

Green Resident Education: A Best Practices Review

Summary of Findings

“It’s like a diet – lots of small steps, not changing everything all at once.”

These small changes must be consistent with those of ownership, maintenance, and management. It is critical to “meet residents where they are at.” Use Community-Based Social Marketing strategies to ensure effective engagement.

Completed on behalf of Southwest Minnesota Housing Partnership

The Southwest Minnesota Housing Partnership is implementing a four-property pilot program to explore and evaluate the best way to deliver Resident Green Education. The pilot is designed to

- *promote the economic and health benefits of green living and*
- *increase resident-led strategies to increase resident health and cost savings.*

The pilot will focus on green features specific to their building and how to use them to maximize efficiency and cost savings. It will develop delivery strategies and explore the best delivery method for Green Resident Education focused on green property management education and training.

This best practices review includes information on

1. fostering sustainable behavior
2. free online tools to guide effective engagement strategies
3. and lessons learned by other affordable housing providers, focusing on
 - a. delivery methods
 - b. recommended engagement strategies, and
 - c. goals and content.

Sources

This assessment prioritized best engagement practices based on academic research and interviews with affordable housing owner/managers or programs who have been implementing green resident engagement strategies. Online resident training resources were identified and reviewed.

Best Practices on Fostering Sustainable Behavior

There is excellent and very accessible social science research about behavior change available online. Use it when planning any resident engagement. An ACEEE report on maximizing resident opportunities for electric savings highlights this, noting



information needs to be “presented in multiple ways, tailored to the consumer, and contextualized to provide meaning and motivation.”¹

One especially interesting ACEEE finding is that, “action appears to be motivated by a variety of factors including self-interest (energy bill savings) as well as civic concerns and altruistic motives.” Programs should *not* limit their appeal to self-interest alone. When engaging residents in small, actionable steps, “provide households with a variety of non-financial forms of motivation through the use of social norms, goal setting, commitment, competitions, and special events. Leverage existing social networks and organizational memberships to help motivate and build community. Focusing on the financial benefits may backfire.”²

Free Online Tools to Guide Effective Engagement Strategies

A fantastic resource is the “[Community-Based Social Marketing: Fostering Sustainable Behavior](#)” (CBSM) website. It provides an accessible, detailed set of steps and tips for designing green resident engagement plans. Another online resource is “[Design with Intent](#),”³ which provides 101 patterns for influencing behavior through design.

An example of a very effective resident engagement is the [Bio-Regional EcoConcierge](#) program. They use CBSM strategies, and their [EcoConcierge handbook](#) is available online. [This is an interesting YouTube video](#)⁴ describing the program, including identifying challenges and how they have responded.

This outline gives a short summary of the key steps in [Community-Based Social Marketing](#). See the online guide for examples, tips, and additional detail.

1. Select behaviors to be changed. (Best practice uses resident input to select goals and the behavior to be changed.)
2. Identify barriers to changing that behavior, and benefits of changing it. (Best practice seeks resident input on identifying barriers and benefits.)
3. Develop strategies to address the barriers and promote the benefits. Strategies include:
 - a. **Convenience**: make it easy to choose the preferred behavior (ideally, easier than any other option)
 - b. **Commitment**: have people show their intent to do the preferred behavior

¹ “Advanced Metering Initiatives and Residential Feedback Programs: A Meta-Review for Household Electricity-Saving Opportunities.” Karen Ehrhardt-Martinez, Kat Donnelly, and John Laitner. ACEEE, June 2010, report number E105. Page v. Retrieved 10/28/2013 http://www.smartgrid.gov/sites/default/files/pdfs/ami_initiatives_aceee.pdf

² Ibid. Page viii.

³ “Design with Intent: 101 Patterns for Influencing Behavior Through Design.” Dan Lockton, with David Harrison and Neville Stanton. Retrieved 10/26/13. http://www.danlockton.com/dwi/Main_Page

⁴ Greg Searle: The EcoConcierge Pilot – Social Capital, Wellness, and Low-Carbon Living. Garrison Institute, June 12, 2012. Retrieved 11/1/13. <http://www.youtube.com/watch?v=uWcF2Vul-No>



- c. [Social norms](#): build community support by creating social expectations for the preferred behavior
- d. [Social diffusion](#): speed adoption of the preferred behavior by modeling it to friends and family through personal interaction
- e. [Prompts](#): remind people to do the preferred behavior at the time they make the choice
- f. [Communication](#): create effective messages about the preferred behavior
- g. [Incentives](#): enhance people’s motivation to engage in the preferred behavior
- h. Choose which strategies to use based on the barriers and benefits. (Best practice seeks feedback on the plans prior to implementing the pilot.)
- i. This chart from the CBSM website illustrates which tools best address specific barriers:

BARRIERS	TOOLS
Lack of Motivation	Commitment Norms Incentives
Forget to Act	Prompts
Lack of Social Pressure	Norms
Lack of Knowledge	Communication Social Diffusion
Structural Barriers	Convenience

4. Pilot the engagement strategy.
5. Move to broad-scale implementation (if desired).

Affordable Housing Experiences with Delivery Methods

Shifting from research and tools to feedback from other affordable housing providers, organizations have generally begun green resident education through stand-alone workshops. However, all interviewees identified workshop shortcomings: they are staff intensive, tend to have low turnout, and attract the residents most engaged and informed on the topic.

In response, nearly every organization was shifting their approach to be more robust and engage residents “where they are at.” By engaging residents already participating in existing activities and services, they are spending less time recruiting participants,



engaging with those who are unlikely to gather the information through other avenues, and developing a social norm of green living as everybody (staff and residents) in the building participates. This has a secondary benefit of building staff buy-in.

Whether by design or through trial and error, affordable housing providers are adopting CBSM strategies. This list shares specific examples.

Convenience

- Foundation Communities initially had one full-time resident engagement staffer running a robust three-workshop series. However, they ended the workshops in favor of integrating the content into their existing programs. They wove multiple curriculum modules into their ESL program, added a 30-minute module into their six-hour money management curriculum, and case managers now offer the curriculum to participants in the [Children's HOME Initiative](#). (Convenience, Social Norms)
- Steven Winter Associates delivered in-unit audits to residents who had high utility usage. This incentive was offered as a free service by the building owner, and provided opportunities to tailor the audit/education to the interests and needs of the tenant. (Convenience, Incentives)
- Foundation Communities is piloting a waste management effort after an audit showed that while they have a 7% recycling rate, they could be recycling 50%. Program delivery is very hands-on. They held two on-site "how to recycle" workshops with youth. They went door-to-door delivering in-unit recycling containers, a refrigerator magnet with recycling information, and practiced sorting waste at the door (with the kids in the units). (Convenience, Social Norms, Communication, Prompts, Social Diffusion)

Social Norms

- Foundation Communities builds social norms and communicates messages through flyers on doors, communication through site managers, and communication through case managers. (Social Norms, Convenience)
- Instead of a one-day training, Eden Housing, Foundation Communities and Steven Winter Associates all highlighted the need for long-term consistency, listing a variety of examples. They noted that every time a resident speaks with the manager or is part of a workshop or activity, green should be part of the conversation. Every written communication includes something green, ranging from all resident newsletters to a posted a green "tip of the month." In one Steven Winter example, every time a maintenance staff members is in a unit, they look around for *one* relevant green living opportunity and strike up a short conversation on it. (Social Norms, Convenience, Social Diffusion)



Communication

- Foundation Communities, Steven Winter Associates, and Hope Communities all highlighted the need for hands-on engagement. (Communication)
- Hope Community's community organizer hosted listening sessions, identified and worked with resident leaders to plan activities and workshops, had tables in the lobby as people came and left. (Convenience, Communication)
- Hope Community and Foundation Communities are now adding submetering to provide residents with tailored feedback. (Communication, Social Norms, Social Diffusion)

Social Diffusion

- Steven Winter Associates led one train-the-trainer program where they trained youth. (Social Diffusion)
- Steven Winter Associates and Eden Housing both noted that if you can get the children engaged, their parents will be engaged. Foundation Communities has integrated some of the green engagement topics into their youth programming, and Eden Housing is training youth as resident educators. Other groups who have focused on youth engagement include Abode Communities and LINC Housing. (Social Diffusion)

Recommended Engagement Strategies

The interview comments about strategies for gaining resident engagement were some of the richest. They ranged from the very practical – people love free things, so use incentives – to conceptual – meet people where they are at, both in their day-to-day activities and in their interests. Once again, they are using CBSM strategies.

Incentives: Use them.

- Very small things get people to participate. It's enough to offer a raffle for attending an event, spray bottles to take home from an activity, or refrigerator magnets for participating in a conversation.
- Incentives can be indirect. Multiple projects have offered residents the opportunity to choose amenity improvements if their building or floor "wins" a green living contest.
- Tie incentives to behaviors. For example, offer to install a garden if residents compost correctly.
- Note: Contests are popular, but a challenge without data. Some research suggests behaviors revert when the contest ends. These are time intensive for staff. (also Social Norms)



Convenience: Integrate green resident engagement into activities rather than creating something new for residents (and staff) to do. You'll have a captive audience rather than needing to build one. It also helps build staff buy-in when everyone is engaged.

- At lease-up, teach people how to read a utility bill.
- Train and equip maintenance staff to start short, green living conversations during maintenance inspections or when responding to work orders. These should focus on *one* specific “green” action. In one example, they were provided with “Kill A Watt” meters. In units with lots of electronics, they start conversations by asking, “Hey, can I show you something?” When the utility rate and electronics are plugged in to the Kill A Watt, residents can see the cost and staff can follow up with ways to save.
- Build green curriculum modules into existing resident programming.
- Plan youth activities around green living.

Communication: Meet people where they are at – motivate them by addressing their interests.

- Ask residents what they care about. If they know the event or information is responding to their interests, they are more like to participate.
- Are there pests in the property? Focus on integrated pest management.
- Communicate that if they sort recycling correctly, maintenance staff will have more time for work orders.
- Be transparent. Multiple interviews reported that revealing the finances of the building motivated some residents to use less water because they liked where they lived and that it was affordable.
- Look for unifying interests for all the residents when creating messaging or developing incentives.
- Be prepared to address unrelated tenant concerns and complaints. If they are frustrated about some aspect of living in the building, they won't be able to engage green living topics until their concerns are addressed.
- Look for ways to provide feedback, the more real-time the better. This makes it more relevant and helps people know whether they are achieving the goal. This can be difficult.
- Have FUN! People engage when it is fun. For example, have a session where people make their cleaning products and get to take home a bottle of cleanser. Do a demonstration with baking soda. Make products out of water, green soap, & vinegar. Compare the prices of store-bought cleaning products against the prices of the ingredients. (also Incentives)

Goals and Content

The biggest theme about content was one of simplicity – and the importance of setting clear goals. Again and again, interviewees said, “Set clear goals before you begin planning. It's much easier to achieve something if you are intentional about your goal and how you are going to engage,” and “Pick one or at most two things to address.” The goal is what determines the content.



Once you have identified the goal, effective communication is critical. “Simple is better, use more pictures and fewer words.” Hope Communities and Steven Winter Associates both noted that the [Enterprise Resident Engagement Training in a Box](#) workshops are too complex, but that they are useful as a starting point. The Enterprise resources include other helpful tools like resident green leader resources, and case studies, and translated “[resident engagement cards](#).”

The phrase, “meet residents where they are at” came up again, but in this context it refers to communication that frames content in ways that matter to residents. Use simple, practical messages. Highlight opportunities to save money, improve your family’s health, or connect with the community (rather than saving the planet).

If saving energy is selected as the goal, note that ACEEE found that low-income residents are most likely to see energy savings as a result of 1) simple changes in routines and habits, or 2) infrequent and low-cost energy stocktaking behaviors like replacing incandescent bulbs with CFLs.⁵ They did not explore benefits to low-income residents of other green living behaviors.

Other Themes

Nearly every interviewee highlighted the importance of demonstrating buy-in from the whole organization, both across all departments and from top to bottom. It is important for residents to see that the owner is making improvements, that resident services are including green topics in their activities, that management is turning off the lights and computers, and that maintenance is using green cleaning products and implementing green improvements. This is an example of a social norm, and demonstrated staff buy-in welcomes residents to join the team. Failure to do so can undermine an otherwise effective program. Steven Winter Associates shared the story of one project where the owner didn’t follow through on promised green improvements, and residents responded by disengaging from the engagement program.

Another common theme was the need for feedback. Residents *do* care about energy and water, but it is very difficult to talk about how the connection between their behaviors and energy and water use without feedback on changes. Feedback shows residents that their actions make a difference, and shows owners whether engagement programs are working. The best feedback is real-time and tailored to the specific resident. Feedback is helpful for effective use of several different CBSM strategies, including commitment, social norms, communication, incentives, and convenience.

⁵ Ibid. Page v.



Other important themes also emerged:

- Rely on local partnerships. Find local guest presenters in your community and local places to tour.
- Workshops are not scalable to an entire portfolio of properties.
- Other programs have resources, and most are willing to share. Examples are train the trainer curricula and maintenance checklists (used to assist maintenance staff in finding a way to engage on every visit on one specific thing).

Looking to the Future

No one has yet identified the best tool for engaging residents – although it is clear that there will not be one tool. A specific technology both Foundation Communities and Hispanic Housing Development Corporation expressed interested in exploring is text messaging. This is based on frequent resident preference for management to contact them by text message, and the ability to tailor messages to properties and resident interests. It aligns with two CBSM strategies, convenience and – in some uses – prompts.

There is some academic literature exploring whether text messaging is an effective way to effect behavior change, although none is directly relevant to resident engagement. However, findings from other areas of study suggest promise.

- Text messaging has been evaluated as a tool for “self-monitoring” of health-related behaviors.⁶ In these studies participants first identified goals (“intentions” to walk more, or eat healthier) and then set text messages to be sent at specific times. The early research has found the messages are welcomed by recipients, and according to self-reports they are effective in changing behavior.
- Text messaging has also been evaluated in a context where there is a demonstrated intention to vote (shown by registering to vote).⁷ In this study, an impersonal text message reminder the day before the election resulted in a 3% increase in voting rates.

In both these situations, the text message help bridge the “intention-behavior gap,” or the difference between what people say they intend to do and actually do.

There are three factors that make text messaging strategies appealing. First, with monthly subscriptions to well-reviewed companies as low as \$25, they are inexpensive.⁸

⁶ “Mobile phone text messaging to promote healthy behaviors and weight loss maintenance: a feasibility study.” Ben S. Gerber, et al. *Health Informatics Journal*, vol 15(1): 17-25. AND “Can Implementation Intentions and Text Messages Promote Brisk Walking? A Randomized Trial.” Andrew Prestwich, Margo Perugini, and Robert Hurling. *Health Psychology*, 2010, vol 29, No. 1, 40-49.

⁷ “Don’t Forget to Vote: Text Message Reminders as a Mobilization Tool.” Allison Dale and Aaron Strauss. *American Journal of Political Science*, vol 53, No. 4, October 2009, Pp 787-804.

⁸ See example of comparative pricing and reviews at TopTenReviews. <http://sms-polling-services-review.toptenreviews.com/> Retrieved 11/2/13.



Second, messages can be tailored to the specific building or recipients. Messaging tools allow residents to tailor messages to their own interests without staff involvement, once a system is set up. [This New York Times article](#) offers some tips on using this tool for marketing. This is relevant, as green resident engagement is essentially marketing green living to building residents. The article highlights that text message engagement is about building relationships over time and needs to be actively and intentionally managed. Third, text messaging is scalable, and can be piloted at one or a few sites and then expanded with limited resources. The combination of cost, the ability to tailor, and scalability recommend piloting in a resident engagement context.

Conclusions

To date, there are very limited effective resident engagement programs in either affordable or market rate housing. The key lesson from both existing research and case studies is to use Community-Based Social Marketing practices – as affordable housing providers said again and again in their interviews, “meet residents where they are at.” This includes everything from convenient engagement opportunities (existing activities or locations) and convenient actions, to ensuring that the engagement is well communicated and relevant to their interests and concerns. Critically, it needs to become part of the social norms of the management and owner in order to become part of the daily lives of residents.

As one program provider described, “It’s like a diet – lots of small steps, not changing everything all at once.”



Appendix A: Interview Sources

Affordable housing owner/managers and program implementation staff interviewed include:

- Erica Brabon, Steven Winter Associates (program implementation) (10/22/13)
- Will Delaney, Hope Community (10/20/13)
- Trever Drake and Diana McKeown, MetroCERT (10/17/13)
- Wyllys Mann, Hispanic Housing Development Corporation (10/25/13)
- Susan Peterson, Foundation Communities (10/16/13)

