelerate growth in the penetration of high performance practices into the existing and new homes markets. Essentially, the guarantee would replace the need to purchase mortgage insurance in the first instance, thereby resulting in a lower interest rate charged to the borrower of approximately 1%. For a borrower taking out a \$200,000 mortgage loan, at current market rates, the interest rate could be reduced from 6% to 5%, resulting in a lower monthly payment from \$1,198 to \$1,074. Where purchase of the insurance is not required, financial institutions would agree to an interest rate reduction owing to the reduced risk as condition for access to the guarantee.



Public Policy and alignment with other compatible resources:

Eligible New Homes: To drive consumers to a new tier of ESLH that reduces energy consumption by 50 percent relative to the International Energy Conservation Code standard (created in collaboration with the EPA), which level is documented by a certified HERS rater or Home Performance Analyst (HPA), and thus qualify the builder for a tax credit under EPACT, homes meeting this standard will be eligible for an Energy Efficient Mortgage supported by the loan guarantee.

Eligible Existing Homes: Only comprehensive Home Performance with ENERGY STAR projects that can document a cost-effective scope-of-work saving a minimum of 40% of baseline energy costs as documented through a Comprehensive Home Assessment (as defined by BPI and RESNET standards) and performed by a certified HPA, will be eligible for an Energy Efficient Mortgage supported by the loan guarantee.

The energy efficient mortgages would be issued by lenders to the owners of higher-tiered ENERGY STAR labeled new homes aligned to the efficiency standard for the Federal tax credit to builders enacted under EPAct and those existing home-owners meeting an energy savings performance standard documented through the HPWES. This combination of a consumer demand driver (the low-interest mortgage) with the mid-stream driver for compliance (the builder tax credit and HPWES standard) will create a powerful, market dynamic. States, utilities or authorities will serve as **Sponsoring Entities** and aggregators of the loans for the purpose of providing access to the loan guarantee. The Sponsoring Entities would ultimately be responsible for assuring that the performance standards of builders and contractors are met and would verify such compliance to the lenders.

Conceivably, as consumers become more aware of the potential monthly savings resulting from energy efficiency improvements and the reduced monthly mortgage payment the loan secures, the demand for the product will increase and the marketplace will replace the need for government-backed securities. In time, the additional cash flow to the home owners from real energy savings can be documented to an actuarial standard to prove these loans, on balance, perform better than the average and will drive a lower interest rate as a market function. The volume and good performance of the mortgage loans made will then permit the regular secondary markets to function to purchase these loans without the loan guarantee. In the long run, it could be replaced with private or state financed mortgage insurance and energy efficient building and construction practices will seen as a dependable way to manage risk.

Explanation: Mortgage loan guarantees can help to reduce the interest rates to the borrowers to below market rates which then substantially increases the initial demand for the product. Energy efficient mortgage products currently offered by Fannie Mae, Freddie Mac, US Department of Veterans Affairs and the US Department of Housing and Urban Development have had limited success in attracting wide-spread use and support by families taking out mortgages when buying new homes or refinancing existing mortgage debt. Most lenders will not use the existing energy efficiency mortgage products, and most borrowers will not take the time to understand them. Many homeowners and homebuyers are instead using more expensive and, in many cases now infamous sub-prime products to fill this gap. This proposal gives lenders and borrowers an

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alternative financing mechanism which will promote a critical public policy with prudent risk sharing by lenders and government.

Loan interest rates are a direct reflection of the risk that the lender, and more importantly, the secondary market investor, considers the loan to represent. The greater the perceived (for untested products) and actual risk (after a three year performance period), the higher the rate to the borrower. Loan guarantees and mortgage insurance reduce investor risk and can be used to offset investor concerns and reduce or stabilize loan interest rates. In general, mortgage loans that exceed eighty percent (80%) of property value (commonly referred to as loan to value, LTV, or the loan amount divided by the appraised value of the property) must contain some form of mortgage insurance to permit the lender who makes (originates) the loan to sell the loan to an investor.

How the guarantee could work: Sponsoring Entities would qualify lenders who offer the loan guarantee to borrowers of energy efficient mortgages without requiring private mortgage insurance and would affirm compliance with the energy savings performance standards. Thus lenders would be required to pass the savings on to the borrowers as an additional incentive to increase market interest in energy efficiency mortgages. The credit standards from a lending perspective will be similar to FHA underwriting and/or Fannie Mae My Community Loan current underwriting standards. The loan interest rate would be established under the lowest prime credit borrower rate so that the loan is easily marketed and delivers loan volume to its investors.

The LTV would be capped between 95% to 99% of value after including energy efficiency and related improvements. This means that the appraiser will assess the value of the improvements made and adjust the value of the home upwards to include the value of the improvements. This would allow lower income households and first time home buyers to participate. It will be effective in both high home value markets where large down payment and closing costs remove most first time buyers from entering the market and lower home value markets where the cost of real energy improvements, plus the purchase/refinance value of the home may be greater than the maximum LTV existing non-effective programs allow.

Conclusion: Loan Guarantees have been an effective instrument of public policy in the housing and civic infrastructure areas. Aligning a loan guarantee strategy with the conduct of high performance energy efficiency work in new and existing homes makes ultimate good sense because it eliminates a major first cost barrier by aligning additional loan costs for aggressive energy efficiency measures with energy and attendant bill savings over time. This strategy also fulfills an addition critical component of a market-based intervention. By supporting a Quality Control/Quality Assurance infrastructure and the adoption of third party performance standards, the initiative also helps retool the services network to be accountable and effective in saving energy. The implementation of public policy becomes imbedded in smart lending and smart borrowing at a nominal cost for a predictable, beneficial outcome for the consumer..

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