



COALITION *for* RESOURCE RECOVERY

Coalition for Resource Recovery MFD Food Scrap Recovery Pilots

A Project of Global Green USA



Recycling Update | March 17, 2015

About Global Green USA

- For 20 years, Global Green USA has been a national leader in advocating for **smart solutions to global warming** including green building for affordable housing, schools, cities and communities that **save money, improve health and create green jobs**.
- The organization was founded to create **a new approach** to solving the world's most pressing environmental challenges. Global Green merges **innovative research, cutting-edge community-based projects and targeted advocacy**.



About Global Green USA's Coalition for Resource Recovery (CoRR)

- CoRR is an industry working group dedicated to combating climate change by **transforming waste to assets**, and assisting cities in maximizing waste diversion.
- CoRR conducts **pilots and related research** to identify and accelerate development of scalable, transferable waste diversion programs and technologies.



Who CoRR Assists

Farms



Cities



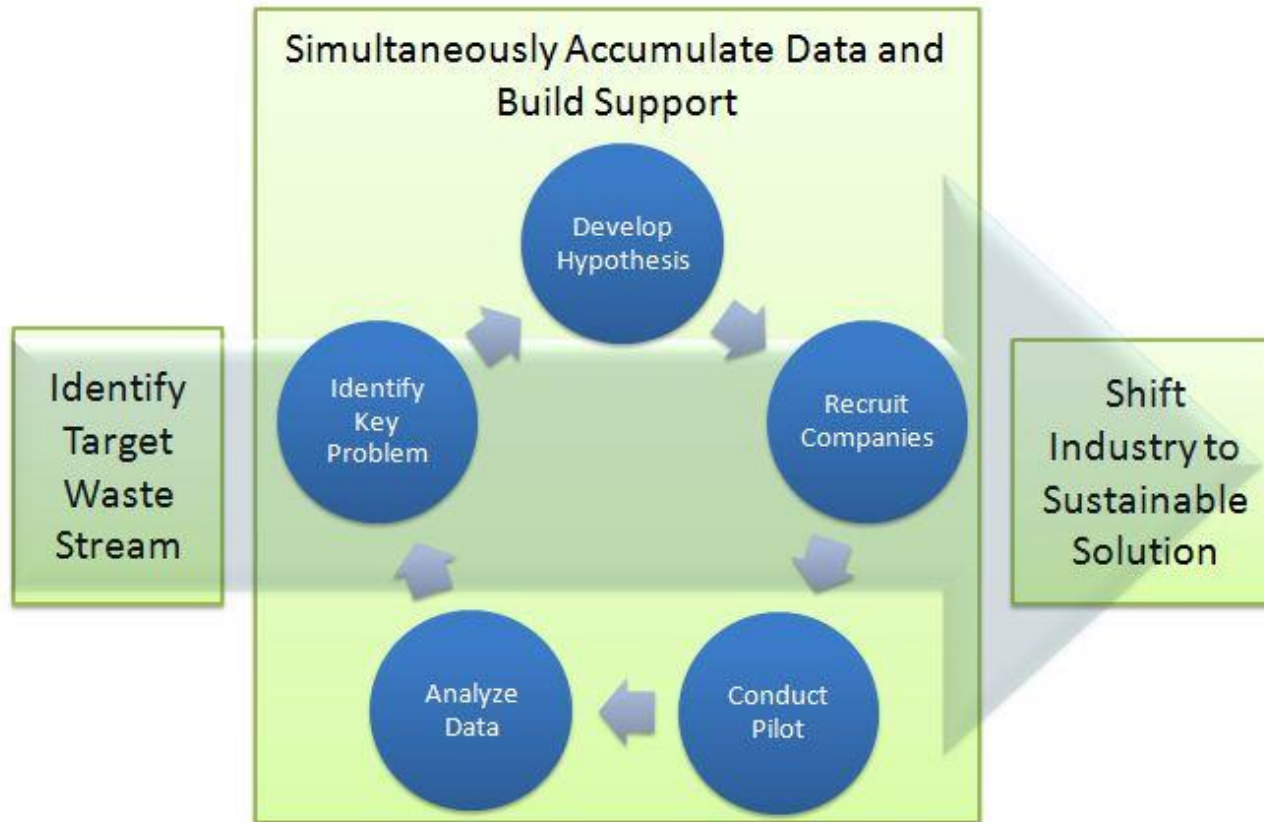
Restaurants/Grocers



Schools



The Purpose of Pilots



Food Scrap Recovery Program

- Problem

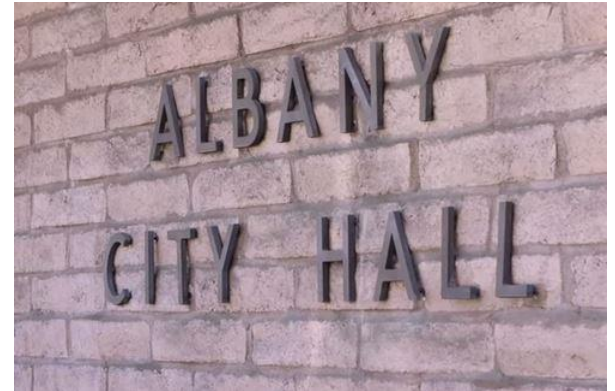
- 33 million tons of food scraps landfilled in US every year.
- *Emissions equivalent to 7 coal-fired power plants!*
- Multi-Family Dwellings (MFDs) are the “final frontier.”

- Question

- How effective are certain “best practices” for tenant engagement in terms of **diversion outcomes**?

Food Scrap Recovery Program

- Phase 1
 - Partnered with City of Albany and StopWaste to identify 4 buildings to “adopt” for the program
 - Contacted property managers, and scheduled initial outreach and surveying.



Food Scrap Recovery Program



- Phase 2
 - Undertook outreach and surveying of residents.
 - Undertook “before” waste audits to determine diversion rates without a green cart.
 - Distributed kitchen pails and water-resistant paper bags.

Food Scrap Recovery Program

- Phase 3
 - Surveyed residents about their experiences using the bins and bags.
 - Undertook “after” waste audits.
 - Undertook comparison waste audits at similar buildings where no outreach had been undertaken.



Food Scrap Recovery Program

- Survey Results

- Surveying reached 85% of residents (out of a total of 54 households).
- 9% of respondents were not participating, most due to language barriers
 - Hindi, Tagalog, and Farsi should be included in the outreach material translations.
- 12% of participants were emptying their pail every day, meaning they went through bags very quickly.

Food Scrap Recovery Program

- Survey Results
 - 14% of respondents wanted to be able to use compostable *plastic* bags over paper bags or newspaper.
 - All participants were using either just the bag (18%), just the pail (2%), or both (80%).
 - No participant was using an alternative method (e.g., milk carton) by choice.

Food Scrap Recovery Program

- Survey Results

- Residents generally liked both the bags and the pails, giving them an average score of 4.5 out of 5 for odor control, leakage, and ease of use.
- Got some great feedback and ideas from residents:
 - *Paper* bag and pail set that are made to fit together
 - A multi-chamber bin that shows what the desired proportions of waste should look like
 - Bags available in buildings at all times
 - Foot pedal for small pail, since most people still keep it down low

Food Scrap Recovery Program

- Audit Results
 - Still significant food and recyclables in landfilled waste.
 - Many buildings have insufficient **recycling** service, according to residents (and observations).
 - E-waste, textiles, C&D, and bulky items are routinely put in the dumpster.
 - MFDs in particular have no convenient, cost-neutral way for tenants to deal with these types of wastes.

Food Scrap Recovery Program

- Audit Results

- Diversion overall increased from ~19% to 42% on average across the 4 buildings, and organics bin contamination rates averaged less than 5%.
- Compared with control buildings, 7% more organics were diverted in “adopted” buildings
- Trash had, weirdly enough, been reduced by 7% (not the same poundage).
 - Recycling rates and contamination rates were about the same.

Food Scrap Recovery Program

- Next Steps
 - Seeking to expand pilot to two **additional cities** in Alameda County to collect more data on diversion outcomes from more various outreach scenarios.
 - Exploring integration of bin **sensors** to alert haulers of when the bin is full – good for e-waste and textiles, as well as determining if service level is insufficient.
 - Continuing to evaluate the **economic** outcomes of investing in enhanced outreach to tenants.



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