

Working Session: Greening Existing Properties

1:15 p.m.-2:45 p.m.

Room 302, Level 3

Greening properties increases sustainability and reduces energy consumption and utility bills. New legislative initiatives could generate green jobs and new resources for achieving greater energy efficiency by leveraging public investment with private capital.

Moderator: Bill Kelly, Stewards of Affordable Housing for the Future

Panelists: Jack Markowski, Community Investment Corporation
Stockton Williams, Enterprise Community Partners
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Energy Conservation in Affordable Rental Housing

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BIG IDEA: Provide financial incentives for energy conservation in affordable rental housing, significantly reducing carbon emissions and utility costs for the government, owners, and residents.

The challenge and opportunity:

The federal government, low-income residents, and owners spend billions of dollars each year paying utility bills for government-assisted multifamily housing, with HUD alone spending more than \$5 billion a year, 15% of its annual budget. Utility bills for properties financed under the Low Income Housing Tax Credit (LIHTC) program without HUD assistance add additional billions of dollars annually to the tab.

At the same time, energy consumption in residential buildings causes more than 20% of carbon emissions in the United States. Retrofitting existing buildings-- not just greening new construction or substantial rehabilitation-- is critical: over 50% of the residential structures we will have in the year 2030 are standing today.

Simple renovations to increase the efficiency of energy use in these buildings could save hundreds of millions of dollars a year. Addressing these costs and inefficiencies requires only a modest investment of \$3,000 to \$5,000 per unit. Most major energy efficiency renovations are projected to pay for themselves through energy savings over a five to ten year period.

Private capital is hesitant to invest in retrofitting assisted rental housing, for several reasons. There is a striking lack of comprehensive data on consumption and savings

from retrofits. Most buildings that could realize substantial energy efficiency savings have not undergone energy audits required to identify cost-effective improvements. And no large, representative multifamily portfolio has tested these projections and provided a proven investment model.

Moreover, in federally-assisted buildings, rents and utility payments are often set by formula, resulting in “split incentives” among residents, owners, and HUD. While owners of market-rate rentals can pass the cost of energy-saving improvements to residents, owners of federally-assisted buildings have a disincentive to invest in energy retrofits when all the benefits flow to tenants and the government. As a result, the common practice has been to build for low initial cost rather than minimizing costs (and the resultant energy and carbon production) over the building’s lifetime.

Finally, the transaction costs involved in adding a new subordinated loan to existing loans on a property can be disproportionate to the value of the loan, and more so when each loan must be processed through a government bureaucracy, with its additional costs and risks.

For its part, the federal government has largely been asleep at the switch. The Energy Performance Contracts program for energy efficiency in public housing and HUD’s energy initiative for a portion of its mark-to-market portfolio reach some units, but no other energy conservation program currently exists for the rest of the 1.7 million apartments in the privately-owned, HUD-subsidized portfolio or the million additional LIHTC apartments. The Weatherization program, itself critically underfunded, is used almost exclusively to provide 100% grant funding to low-income homeowners.

HUD’s Energy Action Plan estimates that reducing energy bills by just 5% would save the department \$200 million annually. Retrofitting multifamily rental buildings would likely result in energy savings of 25% or more. As energy prices continue to rise, the resulting savings for all parties will become even more dramatic.

The strategic value: Greening Affordable Rental Housing

Using existing law, a new Administration should immediately authorize owners and intermediaries to raise capital and make investments in energy retrofits of portfolios of section 8 properties with budget-based assistance by agreeing to include a portion of the debt service in project budgets.

The next step is a targeted federal investment to “green” affordable rental housing” which could leverage utility- and state-controlled funds and the private capital markets, to produce a widespread and lasting economic and environmental benefit, reducing utility bills and carbon emissions while producing local, green jobs. The Department of Energy estimates that every \$1 million invested produces 52 low-income community jobs, and a German residential energy efficiency initiative created 140,000 jobs in the course of retrofitting 200,000 homes. With leverage from private and state funds, the impact of federal funds would be multiplied.

Guiding principles: Aligning Incentives, Leveraging funds, and Minimizing Costs

To maximize impact, federal funds should be made available in a way that (1) incentivizes both private and public entities to raise and invest capital in energy retrofits, (2) aligns the incentives of owners, residents and the government, (3) obtains maximum leverage of federal funds with private and state funds, and (4) minimizes transaction costs. Over time, as documented savings make the private market more comfortable, the percentage of federal assistance should decline.

Recommendation 1: Enact a 30% energy efficiency tax credit. This credit could be sold to investors to raise capital and pay for nearly 30% of the cost of energy retrofits, lowering the debt service, lowering the risk to investors and owners, and jump-starting the market. The credit would in effect extend the scope of existing 30% credits, such as renewable energy credits and the New Home Energy Efficiency credit. Much of the nation’s affordable rental housing is owned by partnerships formed long ago under partnership agreements that provide no workable mechanism for raising additional capital from the original partners. Transaction costs could be minimized by treating the improvements as a separate bundle of property, a practice with precedent in the LIHTC’s substantial rehab program.

Recommendation 2: Temporarily increase section 8 assistance, the “energy difference”. Section 8 assistance should be increased temporarily to help defray the cost of debt service for energy retrofits. In September, 2008, the House of Representatives authorized such an increase as part of the GREEN Act. Properties would finance the energy retrofits with debt from the private sector. A modest increase in subsidized rent level during the amortization period would be used for debt service along with the cost savings flowing from improved energy efficiency. The Energy Difference would help repay the debt over a relatively short period, and once the debt has been paid off the savings resulting from diminished energy use could be shared among the stakeholders.

Recommendation 3: Invest cap and trade proceeds in energy retrofits. The “cap and trade” proposals offered in the 110th Congress have included a significant government commitment to reinvest federal revenues from carbon permit auctions into programs that mitigate cap and trade’s economic effect on the poor. But we need to do more than simply pay utility bills. A portion of these funds should be invested in energy retrofits for assisted housing, furthering the goal of mitigating cap and trade hardship through bill reduction and job creation, while reducing carbon emissions and enhancing energy independence.

Recommendation 4: Access state public benefit funds and utility sources. State or local money from utility-related public benefit funds should be part of the solution, involving interested parties as political and financial stakeholders while enhancing the impact of federal dollars. Requiring a match for federal investment from a state or utility’s public benefit fund would stimulate states to pitch in through programs similar to that established in New York, reducing the burden to the federal government and the risk to private capital and spurring further investment in energy efficiency.

The federal government could require burden sharing as a condition of its assistance. For instance, California has required that metering systems be installed in all multifamily housing, a major step toward remedying the information gap that limits market participation and investor confidence.

Illustrations:

Social enterprise nonprofits have plunged ahead on a pilot basis. For instance, National Church Residences (NCR) is currently completing a lighting retrofit at 28 affordable multifamily properties in Ohio. These retrofits cost about \$7,000 per property, for a total cost of about \$200,000, and are expected to reduce energy spending by \$75,000 a year. These improvements will pay back their own cost in about two and a half years and save 1 million kilowatts annually.

Preservation of Affordable Housing (POAH) completed a detailed energy assessment in a portion of its Massachusetts portfolio. At a property in Randolph, savings from a \$58,000 set of efficiency improvements will pay for themselves in just over five years. Massachusetts has funded the addition of a solar photovoltaic generation system which will supply roughly 15% of the project's energy.

At Galen Terrace in Washington, DC, test data shows that NHT Enterprise will reduce energy consumption by 59% and water consumption by 21% as a result of mechanical equipment, heat pumps, and gas water heaters and provide a healthier environment for 2000 low-income children through use of non toxic paints, sealants, carpeting and cabinetry. The rehabilitation project met the Enterprise Green Communities criteria at an extra cost of only 3.8%.

To enable its nonprofit members to manage their energy consumption, Stewards of Affordable Housing for the Future (SAHF) is gathering two years of comprehensive energy use and billing data on 800 properties and developing a series of portfolio financing strategies.

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