

Common Energy Efficiency Requirements

Lead Office: HUD

Participating Offices: Department of Energy, Treasury-IRS, USDA-RD, EPA, HUD-OSHC, HUD-MFH, HUD-CPD, HUD-PIH

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Issue Statement:

Today, the Federal programs that help produce and preserve rental housing vary widely in terms of their energy efficiency requirements. While some variety is appropriate, given that the Federal government provides various forms and levels of assistance to properties along a continuum of physical and financial condition, there is an opportunity to achieve greater alignment and in the process maximize the potential for energy savings in rental housing, generating significant financial savings.

The Common Energy Efficiency Requirements (EE) Team recognizes the challenges in implementing Federal energy requirements for rental housing. Building codes are largely a State and local responsibility. Code compliance and enforcement is highly uneven across the country. And the limited data available suggests that stronger energy requirements tend to increase development/rehabilitation costs. Having said that, HUD and USDA, recognizing the economic as well as energy benefits, have already begun to significantly strengthen and align energy requirements in Federal rental housing programs. Building on that progress and extending it to cover more rental housing production and rehabilitation programs has the potential to save time, reduce duplicative efforts and clarify Federal policy intent for agencies and the end-users of their programs, while supporting progress on important energy efficiency goals of the Administration. HUD, USDA and the Department of Energy (DOE), will work closely together on implementation.

Proposed Alignments:

Alignments summary: A four-part framework is recommended:

1. New construction and “gut rehabilitation”¹ of rental housing supported with *Federal grants* should meet or exceed the current Energy Star requirement or Builder’s Challenge Quality Criteria;²

¹ For the purposes of these recommendations, “gut rehabilitation,” “substantial rehabilitation,” “moderate rehabilitation” and “minor rehabilitation” are defined in accordance with the primary HUD definitions of those terms.

²The Energy Star requirement for new homes is at least 15% more energy efficient than homes built to the 2004 International Residential Code (IRC). For new or substantially rehabilitated multifamily high rise (MFHR) buildings, the Energy Star requirement is at least 15% more energy efficient than MFHR buildings built to American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 90.1-2007. Alternatively, MFHR buildings may pursue a “performance path” to meet the requirement. The Builder’s Challenge Quality Criteria are a mix of prescriptive and performance-based requirements; some are merely code requirements while others are very similar to provisions in Energy Star.

2. New construction of rental housing supported with *Federal insurance, loan guarantees, or public housing capital and operating funds* should meet or the most current applicable International Energy Conservation Code or ASHRAE that is deemed feasible to apply on a nationwide basis;
3. “Substantial” rehabilitation of rental housing should implement energy improvements that a new Capital Needs Assessment (CNA) template tool as recommended by the Capital Needs Assessment Work Team determines are financially feasible for the property³;
4. “Moderate rehabilitation,” minor rehabilitation” or capital improvement of rental housing should replace systems and appliances as needed with the most energy efficient options, including Energy Star, to the extent they are financially feasible.⁴

The Low Income Housing Tax Credit (LIHTC), Weatherization Assistance Program (WAP), and Public Housing Operating and Capital Fund programs are treated differently for the purpose of these recommendations. The EE Team recommends the following with respect to these programs:

1. A qualified allocation plan must contain a variety of selection criteria. These criteria include “the energy efficiency of the project.” 26 USC 42(m)(1)(C)(ix). In light of the alignment effort described in this document, Treasury will work with NCHSA to determine how States are administering this statutory energy-efficiency criterion, and will consider appropriate follow up action.
2. For WAP, no change should be made. Under the WAP regulations, grantees are required to hold average costs to a defined level and only perform a limited group of energy interventions. The measure of cost effectiveness for weatherization efforts is described at 10 CFR 440.21(d), which states that weatherization measures “must result in energy cost savings over the lifetime of the measure(s), discounted to present value, that equal or exceed the cost of materials, [and] installation.” Thus, WAP already has a specified regulatory regime for establishing energy requirements; the regime imposes a “cost effectiveness test,” to help ensure that the maximum level of efficiency is achieved with available funds. The EE Team believes that this is an appropriate framework for WAP.
3. For Public Housing Capital and Operating Funds, no change should be made for substantially or moderately rehabilitated properties or continuing capital improvements. Public Housing funds through these programs are heavily oversubscribed and operating funds are required to meet multiple needs, including building maintenance, a portion of utilities, services for residents, and Public Housing Authorities (PHA) employee salaries and benefits. The EE Team notes that PHAs are required to conduct energy audits of their projects at least every five years and incorporate the most cost-effective measures into their capital improvement plans, including insulation, weather stripping, storm doors and windows, flow restrictors for hot water lines, improved boiler controls, solar energy systems, and installation of individual utility meters. PHAs are also required to choose Energy Star or FEMP-designated products in their procurement activities, unless the products are not cost effective (essentially the same as recommendation 4 above). HUD has issued a proposed rule for the Public Housing Capital Fund that clarifies and strengthens these provisions (RIN–2577–AC50).

³ The Capital Needs Assessment tool to be developed by Capital Needs Assessment Work Team will remain optional for HFAs.

⁴ Pending further development of the template tool recommended by the Capital Needs Assessment Work Team, some properties in this category may be able to utilize a CNA as well.

Specific actions to effect alignment: The EE Team recommends that the recommended framework be articulated as a joint notice of agency policy by HUD and USDA, subject to the timetable outlined below. The notice would describe the framework, its rationale, the affected programs and how HUD and USDA will ensure compliance and provide support to stakeholders in implementing the requirements.

As noted above and summarized below, most HUD and USDA new construction programs reflect the Energy Star, IECC or ASHRAE standard, i.e., recommendations 1 and 2.

New Construction Requirement	Already Reflect the Requirement	Would Reflect After Alignment
Energy Star	<u>HUD:</u> Choice Neighborhoods; Housing Trust Fund; Indian Community Development Block Grant; Neighborhood Stabilization Program -3; Section 202; Section 811; Self-Help Ownership Opportunity Program. <u>USDA:</u> Section 515 New Construction; Section 514/516 Farm Labor Housing; Multifamily Preservation & Revitalization; Housing Preservation	<u>HUD:</u> HOME; Hope VI CDBG.
IECC/ASHRAE	<u>HUD:</u> Public Housing; Multifamily Insurance Programs.	<u>HUD:</u> Native American Housing.

In the case of recommendation 3, the EE Team refers to the recommendation of the CNA Work Team (CNA Team), which recommend participating Federal agencies direct and procure the development and implementation of a new, single CNA template tool for programs that require CNAs that includes a traditional, comprehensive property evaluation, an assessment of green building and energy efficiency needs and opportunities, and a utility data collection component. With respect to actions to effect alignment, the CNA Team noted that:

Development and adoption of a single CNA template tool will require a robust training and implementation component for Agency and stakeholder users of the new CNA template. This training will include, at a minimum, a comprehensive user guide, in-person training for respective Agency staff, regional in-person training for CNA providers and other stakeholders, and a webinar (or potentially multiple webinars targeting various stakeholder audiences) conducted jointly by the Agencies and the contractor responsible for development of the template, as part of its overall engagement.

The EE Team builds on the CNA team’s recommendation by establishing a uniform utilization of the template tool across all covered programs: substantial and moderate rehabilitation projects supported by programs that adopt the new, single CNA template tool would be required to adopt the recommendations generated by the tool to the extent they financially feasible for the property.

The major action to effect recommendation 3 is linking the results of the CNA to the financial underwriting model used by each covered program to support funding award decisions, loan sizes etc. This process will may require a significant investment of staff time and resources, as discussed more below.

In the case of recommendation 4, the EE Team recommends the agencies adopt a policy along the lines of the policy HUD already has adopted for the Housing Trust Fund program:

ENERGY STAR-labeled and WaterSense-labeled products must be installed when older obsolete products (such as windows, doors, lighting, fans, water heaters, furnaces, boilers, air conditioning units, refrigerators, clothes washers, dryers, dishwashers, toilets, showers, and faucets) are replaced as part of the approved rehabilitation work, and such products are appropriate for achieving energy efficiency for the climate area in which the housing is located.

Finally, the EE Team notes that Energy Star and the IECC and ASHRAE standards (relevant for recommendations 1 and 2) are regularly revised and generally made more demanding over time. The EE Team's recommends aligning all major Federal rental housing production programs to the specified levels summarized above a major first step. The EE Team is not at this time recommending that as underlying standards are revised, that the requirements in all Federal programs would automatically follow suit. Instead, the EE Team recommends that the participating agencies follow the approach contained in the Energy Independence and Security Act of 2007, which generally established certain minimum energy requirements for HUD programs and further required the agencies to adopt revised standards as they were promulgated, provided their analysis determined that doing so would not adversely affect affordable housing.

Resource estimate for implementation: The EE Team believes that sufficient staff resources and expertise are already available to implement the first phase of these recommendations: developing and issuing a joint HUD-USDA notice articulating the alignment policy. Both agencies have dedicated staff that could continue to flesh out the framework if approved to do so by their Departmental leadership.

In the case of recommendations 3 and 4, self certification is likely the only feasible way to ensure compliance.

Estimated cost savings for owners, operators, developers, investors, and/or lenders: The issues of costs and benefits (i.e. savings) associated with energy efficiency requirements for newly constructed and rehabilitated rental housing is complex. The most comprehensive study to date found that building and rehabilitating low-income developments to the Energy Star for Homes standard or a similar standard added only 2.1 percent to average total project costs. The study also found that the projected lifetime cost savings were greater than the average additional upfront costs on a net present value basis.⁵ These findings are consistent with other research on the costs and benefits of broader "green building" improvements that include energy criteria. In other words, the limited available data suggests that stronger energy requirements do lead to modestly increase development costs for the private sector.⁶

According to a somewhat more theoretical analysis, improving energy efficiency by 30 percent in the multifamily housing stock (which mostly consists of rental properties) could generate \$9 billion in savings annually to renters and owners, while achieving energy savings equivalent to the annual electrical output of 20 coal plants and the entire natural gas usage of California, Oregon, and Washington states and avoid the emission of at least 50 - 100 million tons of CO₂ per year – equivalent to the emissions associated with the current energy use of 4 - 8 million U.S. households.⁷

⁵ Dana L. Bourland, "Incremental Costs, Measureable Savings: Enterprise Green Communities Criteria," Enterprise Community Partners, 2009.

⁶ Davis Langdon, "Cost of Green Revisited: Reexamining the Feasibility of Sustainable Design in the Light of Increased Market Adoption," Davis Langdon, 2007.

⁷ Benningfield Group, Inc, "U.S. Multifamily Energy Efficiency Potential by 2020," Prepared for the Energy Foundation, October 29, 2009.

Estimated cost savings for state, local, and Federal governments: HUD's own recent experience further affirms that significant savings are achievable in existing multifamily rental properties. The 20,000 apartments in 221 properties that benefitted from the HUD Green Retrofit Program are expected to reduce energy consumption by more than 25 percent on average and save an estimated \$12 million annually on utility bills. Of course, in rental properties, the party that incurs the cost of making energy improvements may not be the same party that benefits from resulting savings. This "split incentive" challenge is in and of itself a major barrier to retrofitting existing rental properties of all kinds. There are not expected to be additional costs to State or local government as a direct result of the recommended alignments, although those levels of government may be motivated to invest more in energy code compliance in part as a result of this effort.

Schedule for alignment implementation: The Federal agencies generally expect to have a policy framework in place for implementing all or most of the recommended alignments by the end of 2011. As noted above, the policy implementation plan may phase-in certain components over a period of time.

Challenges to effecting proposed alignment(s):

The EE Team recognizes the challenges in implementing Federal energy requirements for rental housing that are both internally consistent and sufficiently robust. Building codes are largely a State and local responsibility. Code compliance and enforcement is highly uneven across the country, due to gaps in knowledge, capacity, and resources, as well as concerns about cost. These issues may be especially acute for affordable rental housing. (As noted above, there is a general consensus that stronger energy requirements generally add to development costs; is not clear however that the incremental increase is significant enough to reduce the number of affordable housing units that would otherwise be available.)

In addition, codes are not always the most effective tool for addressing energy performance in existing properties, and tools to serve that market – such as CNAs that reflect energy consumption and cost-effective opportunities to reduce it – are at a more nascent state of development and deployment.

The EE Team believes that it is possible, and necessary, to continue to strengthen energy requirements for rental housing programs. Not only does it appear that it is possible to do so without imposing infeasible additional costs on developers and owners, recent research suggests that energy requirements can directly lead to positive energy and environmental outcomes. According to one recent study, for example, stronger residential energy codes are associated with a 4 percent decrease in electricity consumption and a 6 percent decrease in natural-gas consumption.⁸

⁸ Jacobsen and Kotchen, "Are Building Codes Effective at Saving Energy? Evidence from Residential Billing Data in Florida," The National Bureau of Economic Research, July 2010.

Purpose

This document is part of an ongoing effort to better align Federal rental policy across the Administration and is sponsored by the Rental Policy Working Group. The Rental Policy Working Group is composed of the White House Domestic Policy Council (DPC), National Economic Council (NEC), Office of Management and Budget (OMB), and the U.S. Departments of Housing and Urban Development (HUD), Agriculture (USDA), and Treasury.

The specific areas of concern identified herein emerged from July 2010 stakeholders gathering at the White House on areas of Federal rental policy inconsistency across the administration. The revised conceptual proposals for alignment articulated within this report are preliminary in nature and have not been endorsed by any Federal agency or office.

With any questions, please contact the Rental Policy Working Group Agency Alignment Leads: Larry Anderson, Director of Multi-Family Housing Preservation and Direct Loans at USDA-Rural Development, Ben Metcalf, Senior Advisor at HUD's Office of Multifamily Housing Programs; or Michael Novey, Associate Tax Legislative Counsel in Treasury's Office of Tax Policy.