



Highlights of [GAO-09-46](#), a report to the Chairman, Subcommittee on Transportation, Housing and Urban Development, and Related Agencies, Committee on Appropriations, House of Representatives

Why GAO Did This Study

Rising energy prices and concerns about the environment have fueled interest in “green building”—resource-efficient construction and maintenance practices that reduce adverse impacts on the natural environment. The Department of Housing and Urban Development (HUD), spends an estimated \$5 billion on energy costs annually in its affordable housing programs and has recently taken steps to reduce its energy costs. GAO was asked to review (1) HUD’s efforts to promote energy efficiency in its programs and the use of performance measures, (2) potential costs and long-term benefits of green building in HUD’s affordable housing programs, and (3) lessons learned elsewhere that HUD could use to promote green building. GAO reviewed HUD program documents and studies on green building, interviewed HUD officials and industry representatives, and made site visits to locations that use green building practices.

What GAO Recommends

GAO recommends, among other things, that HUD ensure the completion of a regulation to require energy-efficient products and appliances in public housing, work to implement updates to the building code for manufactured housing, consider developing a utility benchmarking tool for multifamily properties, and consider providing nonenergy green building incentive points in some grant programs. In written comments, HUD welcomed GAO’s recommendations but had concerns with certain aspects of the report.

To view the full product, including the scope and methodology, click on [GAO-09-46](#). For more information, contact William B. Shear at (202) 512-8678 or shearw@gao.gov.

GREEN AFFORDABLE HOUSING

HUD Has Made Progress in Promoting Green Building, but Expanding Efforts Could Help Reduce Energy Costs and Benefit Tenants

What GAO Found

HUD has taken steps to promote energy efficiency by providing information, training, and technical assistance, but its efforts have limitations. HUD has also provided some financial incentives to promote green building, including energy efficiency, for public housing and for a small segment of the multifamily properties HUD supports. Additionally, HUD has developed some performance measures to track the progress of its energy efficiency efforts. However, HUD has not begun requiring energy-efficient products and appliances in its public housing properties, as required by statute. HUD has also not implemented major energy efficiency updates to the building code for manufactured housing in more than a decade. Without such requirements and updates, public housing authorities may be spending more on utility expenses than is necessary and manufacturers may lack an incentive to build energy-efficient manufactured homes.

Green building practices can increase up-front costs but may also provide long-term benefits, including financial, environmental, and health benefits. But the benefits in rental housing may not go to the party incurring the up-front costs, potentially discouraging the use of green building practices in a significant segment of affordable housing. HUD has partnered with others to develop a utility benchmarking tool for identifying savings in public housing, but only for the public housing portfolio. Utility benchmarking is often used to assess energy consumption and to help identify properties that could improve their energy efficiency. HUD does not collect the data needed to understand its current utility costs or future savings possibilities in some parts of its multifamily housing portfolio. HUD officials told GAO that developing a utility benchmarking tool for this portfolio would be helpful but could be costly to HUD and property owners. However, a 2003 study by Harvard University—and funded by HUD—found that collecting consumption data in insured privately owned multifamily housing would not be unreasonably burdensome. Without such a tool, HUD cannot fully understand the utility costs for over 1.6 million units in its portfolio and may be missing opportunities to reduce utility expenses for some properties.

HUD has focused its attention on incentives that encourage energy efficiency but has few financial incentives, such as those used by states, to encourage other green building practices such as water conservation. Many state and local governments have used financial incentives to promote the development of green affordable housing. For example, in the scoring systems for some competitive funding, applicants are awarded additional incentive points for energy and nonenergy green building practices. Without financial incentives for nonenergy green building, HUD is likely missing opportunities to make its affordable housing more resource efficient and environmentally friendly.