Multifamily Recycling: Barriers and Opportunities

A Barrier/Best Practices Inventory: The Basis of Community-Based Social Marketing

Introduction

Understanding the barriers to recycling in multifamily buildings is the first step towards expanding recycling in this sector. Practices that have led to success in other locales suggest strategies that can be tested for acceptance and effectiveness in your own community.

Barriers

Building owners/managers, residents, haulers and communities all experience barriers to successful multifamily recycling. In the late 1990s, the City of Northampton and sixteen surrounding towns conducted a series of forums with funding from the Department of Housing and Community Development. The forums brought together building owners/managers, haulers and community officials to discuss common perceptions about and barriers to multifamily and commercial recycling. Their findings are the basis of the barrier inventories for building owners and managers and haulers below. A separate end note is listed for barriers that were identified via research conducted by another organization or via the Northampton forums and another organization.

Where resources allow, it is wise to use the information below as a starting point for further research into the barriers that most affect multifamily recycling in your community.

Multifamily Building Owners and Managers Stated That:[1]

Recycling..

..adds to employees' responsibilities;[2]
..is unsanitary/unslightly (bottles & cans are smelly and attract bugs, extra recycling collection containers add to problems associated with aesthetics, litter, etc.);
..is more expensive (recycling services and specialized containers cost more money; buildings using smallest-sized dumpsters usually can't save on trash bill by recycling);[3]
..is just another headache (additional containers for recycling attract more illegal dumping and acts of vandalism, winter access to recycling containers and changes in collection schedules due to weather, etc.);
..is sometimes contaminated with non-recyclables/improperly prepared recyclables. Containers must be monitored for contamination and the contamination is difficult to trace back to the tenant generator;[4]
..is confusing (guidelines are complex or always changing).

Education and Outreach..

..My tenants don't read (they already "know" the information, are illiterate or lazy, etc.);
..Many multi-unit buildings have multi-lingual populations and multilingual recycling information is not always available;[5]
..Education and outreach needs to be constantly provided with a variety of approaches.

My waste hauler..

..Does not provide recycling services or is unwilling/unable to provide recycling services at a reasonable cost;
..Holds a long term contract that prohibits me from obtaining other services;
..Landfills or sorts all recyclables from trash anyway, why should we bother to source separate?
..Will not return my phone calls about recycling services;
..Will not share data or stopped reporting quantities collected.[6]

My tenants…
..are not likely to recycle/have low awareness and motivation/are not interested in recycling (associated with language/cultural barriers, education/literacy, low income, transience, etc.);[7]
..use blue recycling bins for other purposes and/or take them when they move.

My town/city…
..does not provide support or resources to multifamily properties.

My multifamily property…
..has limited or non-existent exterior/interior storage area (due to layout, conflicting use, health/fire codes, etc[8]

***Haulers Stated That:*[9] Markets..**
..Recycling markets are unstable/unprofitable.

Feasibility/Logistics..
..Dedicated collection routes for recyclables are often unfeasible and/or inconvenient due to limited resources (related to time/distance, availability of vehicles/labor, etc.).

Service..
..The bottom line: customers may be unwilling to bear the extra cost of recycling services; the overall service price must be competitive in the marketplace. Customers are not seeking these services (due to apathy, other priorities, lack of education about the benefits of recycling, lack of awareness about available services, apprehension about costs, etc.).

Space..
..There isn't any room for additional collection containers at the customer's site.

Higher priorities..
..Other issues and problems are higher on our priority list.

Residents Stated That:

Communication..
..Tenant/apartment complex communication problems can be caused in whole or in part by uninterested property managers.[10]
Confusion..
..In some communities, haulers may be free to change the list of acceptable materials as market prices dictate, even if this discourages participation in the recycling program.[11]

Inconvenience..
..“Recycling can be less convenient for residents than taking out the garbage.”[12] In East Harlem, New York, the results of a recycling survey revealed that residents in public housing were significantly more likely to cite the lack of a convenient drop site as a barrier to recycling than those in privately owned buildings. It was also true that the distance to the designated place for recycling was generally greater for the public housing residents and that public housing residents were more likely to say that there were relatively few containers in which to put the recyclables.[13]

Communities

Lack of Incentives..
..There is a lack of incentives for property owners to implement and support recycling programs in their multifamily buildings and for haulers to provide comprehensive recycling services to multifamily buildings.[14] ..Landlords, not tenant generators, pay garbage bills, making it hard for communities to effectively use Pay As You Throw incentives.[15]
..Containers are “shared” so it is difficult to see who does and who doesn’t put out recyclables.[16] This fact limits opportunities to utilize peer pressure within multifamily buildings to encourage participation in recycling programs.[17]

Limited Budgets..
..Municipal budgets for implementing and promoting recycling programs in multi-unit buildings are limited.[18]

Opportunities

Various organizations and researchers have examined multifamily recycling programs across multiple buildings or multiple communities. They have drawn conclusions about program elements that appear to be effective in overcoming barriers to increased recycling. Some organizations suggest possible strategies that are not in widespread use, but that have the potential to overcome barriers.

Where program elements or strategies lend themselves to testing on a small scale before community-wide implementation, it is wise to conduct a pilot. Small scale pilots will tell you if these practices result in increased diversion within your program’s specific parameters. Managers are also encouraged to refer to the cited documents for more details on the program elements and strategies described below.

Contracting Arrangements
Programs with high diversion rates are more likely to contract with a private firm than to use municipal employees to collect the recyclables. They are also more likely to award one private firm the exclusive right to collect from all multifamily buildings via contract or franchise agreement, as opposed to a subscription arrangement in which each building contracts for its own service independently.[19]

Fees
Implementing a recycling program for multifamily buildings via any system except mandated subscription arrangement requires government funding. Allocations can be derived from the general fund, or from a fee or tax. Interestingly, communities with lower diversion rates are more likely to pay for multifamily recycling service from taxes. Higher

diversion rates are associated with a greater likelihood that programs are funded via a fee charged to multifamily buildings. Furthermore, as diversion rates increase, the percentage of communities with a fee in excess of $2 per household per month also increases. Communities with higher diversion rates are more likely to charge a flat monthly fee for recycling service, generally per household or per complex. There is also more often a variable-based fee for multi-family refuse in communities achieving a high diversion rate.[20]

Mandatory Participation

Buildings

High diversion programs are more likely to be mandatory.[21] A Portland, OR ordinance requires multifamily buildings to establish recycling programs that collect mixed paper, newspaper and three other materials. The Portland Bureau of Environmental Services found that the proportion of complexes with no recycling program dropped from 10% in 1995 to 2% in 1996 as a result of the ordinance.[22] High diversion programs are more likely to report the use of fines, liens or other sanctions against complexes that do not recycle properly.[23]

Haulers

Communities can require haulers to provide multifamily recycling services by ordinance or by contracts or franchise agreements. In Tehema County, California, the County's franchise agreement with a local hauler requires the hauler to provide its multifamily building trash customers with recycling and yard waste collection at no extra cost. The company must provide carts and bins for trash and recyclables and must accept certain materials for recycling.[24]

Requiring Recycling plans

Requiring multifamily owners to develop and file recycling plans stops short of requiring recycling, but motivates some buildings to sign up for recycling.[25]

Requiring recycling in the lease

Communities can recommend that building managers require residents to recycle as part of the lease.[26]

Containers

High diversion programs are more likely to use 90 gallon carts. They are less likely to use cans or 60 gallon carts or to use 18 gallon bins. "The 90 gallon wheeled cart has several advantages, including mobility on site, low square footage required for siting and compatibility with the semi-automated side loading compartmentalized trucks frequently used for single family recycling." "Higher diversion programs also serve fewer households (15-19) per set of recycling containers than lower diversion programs (26). Less sharing of containers means each set is located closer to each apartment unit, making it more convenient for residents to drop off their recyclables."[27]

Providing bins or baskets for storing recyclable materials within individual apartment units may also lead to higher diversion levels.[28]

Number of Materials Accepted

"Communities with high diversion rates include more materials in their multifamily recycling programs, an average of 10.3 materials, compared to 8.2 materials in the communities with low diversion rates." Communities with high diversion rates are more

than twice as likely to include mixed waste paper and other plastics. They are also much more likely to include OCC [old corrugated containers], magazines and phone books.[29]

Tracking Performance
"Keeping track of the performance of a program (in terms of the number of set outs, number of containers distributed, how often the containers are emptied, number of households in complexes receiving service, number of complaints registered and service violation notices issued, and quantity of materials collected) is itself a probable causal factor in achieving high or improved program performance. For example, communities that know where containers have been distributed and how often they are emptied are better able to target their program promotions, education efforts and outreach elements, which encourage participation."[30]

Education and Outreach
High diversion programs are more likely to have more frequent mailings to individual households, while communities with lower diversion rates tend to have less frequent mailings and rely more on the property managers.[31] Outreach in multiple languages is important. "Some communities are experimenting with outreach materials that are all pictures so the materials do not have to be translated."[32] Because of higher turnover in many multifamily buildings, reaching newcomers is more of an imperative than in single family homes. The City of Davis, CA identifies new residents by monitoring phone service accounts. The city sends its "Garbage Guide" directly to every new phone service customer in the city.[33]

In Portland, OR, it was determined that contamination could be reduced in medium-sized buildings by providing residents with specific feedback on contamination problems in their building or with more general feedback on the most common types of contamination problems occurring in Portland's multifamily recycling program as a whole. Asking residents to sign a pledge to prepare items in accordance with the City's guidelines also led to a decrease in contamination in medium- sized buildings, defined as buildings with 11-30 units. It was found that small buildings (10 or fewer units) had fewer problems with contamination than the other buildings regardless of whether any outreach was attempted. None of the outreach methods were able to reduce contamination problems in very large buildings (100 or more units).[34]

User Friendliness/Convenience
The Recycling Education Project at Portland State University in Oregon examined recycling at twelve similar multifamily complexes. Two factors that showed correlation with participation were user friendliness of the collection containers, (defined by visibility, prominence, attractiveness and cohesiveness) and the location of the recycling facilities, (including proximity to the trash container, resident traffic and living units, and the absence of physical barriers to the facilities).[35] Several other surveys also identified these same factors as elements of success.[36]

Management Support
The Recycling Education Project at Portland State University also found that manager commitment (motivation, direct participation and interest) correlated with participation.[37]

Creating Incentives

Direct Tenant Incentives
Because Pay-As-You-Throw programs can't reach tenant generators directly, one possible strategy is to provide credits on "other" bills to tenants in buildings that meet defined criteria as a participating recycling building. This strategy might be feasible in communities that provide residents with energy or water services. The strategy would give tenants a financial stake in helping make sure that that building continued to have recycling available and that participation was high enough and contamination low enough so that the building would remain "qualified" to receive the credits.[38]

Management Incentives
"Some communities provide incentives to building managers to establish, improve or promote recycling. For example, Seattle's "Friends of Recycling" volunteer program trains individuals who then champion recycling within their building." The volunteer can either be a member of the management staff or a tenant. Seattle issues a one-time $100 rebate on trash bills to the management of buildings with Friends of Recycling volunteers.[39] Seattle has not evaluated the effectiveness of its "Friends of Recycling" program, however. Interestingly, the use of volunteer outreach coordinators was one of four different outreach techniques tested in 98 multifamily buildings in Portland, OR. In the Portland test, volunteer outreach coordinators were ineffective at increasing the quantity or quality of multifamily recyclables.[40]

Hauler Incentives
Communities with hauler-provided service (though contract or franchise) can provide financial rewards to their hauler(s) for increasing recycling in the multifamily sector. This provides an incentive to the hauler to become a more active agent in promoting multifamily recycling.[41]

Logistical Strategies

Hardware Solutions
Systems are now available that make recycling as convenient as trash disposal in large buildings with central garbage chutes. The chutes are retrofitted to be used for both garbage and up to 6 recycling streams. The tenant pushes the appropriate button at the chute – selecting "containers" for their bottles and cans and then selecting "garbage" for their trash disposal. The systems have been installed in Florida, New York, Canada and other locations and have been assessed in several high rise buildings in Toronto. Increases in recycling from 25% to 45% were found after the systems were installed. Three year paybacks from lower garbage bills are fairly typical.[42]

Requiring Space for Recycling
Modifying the building codes to require adequate space for recycling in new and remodeled multifamily buildings can help make recycling as convenient as garbage disposal for tenants.[43]

Resources

More information on overcoming the barriers to recycling can be found at http://www.mass.gov/dep/recycle/recycle.htm. Click on "Motivating People to Reduce Waste." Questions about this inventory can be directed to Brooke Nash of the Massachusetts Department of Environmental Protection at 617-292-5984.

End Notes

[1] Bouquillon, K. A. (2000).
[2] Bouquillon, K. A. (2000); Skumatz, L.A. & Green, J.L. (1999) p1.
[3] Bouquillon, K. A. (2000); Skumatz, L.A. & Green, J.L. (1999) p1.
[4] Skumatz, L.A. & Green, J.L. (1999) p1; EPA (2001) p51.
[5] Bouquillon, K. A. (2000); Recycling Council of Ontario (2000) p51; EPA (2001) p47.
[6] EPA (2001) p47.
[7] Bouquillon, K. A. (2000); EPA (2001) p47.
[8] Bouquillon, K. A. (2000); Skumatz, L.A. & Green, J.L. (1999) p1.
[9] Bouquillon, K.A. (2000).
[10] EPA (2001) p47.
[11] EPA (2001) p47.
[12] Skumatz, L.A. & Green, J.L. (1999) p1; Recycling Council of Ontario (2000) p51; Margai, F.L. (1997) p786.
[13] Margai, F.L. (1997) p781 & 788.
[14] Recycling Council of Ontario (2000) p51.
[15] Skumatz, L.A. & Green, J.L. (1999) p1.
[16] Skumatz, L.A. & Green, J.L. (1999) p1.
[17] Recycling Council of Ontario (2000) p51.
[18] Recycling Council of Ontario (2000) p51.
[19] EPA (2001) p39.
[20] EPA (2001) p45.
[21] EPA (2001) p41.
[22] Lease, K. (2001) p5.
[23] EPA (2001) p51.
[24] Lease, K. (2001) p5
[25] Skumatz, L.A. & Green, J.L. (1999) p8.
[26] Skumatz, L.A. & Green, J.L. (1999) p9.
[27] EPA (2001) p40.
[28] Recycling Council of Ontario (2000) p50.
[29] EPA (2001) p42; Skumatz, L.A. & Green, J.L. (1999) p11.
[30] EPA (2001) p43.
[31] EPA (2001) p52; Recycling Council of Ontario (2000) p51.
[32] Skumatz, L.A. & Green, J.L. (1999) p11.
[33] Lease, K. (2001) p7.
[34] De Young, R. et.al. (1995) p263.
[35] Katzev, R. et. al. (1993) p374 & 379.
[36] Skumatz & Green (1999) p11; Recycling Council of Ontario (2000) p50.
[37] Katzev, et. al (1993) p383.
[38] Skumatz & Green, (1999) p6.
[39] Lease, K. (2001) p6; Skumatz, L.A & Green, J.L. (1999) p5; Kain, L. (2002).
[40] De Young, R. et. al. (1995) p260.
[41] Skumatz, L.A. & Green, J.L. (1999) p6; Lease, K. (2001) p6.
[42] Skumatz, L.A. & Green, J.L. (1999) p10.
[43] Skumatz, L.A. & Green, J.L. (1999) p9; Lease, K. (2001) p5.

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