Behavior Change Toward Green Living and Emissions Reductions

“Going green: it’s not just about the buildings, it’s about how we live and work in them.”

— Linda Mandolini, Eden Housing

Building design and construction are important, but the human factor – the behavior of the people who live and work there – is just as critical to meeting a housing development’s green goals. Residents and staff play a major role in shaping the performance of a building and maximizing its environmental, health and sustainability benefits. It is critical to engage building staff and residents from an early stage to encourage support for and participation in energy and water conservation, recycling, greening and other initiatives. These measures not only enhance a building’s green performance but also represent important cost savings to building owners and residents.

Innovation in Action

Founded in 1968, Eden Housing manages 80 affordable housing properties in Northern California. Many of these properties are more than 20 years old and have significant operations and maintenance expenses. To reduce costs and achieve positive sustainability outcomes, Eden launched a green initiative focused on both physical building improvements and staff and resident behavior change in 2009. Their objective was to reduce energy and water consumption and cut trash generation by 10 percent, while saving money in the process.

Eden undertook a number of retrofits to various buildings, ranging from solar panel installation to improved insulation. It also launched an ambitious behavior change program centered on recycling. The program started simply, focusing on motivating and training staff first, designing a pilot project and ultimately developing a plan to implement across Eden’s entire building portfolio.

Once Eden generated staff buy-in with education, training and recognition, they turned to the residents. They developed a series of toolkits – tailored specifically to the county in which the property was located – brought in trainers, created a series of recycling posters and generated results. In Eden’s diverse multilingual community, pictures were key to getting messages across in a way that all residents could understand. Incentives and recognition also played a role. Where Eden saved money, it shared those benefits with residents and with local partner organizations such as the Boys and Girls Club.

The results so far have been impressive. Water use has been reduced by 14 to 39 percent; energy use has been cut 14 to 65 percent; and Eden has been able to eliminate one weekly trash pick up at each of their properties. The cost savings have also been substantial, with the recycling program helping to reduce Eden’s trash expenses by up to 25 percent. Eden Housing was recently recognized with a California Sustainability Award for multifamily housing.
Key Points to Consider

“Green behavior is a subset of ‘pro-social’ behavior. When you create more pro-social behavior, you have happier, safer, healthier, more efficient buildings.”

—Jonathan Rose, Jonathan Rose Companies LLC

- Human beings are wired for group benefit. Behavior change initiatives strive to tap that potential because social networks within communities can bring about fast and effective change. It is important to align pro-environmental messages with pro-social messages.
- To generate behavior change, give staff and residents baseline information and feedback, while fostering healthy competition. For example, publicize how much Buildings A and B are recycling. Circulate anonymous utility bills among neighbors. Use data to show people where improvements are being made.
- Focus behavior change initiatives on building staff first. Their buy-in is essential for the success of residential behavior change programs.
- Offer incentives and provide recognition whenever possible.
- Remember that children are important participants in behavior change programs. Where they go, their parents follow.
- Keep it simple: start with a pilot project, learn from repetition and know that widespread integration and sustained behavior change take time.
- Behavior change initiatives can be inexpensive to implement, while saving a lot of money. Enterprise offers grants of up to $5,000, as well as various tools and templates, to support resident and building staff engagement activities.

Emerging Trends

Sophisticated feedback systems are emerging to help residents and building staff more easily reduce energy usage and change behavior. For example, in the Tapestry building in Harlem, N.Y., the Jonathan Rose Companies installed smart outlets in half of the units across all income levels. The smart outlets have an IP address tied into residents’ smart phones or computer, allowing them to turn the outlets on and off remotely. Residents are able to get real-time feedback and see how much energy they are saving. The company is currently conducting an experiment to compare energy usage in units equipped with and without smart outlets.

Additional Resources

Enterprise Resident Engagement Training Tools

Enterprise Sustainability Training Grants

Enterprise Live Online Event: Behavior Training Toward Green Living and Emissions Reductions
www.EnterpriseCommunity.org/archive