#### MEMORANDUM OF UNDERSTANDING

#### Between the

## **U.S. Department of Energy**

#### and the

### U.S. Department of Housing and Urban Development

# Regarding

### **Building Energy Programs and Energy Efficient Mortgages**

### I. Purpose:

The purpose of this Memorandum of Understanding (MOU), made this 13<sup>th</sup> day of January, 2010, is to establish a general working agreement between the U.S. Department of Energy (DOE) and the U.S. Department of Housing and Urban Development (HUD) to coordinate policies and activities aimed at improving the energy efficiency of the nation's housing.

This MOU is intended to support and implement the agreement between the two agencies that was announced on February 27, 2009 (Attachment 1). This MOU builds on existing building energy programs in DOE, energy efficient mortgage programs at HUD's Federal Housing Administration (FHA), and other energy programs in HUD's portfolio of public and assisted housing.

The MOU also expands on the Memorandum of Understanding signed on May 6, 2009, which addressed significant barriers to using the DOE Weatherization Assistance Program in HUD-assisted multifamily buildings.

# This MOU is designed to:

- (1) Coordinate DOE and HUD resources and programs to enhance the Energy Efficient Mortgage and improve market acceptance of the product through education, incentives, and other measures.
- (2) Coordinate DOE and HUD resources to test new DOE energy assessment tools in a pilot using FHA borrowers in select markets, utilizing incentives to promote usage and feedback.
- (3) Coordinate DOE and HUD resources to lower utility costs in HUD-assisted and public housing programs.

(4) Develop new information tools and coordinated financing to accelerate the level of energy retrofits in the residential sector including both affordable and market-rate, single family and multifamily, rental and homeownership.

#### II. Problem Statement

Existing residential structures in the U.S. consume approximately 20 percent of all U.S. energy and more than one third of all U.S. electricity. Retrofits of these buildings can reduce this energy use by at least 30 percent and are among the most cost-effective energy and environmental investments available.

Because less than two percent of residential buildings are replaced each year, failure to make these energy retrofits will greatly increase the cost of meeting national energy and environmental goals.

Significant barriers exist to expanding the energy efficiency of housing in the U.S. These barriers include:

(1) The lack of strong incentives to incorporate energy efficiency measures in the home buying process.

Consumer (and lender) participation in energy efficient improvements during the mortgage loan process likely has been limited by a number of factors, including:

- Incomplete consumer information as to energy efficiency incentives and a lack of a central source that explains such incentives (either at the state or federal level).
- Incomplete consumer information as to what additional actions and burdens energy efficiency programs impose during and after the home purchase process.
- Incomplete consumer information regarding testing and rating requirements, performance levels, and other technical information.
- Consumer skepticism about the reliability of energy savings projections and concerns that energy savings will not cover added monthly (principal and interest) costs or that the investment cannot be recovered while they own the home.
- Lender concerns that upfront energy efficiency audits or inspections will delay completion of the home buying or refinancing process; particularly regarding increases in the time between primary loan placement and the time when the mortgage can be sold to a secondary buyer.
- No assurance to the consumer or the lender that the energy savings realized or the energy investment costs incurred will be included in the appraised value of the house.

(2) Barriers to retrofitting federally-subsidized multifamily housing.

Each year, HUD assists approximately five million renters and homeowners (almost five percent of all households) through its various programs. HUD spends some \$5 billion each year on energy, through utility allowances to renters, housing assistance payments to private building owners, and operating grants to public housing authorities. A number of factors have constrained HUD's ability to facilitate broad-based energy improvements to its inventory including:

- Uncertainty about building diagnostic tools and appropriate investment standards and protocols useful to affordable housing assets to plan routine and ongoing energy retrofits.
- Technical challenges encountered by property management in designing, planning, and managing a property-wide energy retrofit inclusive of developing specifications, locating and hiring qualified contractors, and developing plans to fund/finance the improvements.
- Reluctance by building owners to make investments in energy efficiency when utility costs are currently paid by HUD or tenants.
- Public and multifamily properties often experience difficulty in accessing affordable capital to finance energy retrofit projects due to regulatory barriers or high transaction costs relative to loan size and energy saving benefits.
- "Split incentives" that limit an owner's ability to capture the savings from the investments, which also inhibits investment in energy retrofits.

### **III. Proposed Solutions**

DOE and HUD agree to work together to address the obstacles and opportunities for promoting energy efficiency in federally-subsidized and market-rate housing. This may include, to the extent authorized by law:

### A. Energy Efficient Mortgages

## (1) <u>Proposals</u>

HUD and DOE will work together toward improving the market acceptance of energy efficient upgrades with a long term goal to make these a routine part of the FHA home buying process.

HUD and DOE agree to work towards conducting pilot programs in three areas:

# (a) Pilot 1: Uniform Energy Rating/Label

FHA, working with DOE, will test the feasibility of providing an optional low-cost energy performance rating/label and related energy efficiency information as a supplement to home inspection reports. The energy performance rating/label would include an energy rating of the residence, as compared to a standardized baseline of similar structures.

HUD and DOE will also work with the industry to explore how to develop energy ratings data that will be meaningful to the home appraisal industry in assisting appraisers, realtors, and other real estate professionals to incorporate the value of energy efficiency improvements in home values.

# (b) Pilot 2: Seller Option

FHA, working with DOE, will explore potential strategies for encouraging or giving incentives to the seller to conduct an energy audit and/or implement energy efficient improvements prior to the sale. This pilot could, for example, explore the willingness of sellers to commission a home energy rating prior to the sale, so that prospective buyers have an "Energy Efficient Mortgage-ready" home at the time of the initial viewing of the home.

## (c) Pilot 3: Buyer Option

FHA will explore new ways to pilot a streamlined Energy Efficient Mortgage, as outlined in HUD's FY 2010 budget proposals. This could allow, as an example, for the cost of the measures identified through the streamlined energy performance report to be included in the primary mortgage, subject to appropriate risk parameters, if they are completed by the purchaser within an acceptable time frame after the sale, are installed by a qualified contractor and are subject to other provisions as applicable.

## (2) Roles and Responsibilities

### (a) DOE will:

- (i) Develop software, home energy inspection protocols and data on the cost and performance of potential retrofit measures that can be used by qualified home inspectors and/or appraisers. The software, inspection protocols and data would be continuously improved based upon experience gained in use and advances in technology.
- (ii) Validate the accuracy of the software, inspection protocols and data by comparing predictions to the actual results of retrofit projects. DOE intends to test the software and inspection protocols with American Recovery and Reinvestment Act energy efficiency projects including the

- Weatherization Assistance Program (WAP) and Energy Efficiency Conservation Block Grants (EECBGs).
- (iii) Work with HUD to define certification criteria to identify qualified home energy efficiency reviewers and provide resources to facilitate training for these inspectors.
- (iv) Work with HUD to define certification criteria to identify building contractors qualified to perform energy efficiency retrofits and facilitate training for these contractors.
- (v) Create a standard format for a rating/label that compares the efficiency and energy use of each reviewed house to other similar structures, as well as standard formats for the provision of reliable estimates of the expected energy use and energy cost of each reviewed house and a list of possible energy efficiency and energy upgrades, together with estimates of the costs and cost savings of such upgrades.
- (vi) Provide information and other resources that will help home appraisers use the results of home energy inspections to accurately incorporate the value of the home's energy efficiency and energy upgrades in the appraised value of the house. The label and other energy inspection results would provide a basis for making this determination.
- (vii) Provide a list of state and federal incentives for energy efficiency.
- (viii) Work with HUD, and other industry resources, to obtain utility cost data so that HUD can work toward developing a mechanism that could include such data in its underwriting process for FHA mortgages.

# (b) FHA will:

- (i) Identify opportunities to expand existing incentives or develop new incentives to encourage existing home owners or home buyers to invest in energy efficiency through the energy efficient mortgage program or other FHA loan products.
- (ii) Work with industry leaders to provide information and training for loan officers and others involved in incorporating energy efficiency in underwriting energy efficient mortgages.
- (iii) Pilot these strategies in partnership with DOE, through the pilot projects outlined in Section III.

# B. Energy Initiatives in Public and Assisted Housing

# (1) <u>Proposed Solutions</u>

HUD and DOE will work together to:

- (a) Design a common set of guidelines and standards, diagnostic tools, and specifications for retrofitting HUD's inventory of public housing and HUD-assisted rental properties.
- (b) Establish the feasibility of implementing a guaranteed loan fund or funds and/or other credit-enhancement mechanisms for energy retrofits in public and assisted housing, to include investments in properties with Section 8 vouchers and utilizing existing loan guarantee authorities, or expanded authority that Congress may provide in the future. If feasible, HUD, working with DOE, will seek to implement such funds.
- (c) Explore strategies to address the "split incentive" issue, whereby owners of properties rarely invest in energy efficiency when the tenants pay the utility bills, and identify policies that provide appropriate market signals that provide incentives for investments that lower costs and disincentives for maintaining inefficient properties.
- (d) Explore the feasibility of implementing common evaluation, monitoring, and reporting protocols that provide reliable data on expenditures and energy savings achieved through American Recovery and Reinvestment of 2009 Act (Recovery Act) funds in the residential sector.
- (e) Jointly devise a strategy to ensure successful application of weatherization funding in multifamily buildings, pursuant to the May 6, 2009 Memorandum of Understanding between HUD and DOE to lower barriers to using weatherization funds in these properties.
- (f) Establish the feasibility of initiating joint data collection and sharing, and identify joint research activities aimed at documenting the costs and benefits of energy and green retrofits in existing housing.
- (g) Explore the feasibility of expanding the use of DOE's web-based bulk purchasing tool (Quantity Quotes) by public and assisted housing properties, to facilitate replacement of inefficient appliances, lighting, and equipment with affordable ENERGY STAR products; this will include adding additional products, and enabling tracking of purchases of products on a nation-wide basis. Alternatively, work with DOE to expand discounts on ENERGY STAR products through existing bulk purchase sources.

(h) Examine ways to support DOE peer-to-peer review of HUD's Energy Performance Contracting Program in public housing. DOE will provide recommendations related to determining and verifying actual and guaranteed savings, and will provide recommendations for streamlining the EPC process.

# (2) Roles and Responsibilities

HUD and DOE will take such actions that are necessary to implement the energy initiatives in public and assisted housing outlined above.

# C. Other Energy Efficiency Measures

# (1) <u>Proposed solutions</u>

HUD and DOE will work to identify opportunities for additional measures, to the extent determined feasible by both agencies and to the extent authorized by law, that link energy efficiency with developing affordable and market-rate housing. These may include:

- (a) Support for States, political subdivisions of States, Indian tribes, local development districts, and nonprofit organizations to integrate energy efficiency into the development of affordable housing.
- (b) Coordination of activities between States, local development districts, communities, and DOE and HUD field staff to help implement the development of affordable, energy efficient housing.
- (c) Collaboration on joint projects or proposal reviews for competitions sponsored by either agency.
- (d) Collaboration on additional pilot projects and, when successful, regional and national expansion of those projects using partnerships between DOE, HUD, and local organizations to develop energy-efficient housing that meet local needs and DOE and HUD objectives.

# (2) Roles and Responsibilities

HUD and DOE will take such actions that are necessary to implement the other energy efficiency measures outlined above.

## IV. Programming, Budgeting, Funding, and Reimbursement Arrangements

(a) This MOU is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement or contribution of funds between the parties to this MOU will be handled in accordance with applicable laws, regulations, and procedures, and will be subject to separate agreements hereunder that shall be in writing by representatives of both parties.

- (b) DOE and HUD will bear their own respective expenses in connection with the preparation, negotiation, and implementation of this MOU, and neither party shall be liable to the other for such expenses.
- (c) This MOU in no way restricts DOE or HUD from participating in similar activities or arrangements with other entities or Federal agencies.
- (d) Nothing in this MOU shall obligate DOE or HUD to expend appropriations or to enter into any contract or other obligations.
- (e) Should DOE and HUD decide to collaborate on a specific project or projects, one agency will be selected to serve as the lead agency. The lead agency will be responsible for all grant management, financial, and accounting services involved in awarding funds to a recipient. The other agency will be responsible for transferring its share of funds to support the project to the lead agency and any other duties as may be specified in separate Interagency Agreements under this MOU.
- (f) Projects funded pursuant to this MOU shall be determined annually on a case-by-case basis in accordance with this MOU and as set forth in specific Interagency Agreements hereunder. Any awards shall be made pursuant to both agencies' governing authorities and will be administered in accordance with applicable laws, regulations, and procedures.

### V. Publicity

The parties shall coordinate all public statement and other disclosures regarding this Agreement, and neither party may enter into any publicity regarding this Agreement unless it consults with the other party in advance on the form, timing and, content of any such publicity.

### **VI. Agency Contacts**

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## VIII. Effective Date

This MOU will become effective upon signature by the Secretary of the U.S. Department of Housing and Urban Development and the Secretary of the U.S. Department of Energy. This MOU shall terminate five years after signature unless renewed by the Parties. However, either Party may terminate this MOU upon 90 days' written notice to the other party. Its provisions will be reviewed annually and amended or supplemented as may be mutually agreed upon in writing.

Steven Chu, Secretary U.S. Department of Energy

U.S. Department of Housing and Urban Development

Shaun Donovan, Secretary

January 13, 2010 January 13, 2010 Date Date

#### **Attachment 1**

# **HUD-DOE** Agreement - February 27, 2009

- **Provide guidance to public and assisted housing.** HUD and DOE will work together to provide a common set of guidelines and specifications for retrofitting public housing, as well as privately owned, federally-subsidized rental properties.
- Coordinate expenditure of economic recovery funds. HUD and DOE will sign an Interagency Agreement within 30 days on coordinating the use of weatherization assistance, energy efficiency and conservation block grant, and other recovery funds in local communities. These include, for example, exploring ways to increase the use of weatherization funds in public and assisted housing, and coordinating the use of CDBG and EECBG funds in local communities. The HUD/DOE collaboration will help catalyze a home performance/energy retrofit industry in the U.S.
- Develop common baseline for measuring energy efficiency measures. HUD and DOE will lead a Government-wide effort to develop a common baseline for measuring home energy use and the gains from efficiency improvements. The goal of this effort is to provide the information base and metrics necessary to help support a national energy efficiency market for the housing sector. In order to assure that homeowners get the savings that they have invested in, HUD and DOE will work with the Environmental Protection Agency (EPA) and industry experts to develop and disseminate a tool that will provide homeowners and consumers with an easy way to assess the relative energy efficiency of their homes and the effectiveness of investments in energy efficiency.
- **Develop new home energy financing products.** HUD and DOE will also explore home energy disclosure and audit standards as well as new financing tools that will enable national scale investment in residential energy efficiency. These include greater use of revolving funds, expanded energy mortgage financing tools through the Federal Housing Administration, as well as exploring the use of DOE loan guarantee authority in the residential sector.