

POLICY MATTERS:

Making Energy Upgrades Healthier for Residents, Workers, and Neighbors

There is no question that investing in energy efficiency delivers substantial financial, health, and environmental benefits, particularly for poor-quality housing. What is far less understood and remedied, however, are the significant health risks to residents, workers, and the surrounding community that can come from the insulating and air-sealing materials usually used in the retrofit process. Although choices of material are driven by many considerations, those policies that shape standards and certifications have a significant impact and present opportunities for change.

We focus here on those policies at a state and local level that drive retrofit materials decisions for the affordable multifamily sector, which provides housing for nearly 10 million people in our country. Our research, based on 12 states with diverse climate and policy contexts, centered on these three questions:

- 1 What drives multifamily retrofit materials choices now?
- 2 How do healthier materials fit into the building standards and certifications that are commonly used?
- 3 How can we further promote the use of healthier materials through these processes?

Our Findings

- The Low-Income Housing Tax Credit (LIHTC) is by far the most common financing source for building, renovating, and retrofitting affordable multifamily housing and consequently is a critical driver in materials decisions. Criteria for allocating this highly competitive resource are set at the state level.
- Uniformly, those we surveyed cited performance level, not product type, as the basis of insulation and air-sealing work specifications. The better a product performed, the more likely a contractor was to rely on it in completing the work.

- The most common green standards used in the target states' LIHTC funding criteria are Enterprise Green Communities, LEED, and EarthCraft. Although these standards make it possible for LIHTC applicants to improve their rankings by using materials favored from a health perspective, each standard could go much further to promote the selection of healthier building materials.
- Although there are clearly opportunities to incentivize or promote healthier retrofit materials through these green standards, a broad industry discussion is needed to build consensus around a common path.



Recommendations

Our recommendations to strengthen the green standards embedded in the LIHTC funding criteria at the state level focus on four approaches: disclosure, product category, red list, and product optimization.

DISCLOSURE

As a first step, LIHTC can require material manufacturers to disclose the chemical ingredients in retrofit materials to promote more informed decision making. This may encourage manufacturers to reformulate products to avoid having to disclose undesirable ingredients.

PRODUCT CATEGORY

For those materials without an easily accessible nontoxic alternative, this approach provides incentives to drive healthier choices by subsidizing some portion of the incremental cost of the healthier, more expensive option. It is likely that as healthier products become more available, their cost will decrease and thus this approach will no longer be needed for some materials.

RED LIST

Under this strategy, contractors must avoid all building materials containing any chemicals on a prohibited “red list.” Given that retrofit programs customarily specify performance level rather than product type, this approach would need to be gradually implemented.

PRODUCT OPTIMIZATION

This approach, to address hazards that have not yet been identified (and thus are not captured on a red list), requires that all ingredients be assessed through a chemicals assessment protocol (e.g., GreenScreen For Safer Chemicals or the Cradle to Cradle assessment protocol).

Any approach to strengthening materials standards should focus on those product categories used most, those to which humans are most likely to be exposed, and those for which alternatives are readily available.

State-Level Opportunities

There are several avenues for using policy or regulation to promote healthier retrofit materials. These pathways, which vary in relevance and viability depending on the specific state context, include the following:

- ✓ utility commission proceedings focused on requirements for building materials and cost-effectiveness testing;
- ✓ legislative committee hearings with oversight over public health, housing and community development, and energy policy;
- ✓ state building and energy code development, either when newly introduced or when poised for improvement and revision;
- ✓ professional certifications award decisions at the state level that focus on the building industry;
- ✓ state-owned or managed building improvement decisions and design changes to meet green certifications; and
- ✓ funding or financing allocation processes that could involve healthier materials specifications.

Local Opportunities

Finally, local governments can be early adopters of policy change, particularly if there are new initiatives underway related to energy, climate, or public health; desired certifications, such as the Living Building Challenge; or local building or energy codes scheduled for adoption or revision.

We envision a future when upgrades not only make buildings energy efficient, but also create living environments that promote the health and well-being of residents, installation workers, and broader communities affected by materials manufacture, production, and disposal.
