

U.S. Department of Housing and Urban Development Community Planning and Development

Special Attention of:

All Regional Administrators All CPD Division Directors All CDBG Grantees Notice: CPD-13-01

Issued: April 2013

This Notice is effective until it is amended, superseded, or rescinded.

SUBJECT: Using Community Development Block Grant (CDBG) Funds to Develop Energy Star®-Certified Housing Units

This Notice provides guidance to encourage grantees to use CDBG funds to develop Energy Star-certified housing units and to report these accurately in the Integrated Disbursement and Information System (IDIS). On March 7, 2006, CPD published a Federal Register Notice (71 FR 11470, available at <u>http://www.gpo.gov/fdsys/pkg/FR-2006-03-07/pdf/06-2174.pdf</u>) implementing performance measures for its formula grant programs. These measures included the number of Energy Star-certified housing units produced. Beginning in 2007, CPD required grantees to track Energy Star units that were built or rehabilitated with CDBG funds in the Integrated Disbursement and Information System (IDIS). Since that time, CDBG grantees have built or rehabilitated over 1,400 Energy Star units.

HUD encourages grantees to support and promote energy-efficient design through the provision of assistance, furthering Subgoal 4B of the Department's 2010-2015 Strategic Plan to promote energy-efficient buildings and location-efficient communities that are healthy, affordable, and diverse. Energy efficient products and housing units are good for the environment and provide for homeowner and renter monthly utility cost savings. The Department's 2012/2013 Management Action Plan (MAP) provides for measurable targets to assist HUD in reaching the broad goals outlined in the Strategic Plan. The Department's 2012/2013 (two-year) goal for Energy Star is 159,000 units constructed or rehabilitated to Energy Star standards.

This Notice establishes guidance for Energy Star reporting purposes only and does not establish program-wide definitions. Energy Star-certified housing units funded by CDBG can be newly constructed single-family detached housing units, newly constructed multifamily properties, or multifamily properties that undergo gut rehabilitation. "Gut or substantial rehabilitation" is defined for the Energy Star program as requiring a change of use, reconstruction of a vacant structure, or causing the building to be out of service for at least 30 consecutive days. Gut or substantial rehabilitation of single family housing units with CDBG funds may also earn the Energy Star certification, but EPA is currently revising its guidelines for single-family gut or substantial rehabilitation. Until the release of specific guidelines for gut or substantial rehabilitation by EPA, CDBG grantees initiating new Energy Star gut or substantial rehabilitation of single-family housing units must meet or exceed Energy Star standards for New Homes in order to qualify as Energy Star certified for reporting purposes.

The flexible nature of the CDBG program and certain program regulations contribute to the relatively small number of Energy Star units produced by the CDBG program. Federal law allows CDBG grantees to determine what activities they will fund from a wide array of statutorily eligible activities. Use of CDBG funds is determined by the wide range of needs at the state and local level. Additionally, CDBG program rules effectively limit the development of newly constructed Energy Star-certified housing units because the program prohibits such funds to be used to construct new permanent housing except in very narrow circumstances, including last resort housing under the relocation provisions at 24 CFR part 42, or as an activity carried out under Section 105(a)(15) of the Housing and Community Development Act of 1974 by certain eligible nonprofit entities. [In the Entitlement program, the eligible nonprofit entities operating pursuant to Section 105(a)(15) are known as Community-Based Development Organizations (CBDOs), and must meet very specific criteria described at 24 CFR 570.204(c).] Still, CDBG grantees have produced more than 1,300 new construction Energy Star units between FY 2008 and FY 2011. CDBG grantees historically do not spend a large portion of their allocations funding substantial rehabilitation for large multiunit buildings, averaging around 2% of national expenditures from 2001-2011. CDBG grantees do perform a large number of single family rehabilitation projects, but many grantees do not undertake housing rehabilitation projects that are extensive enough to qualify for Energy Star certification.

Nonetheless, producing certified Energy Star units is an important CDBG and Departmental priority that reaps many benefits for the homeowner or renter and that also makes a significant contribution to the energy efficiency and environmental well-being of the grantee and the nation as a whole. This Notice encourages grantees to consider making the production of Energy Star-certified units an integral part of their CDBG program.

Why Energy Star?ⁱ

Energy Star is a joint program of the U.S Environmental Protection Agency (EPA) and the U.S Department of Energy (DOE). The purpose of this program is to promote the use of energy efficient products and practices. In 1995, the Energy Star certification was first used for housing units to distinguish the energy efficient features of housing units constructed to a strict standard from those housing units constructed without these features. The certification can only be obtained after the housing unit has been verified as built to certain strict specifications which must be independently verified. This Notice contains information on certifying new single-family housing units, low-rise multifamily buildings, and high-rise multifamily buildings. Complete information is available on http://www.energystar.gov.

Pursuing Energy Star certification offers CDBG grantees many benefits, including:

Lower ownership cost. Compared with standard housing units, Energy Star-certified housing units use substantially less energy for heating, cooling, and water heating—delivering \$200 to \$400 in annual savings, which is particularly significant for the low- to

moderate-income beneficiaries served by CDBG. During the average seven to eight years a beneficiary might live in a housing unit, this adds up to thousands of dollars saved on utility bills. Additional savings on maintenance can also be substantial.

- Better performance. Properly installed energy efficient improvements deliver better performance against cold, heat, drafts, moisture, pollution, and noise. An energy-efficient housing unit helps ensure consistent temperatures between and across rooms, improved indoor air quality, and greater durability.
- Energy conservation. About 17 percent of the greenhouse gases emitted in the United States are attributed to the energy used to heat, cool, and light housing units, as well as to power the appliances and electronics in them. By making energy-efficient choices in the construction of new housing units and the improvement of existing housing units, American homeowners, renters, homebuilders, and home remodelers lower household utility bills while helping to protect the environment.

How Do New Homes Earn Energy Star Certification?

Energy Star is a system for achieving and verifying a certain level of energy efficient performance. The U.S. Environmental Protection Agency (EPA) administers the Energy Star program and sets strict energy efficiency guidelines (sometimes referred to as the Energy Star New Homes standard) that new housing units must meet in order to attain the Energy Star certification. The following types of housing units are eligible:

- Single family housing units
- Low-rise multifamily housing units (three stories or less)
- Manufactured housing units
- Systems-built housing units (e.g., structurally insulated panel (SIP), insulated concrete forms (ICF), or modular construction)

As directed by EPA, these housing units must be independently verified to be at least 15% more energy efficient than housing units built to current specified codes and must feature additional measures that deliver a total energy efficiency improvement of up to 30 percent compared to typical new housing units. Housing units achieve this level of performance through a **combination** of energy-efficient improvements, including:

- Effective insulation systems
- High-performance windows
- Tight construction and ducts
- Efficient heating and cooling equipment
- Energy Star-certified lighting and appliances

It should be emphasized here that installing energy-efficient windows, insulation, or appliances **alone** does not make a housing unit Energy Star-certified. This appears to be a major point of confusion for grantees in reporting in IDIS the number of Energy Star units they have produced. While these energy conservation measures are encouraged in building new housing units, they alone do not qualify a housing unit as Energy Star-certified and should not be counted as such in IDIS. To be counted in IDIS, a housing unit must have achieved full Energy Star certification.

To ensure that a housing unit meets Energy Star guidelines, third-party verification by a certified Home Energy Rater (or the equivalent) is required. This rater works closely with the builder throughout the construction process to help determine the needed energy-saving equipment and construction techniques, and conducts required on-site diagnostic testing and inspections to document that the housing unit is eligible to earn the Energy Star certification.

According to EPA's Energy Star guidance, each of the following steps must be taken to build new housing units that can be certified as Energy Star.

- Step 1: The grantee or subrecipient selects a builder that has a partnership agreement with EPA to affix the Energy Star certification on housing units that are independently verified to meet Energy Star guidelines. Through the partnership agreement process, the builder also selects a Home Energy Rater to work with to qualify its housing units. To find participating builder partners throughout the country, visit the Energy Star Partner Locator at http://www.energystar.gov/index.cfm?fuseaction=new_homes_partners.locator.
- Step 2: The builder submits its architectural plans to its rater for review. The rater looks for key information on the plans to help the builder choose the best combination of energy efficient features to ensure that the housing units will earn the Energy Star certification when constructed.
- Step 3: The builder constructs the housing units and the rater verifies features and performance. Throughout the construction process, the rater performs a number of inspections and diagnostic tests to verify the proper installation of the selected energy efficient features and overall energy performance of the housing units.
- Step 4: The rater inspects the completed housing unit with software that numerically measures the housing unit's energy efficiency characteristics.
 After the rater completes the final inspection and determines that all requirements have been met, the rater will provide the builder with an Energy Star certification, which is placed on the circuit breaker box of the housing unit. The certification provides the owner with documentation that the housing unit is Energy Star-certified.

How do Multifamily High Rise Buildings Earn Energy Star Certification?

To earn Energy Star certification, a new or substantially rehabilitated multifamily high rise building must meet strict guidelines for energy efficiency set by EPA, making them designed to be at least 15% more energy efficient than multifamily high rise buildings built to the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 90.1-2007. Unlike the above Energy Star standards for new housing units, these standards for multifamily high rise buildings apply to both new construction and substantial or gut rehabilitation. For Energy Star, "gut or substantial rehabilitation" is defined as requiring a change of use, reconstruction of a vacant structure, or causing the building to be out of service for at least 30 consecutive days.

The following outlines eligibility for the Energy Star Multifamily High Rise (MFHR) program:

- The intended use of the building must be for residential purposes. Commercial uses such as hotels, nursing homes, and assisted-living facilities are ineligible for the program.
- If the building includes both residential and commercial space:
 - The residential and residential-associated common space must consist of more than 50% of the occupiable square footage of the entire building; and
 - The residential space must be separately metered from the commercial space.
- Additionally, the building must meet the requirements of either Building Type 1 or Building Type 2 summarized in Table 1 below:

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New construction or substantially rehabilitated multifamily buildings with:				
5 or more dwelling units; AND				
4 or 5 stories; AND				
Has a central heating, cooling, or hot water system; OR	The space occupied by the dwelling units is less than 80% of the occupiable residential square footage of the building.			

Building Type 1

Building Type 2

New construction or substantially rehabilitated multifamily buildings with:		
5 or more dwelling units; AND		
6 or more stories		

To ensure that a MFHR building meets Energy Star guidelines, the developer of a project participating in the program must provide EPA or its designated agent with program-specific submittals. These submittals, which must be validated by a licensed professional, are used to demonstrate that the Energy Star program's requirements have been met, that all prerequisites are included, and that each energy conservation measure is installed to specification.

EPA has developed a flowchart to assist in the determination of whether a building project is eligible to pursue Energy Star certification as a multi-family high-rise. This tool can be accessed by CDBG grantees and subrecipients at:

http://www.energystar.gov/ia/partners/bldrs_lenders_raters/downloads/mfhr/MFHR_Flowchart_V ersion_1.0.pdf?e619-0e9e. All of the following steps must be taken to certify multifamily buildings as Energy Star.

• Step 1: Developer chooses to partner with Energy Star

Through a Partnership Agreement with EPA, a developer agrees to develop projects that are verified by a licensed professional. This licensed professional must be a registered architect or a professional engineer, with a license in a discipline related to residential and/or commercial building systems (e.g. mechanical engineering or commercial/residential architecture) and working knowledge of building systems, American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) Standard 90.1-2007, ASHRAE Standard 62.1-2007, and ASHRAE Standard 62.2-2007.

- Step 2: Developer submits an Energy Star MFHR Project Application
 An Energy Star Multifamily High-Rise Project Application (available at: http://www.energystar.gov/ia/partners/bldrs_lenders_raters/downloads/mfhr/ENERGY_ST_AR_MFHR_Project_Application_V1.0.pdf?e619-0e9e) must be submitted to mhfr@energystar.gov for each project. Once a project application is approved, the project will be held to the specified versions of the requirements as noted in the application.
- Step 3: Developer finalizes a set of designs that conform to the program's prerequisites and incorporates the recommended measures contributing to the achievement of the Performance Target OR the Prescriptive Path requirements. Once the project is approved, there are two paths to earning the Energy Star designation. Developers may choose a prescriptive package developed by EPA, or a customized approach using ASHRAE approved energy modeling software. Prior to construction, the licensed professional working on behalf of the Energy Star MFHR Developer Partner, must submit a complete Proposed Building Submittal (available here: http://www.energystar.gov/ia/partners/bldrs_lenders_raters/downloads/mfhr/ENERGY_ST_AR_MFHR_Submittal_Validation_Form_V1.0.pdf?d158-e277) to EPA or its designated agent to ensure that the proposed building design meets program requirements.
- Step 4: Developer constructs the project with the prerequisites and energy conservation measures as described by the Proposed Building Submittal or commits to make no changes during construction that would cause the as-built project to fail to comply with the program's prerequisites, the Prescriptive Path or cause the modeled consumption of the as-built project to fall below the Performance Target. Throughout the construction process, a number of inspections and diagnostic tests are required to verify proper installation of the selected energy–efficient features and overall energy performance of the project. Testing and verification requirements are found in the Energy Star Testing and Verification Protocols and are documented in the Testing and Verification Worksheets (both available here:

<u>http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_mfhr_tech_res</u>). After the final inspection, the licensed professional working on behalf of the Energy Star MFHR Developer Partner must submit a complete As-Built Building Submittal (available here: <u>http://www.energystar.gov/ia/partners/bldrs_lenders_raters/downloads/mfhr/ENERGY_ST</u> <u>AR_MFHR_Submittal_Validation_Form_V1.0.pdf?a5de-a063</u>) to EPA or its designated agent to ensure that the program prerequisites and energy conservation measures are installed to specification. Once the submittal has been approved, EPA will provide documentation to the developer notifying them that the building has earned the Energy Star certification.

Step 5: The developer or property owner assesses the energy performance of the project using Energy Star's Portfolio Manager for a minimum period of two years following the date of receipt of the Certificate of Occupancy. Although the Energy Star certification is attained by completing Steps 1 through 4, building performance is as much a function of proper building management as the energy conservation measures designed into the structure. Therefore, after the project has earned the Energy Star certification, the developer/owner must commit to benchmarking their building in Portfolio Manager

(<u>http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager</u>) for a period of two years.

Can Rehabilitation of Single-Family Housing Units Qualify for the Energy Star Certification?

At the time of publication of this Notice, guidelines do not exist for certifying existing housing units as Energy Star when CDBG grantees or their subrecipients are performing gut or substantial rehabilitation on those units. EPA is currently preparing guidelines to adapt the standard applicable to new housing units (sometimes called the New Homes standard) to gut or substantial rehabilitation. Until those guidelines are released, CDBG grantees initiating new gut or substantial rehabilitation projects for single-family housing units must meet or exceed Energy Star standards for New Homes in order to qualify as Energy Star certified for reporting purposes.

How Do Grantees Report Energy Star Units in IDIS?

Grantees should report the number of Energy Star-certified housing units that have been produced during each program year on the CDBG Accomplishment Detail (Page 3) screen for each activity that has produced certified Energy Star units. The location of these data in IDIS for the various types of applicable CDBG housing activities is displayed in Chapter 11 in the IDIS Online for Entitlement Communities manual

(http://www.hud.gov/offices/cpd/systems/idis/library/idis_online_entitlements.pdf) and the IDIS Online for State Grantees manual

(http://www.hud.gov/offices/cpd/systems/idis/States_IDIS_Manual.pdf).

HUD has determined that many CDBG grantees are incorrectly identifying housing units as Energy Star certified in IDIS. This results in inflated, inaccurate numbers in IDIS reports and in labor intensive efforts to determine the correct number of CDBG units that actually attained Energy Star certification. The number of Energy Star-certified units produced by CDBG grantees is reported to the Secretary of HUD and to the Office of Management and Budget each quarter to assess CDBG's progress in meeting the Energy Star goal in HUD's Strategic Plan. CDBG must be able to obtain Energy Star data in IDIS that is reliable and that does not routinely require verification. The following table demonstrates reporting discrepancies identified for new housing construction Energy Star units during the past four years.

Fiscal Year	Number of New Construction Energy Star-Certified Units Reported in IDIS by Grantees	Number of Units Verified as Energy Star, after HUD Staff Review	Number of Units Incorrectly Reported as Energy Star
2011	371	281	90
2010	631	369	262
2009	724	376	348
2008	447	290	157

One of the primary purposes of this Notice is to provide a better understanding for CDBG grantees about what constitutes an Energy Star-certified housing unit and what does not, in the hope of eliminating units that are incorrectly reported in IDIS. The above descriptions of New Home and Multifamily High Rise Energy Star requirements should be read carefully to prevent recurrence of these types of reporting errors. It should also be reiterated that performing one or more of the following improvements alone does **not** earn the housing unit the Energy Star certification:

- Installation of replacement windows
- Installation of Energy Star-rated appliances
- Installation of insulation
- Installation of water efficient toilets
- Weatherization projects

While these are commendable energy conservation measures that the CDBG program encourages, by themselves they do not earn a housing unit Energy Star certification. Therefore, they should not be reported as Energy Star-certified housing units in IDIS.

HUD encourages grantees to implement energy-saving measures into their CDBG-funded activities, particularly housing rehabilitation programs, even if full Energy Star certification is not possible. Weatherization measures and energy efficient appliances are essential to creating truly affordable housing, as they reduce monthly utility costs for low- and moderate-income residents, particularly fixed-income seniors. While installing these features presents an up-front cost to grantees and subrecipients, the utility cost savings over the life of the improvements exceed that cost, on average, making a big difference in the financial health of low- and moderate-income owners and renters.ⁱⁱ Furthermore, there is evidence that adopting a coordinated set of green building and energy conservation measures, such as Enterprise Green Communities Criteria (www.greencommunitiesonline.org), LEED for Homes (www.usgbc.org) and NAHB National Green Building Standard (www.nahbgreen.org), will create more savings and energy efficiency in a project.

Constructing or rehabilitating housing units to Energy Star standards makes sense for the environment, for grantees, and for beneficiary homeowners and renters. Should you have questions about this Notice, please direct them to the Entitlement Communities Division or the State CDBG Division at 202-708-1577 or (202) 708-1322, respectively.

ⁱ All reference information on Energy Star certification eligibility, program design, and qualification steps was taken from <u>http://www.energystar.gov</u> ⁱⁱ Bourland, Dana. *Incremental Cost, Measurable Savings: Enterprise Green Communities*

¹¹ Bourland, Dana. *Incremental Cost, Measurable Savings: Enterprise Green Communities Criteria*. Enterprise Community Partners, Inc. 2009. ¹¹¹ Ibid.