

Home Energy Performance Coupons A Model for Effective Use of Economic Stimulus Funds

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Introduction

It is possible to cost-effectively reduce an existing home's energy use by 30% using the technology, building practices, standards, and skills that are readily available. However, due to the recession and banking issues, homeowners lack access to affordable financing that would spur investment in energy improvements. There is also a need for investment in the existing infrastructure to meet the anticipated demand for such improvements.

The state and municipal energy block grant funding provided by the economic stimulus legislation presents an opportunity to address both of these barriers.

The RESNET/BPI dual Comprehensive Home Energy Audit standard certifies individuals to inspect, test, and rate a home's energy performance, prepare a work order for contractors to make needed improvements and verify that the improvements are properly completed.

State and municipal governments will soon be receiving billions of dollars in block grants from the federal government as part of the economic stimulus package to support improved energy efficiency and the creation of green jobs. President Obama has set a goal of improving the energy performance of a million homes with this funding. In addition the federal government expects the funds be spent transparently and with measurable results. Finally, the state and local governments have 18 months to identify and fund the projects to be supported with the stimulus support.

At the same time, due to the current economic situation, state and local governments will not be able to gear up with staffing for the planning, allocation and implementation of the new programs.

Clearly a simple, effective and accountable method needs to be promoted that is simple to implement, gets the money on the street soon, leads to the wise investment of funds, is accountable, and creates local jobs.

To assist state and local officials in deciding how to allocate the new federal funding, RESNET proposes the following model for consideration.

Proposal

Under the proposed Home Energy Performance Coupons program, there would be a set of coupons for consumers that would cover half of the costs for the inspection and amount of energy saved.

The first coupon would cover the cost of the inspection and testing of the home to determine what improvements can cost effectively be made to the home.

Based upon the results of the assessment, the consumer would be presented with a coupon whose value is based on the calculated savings from the upgrade to the home. As a point of discussion, it is suggested that the value of this coupon be equal to the number of annual kWh saved * % kWh saved * \$1.00 (and for natural gas savings the annual therms saved * % therms saved * \$10.00). This subsidy could easily be calculated by accredited rating software programs.

If the work that the homeowner wishes to make is for a specific upgrade, (such as a new water heater) the auditor would calculate the savings from the new appliance and present a coupon based upon the projected savings. The consumer would then select a contractor to install the product. When the work is completed, the auditor would verify this and sign off on a form. The contractor would then submit the coupon and verification form to the program administrator and then be paid for the face value of the coupon.

If the homeowner wants a comprehensive improvement to the home, a coupon would be presented whose value would be based on the calculated savings from the work. In the case of a comprehensive improvement, it will be required that the contractors are trained to properly complete the work and that there will be testing out after the work is completed. In addition, the report will include calculations of the energy and carbon emissions saved.

For comprehensive improvements, the Homeowner will pay for the improvements and then be reimbursed by the program administrator upon submission of the coupon, receipts paid in full, and the Energy Auditor's post improvement analysis. This will ensure that the work is completed properly to maximize the energy savings.

This will ensure that more savings are achieved by tying the coupon value to the amount of energy savings.

Benefits

This model uses existing, cost-effective technologies that are on the "market shelf" now. It also uses the existing national standards and infrastructure for the inspection, testing and verification of the homes that participate in the program. It uses contractors that have been trained and accredited to undertake the work.

It leads to leveraging the funding with homeowner contributions. The model is also simple to administer.