



ECO-AMBASSADOR PROGRAM GUIDEBOOK

Empowering Communities to Strive for Zero Waste

6 STEPS TO A SUCCESSFUL OUTREACH PROGRAM

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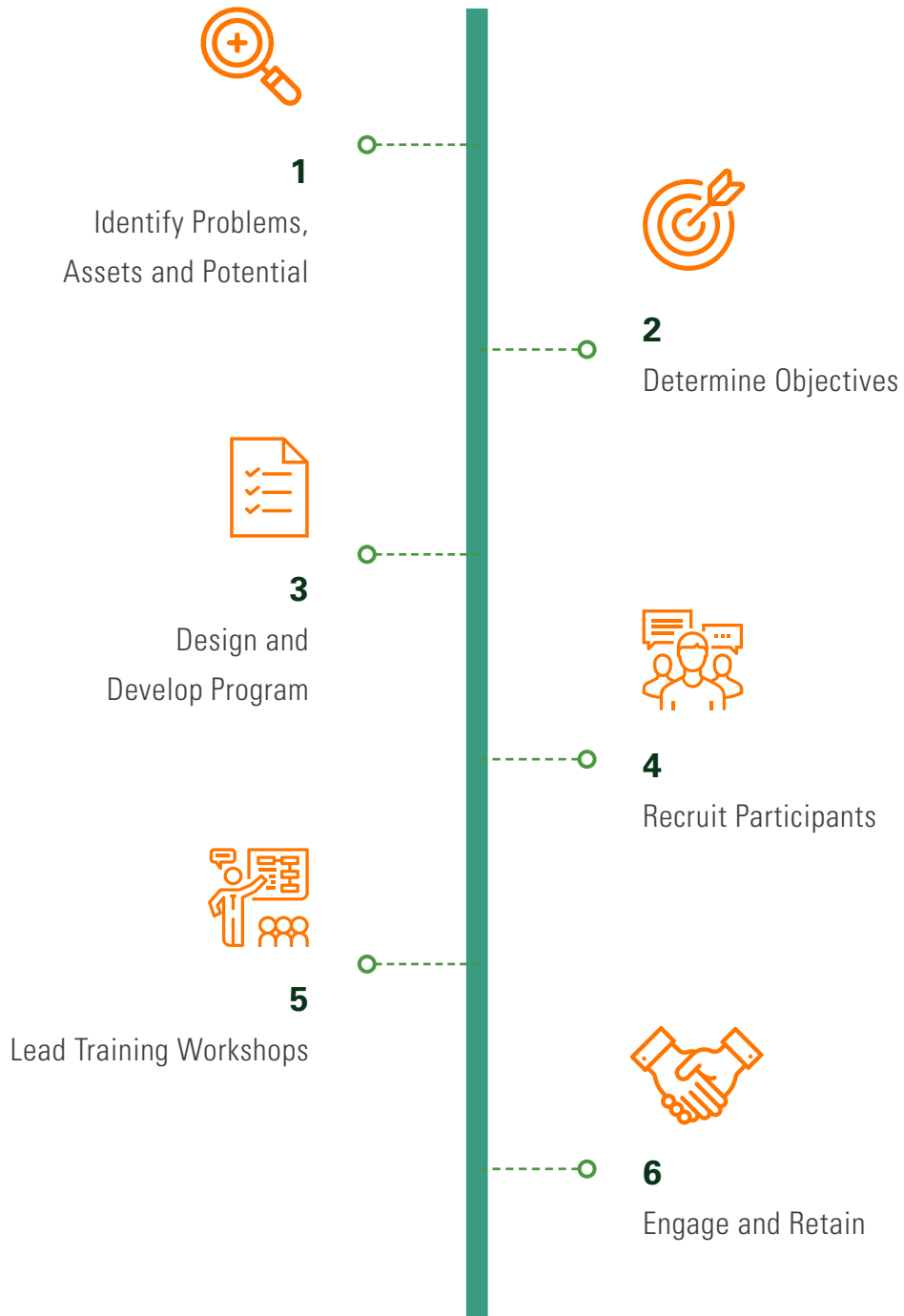
For over 20 years, Global Green has been a national leader in advancing smart solutions to climate change.

Our Green Urbanism department works nationally to transform the built environment through different sustainability projects around green-building, water, energy, resource recovery and community engagement.

This guidebook is prepared by Global Green's Resource Recovery Department, which generates value by managing and transforming waste. We work with communities to identify needs, explore emerging technologies, and pilot effective diversion programs that keep recyclables out of the landfill. To learn more, head to [**globalgreen.org/CoRR**](https://globalgreen.org/CoRR).



6 Steps for Success



BACKGROUND AND CONTEXT

Food waste is a global problem that encompasses issues spanning from hunger, to climate change, to our economy. According to the United Nations Food and Agriculture Organization, food waste is one of the largest contributors to greenhouse gas emissions, and in 2013 roughly five and half million acres of agricultural land were devoted to growing 'wasted' food (1,2). In this line, the average American will throw out 400 lbs of food each year, wasting valuable time and natural resources (3). As a result, this translates to about \$1800 dollars wasted annually for a family of four, and \$218 billion spent nationwide on food that is never eaten; all of this while 42 million Americans face food insecurity (4,5).

Global Green believes in transforming these issues into opportunities. We are working to educate communities about resource recovery and reducing food waste in order to capture benefits and keep nutrients, water, and even capital cycling through local systems. Supporting a closed-loop system that keeps resources local through community education, action and empowerment, Global Green has created an Eco-Ambassador environmental stewardship outreach program through our work implementing food waste diversion in multi-family dwellings.

We designed this program to train and engage community members to become champions of waste prevention, recycling, and diversion. By teaching Eco-Ambassadors the skills and tools to be advocates for a zero waste future, we propose this model as an effective strategy to build strong communities, expand recycling and composting programs, and ultimately, to increase awareness, participation, and diversion.

WHY

AMBASSADORS?

Consistently maintaining engagement among multi-family residents for resource recovery programs can be overwhelming for building owners and property managers. Our work to date demonstrates that local support is essential for effectively implementing, sustaining, and analyzing the overall success of these programs.

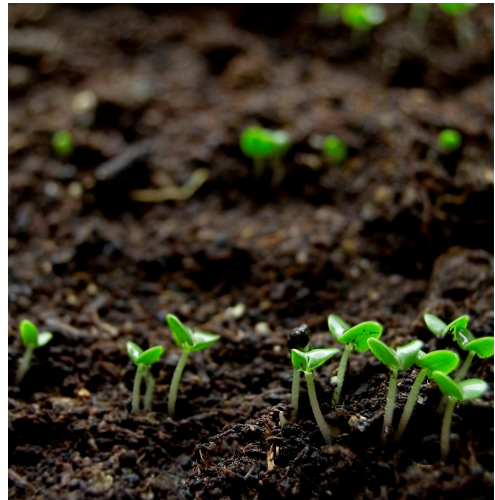
The Eco-Ambassador program empowers people to educate their communities about resource recovery and to support waste prevention and diversion. As stewards in their communities, Global Green Eco-Ambassadors amplify the potential for waste management programs in multi-family buildings; their efforts help to increase participation, maintain community engagement, improve outreach capacity, and track valuable data.

Global Green's Eco-Ambassador program now includes training workshops with local governments and other community partners throughout California and around the country. In these workshops, ambassadors receive the educational tools to become local waste experts, as well as the communication skills to share the value of diverting organics with property managers, landlords and neighbors. Eco-Ambassadors learn how to implement recycling and food scrap collection programs in their buildings, how to conduct outreach and perform visual waste audits, and how to help keep their neighbors engaged with diversion practices in their community.

“Eco-Ambassadors share knowledge that sparks behavior change and empowers people to take sustainable action in their communities.”

– Walker Wells, Executive Director of Global Green





BENEFITS

Resource Recovery

ECONOMIC

Recovering recyclables helps to capture the economic value that was invested in agriculture or production. When food waste and other recyclables end up in a landfill, they exit the economy and their value is lost. Food waste and other organics offer unique economic opportunities, because they can be converted into renewable natural gas, electricity, and/or nutrient-dense, water-rich soil amendment and sustainable alternative to chemical fertilizers for agriculture, landscaping, urban farms, and construction. There is also the potential to save money on disposal rates and/or hauling fees if diversion significantly decreases the generation of landfill waste.

ENVIRONMENTAL

When food waste and organic material end up in landfills, it produces methane - a potent greenhouse gas that contributes to climate change. Diverting organics away from landfill prevents harmful methane emissions and repurposes waste to keep natural resources, like water and other key nutrients, cycling through the ecosystem. Managing recyclables also works to reduce overall landfill volume and the environmental health risks associated with landfill waste. For more information, check out our report “Methane Matters” (6).

SOCIAL

Recovering resources and preventing waste provides social benefits by making their value available to the community again. Managing and preventing food waste, in particular, can help to benefit the most vulnerable members of society by capturing edible food before disposal and redistributing it to places like food banks or shelters. An urban farm or community garden is a perfect example of how we can begin to resolve food security issues and create a closed-loop system of water, nutrients and economic value. Educating people about organic waste management also provides opportunities to build skills, establish relationships and engage meaningfully with their communities.



BENEFITS

Enhanced Outreach and Reporting

IMPROVE PROGRAM EFFECTIVENESS AND PERSISTENCE

Outreach and education is essential for an effective diversion program; our Eco-Ambassador pilot data supports a connection between enhanced outreach strategies and program success. Engaging residents through ambassador-style programs can significantly augment implementation, increase receptivity among residents during door-to-door outreach, and improve diversion rates. Employing community stewards within their own buildings activates an internal resource for the community and helps to mitigate the challenge of high-turnover in multi-family buildings.

GENERATE METRICS AND DATA

Tracking and analyzing waste data is a fundamental part of resource management, because it informs diversion rates and targets, providing the foundation for performance benchmarks and government planning. An ambassador program is also a method of 'crowdsourcing' waste data. Eco-Ambassadors can directly report waste data through a city form or common data tracking platforms such as EPA's ENERGY STAR Portfolio Manager. Eco-Ambassadors can also monitor waste data through technology solutions like sensors. Expanding capacity for waste data tracking provides opportunities to optimize hauling routes, reduce bin sizes and collection frequency, and even reduce management fees.

ENHANCE SUSTAINABILITY EDUCATION AND COMMUNITY ENGAGEMENT

Community education events, stewardship trainings, individual engagement and other direct resources create an interactive support system that empowers residents to manage their waste sustainably. Our participant surveys demonstrate the positive impact of these outreach strategies on communicating information effectively and generating long-term community engagement.

INCREASE RETURN ON INVESTMENT

The Eco-Ambassador program provides a model for enhanced outreach while lowering costs associated with traditional engagement. Eco-Ambassadors work with their communities to improve the efficiency of individual outreach, and empower others to take action and ownership of their waste. Rather than investing in a typical fee-for-service outreach consultant contract, the Eco-Ambassador program consolidates expenses towards community training that spreads information from strategic point sources. A single training workshop sparks a chain reaction where a group of certified Eco-Ambassadors activate and energize their community networks to transform local waste management. For Example: During our project pilot we trained twelve ambassadors during one 2.5-hour training, who then reached an average of 4.5 households or 10 people. In other words, 120 people were directly engaged with our program through Eco-Ambassadors as a result of just one training.

01

STEP ONE

Identify Problems, Assets, and Potentials

- Support is needed for managing
 - a. Recyclable materials
 - b. Food and organic waste
 - c. Other _____
- Support is needed for
 - a. Commercial buildings
 - b. Multi-family buildings
 - c. Single-family
- On a scale of one to ten (one being extremely problematic and ten being extremely successful) rate your operation with regard to these different resource recovery issues.

DIVERSION FROM LANDFILL

1 2 3 4 5 6 7 8 9 10

CONTAMINATION OF RECYCLABLES

1 2 3 4 5 6 7 8 9 10

PROGRAM PARTICIPATION

1 2 3 4 5 6 7 8 9 10

WASTE PREVENTION

1 2 3 4 5 6 7 8 9 10

- Are there any existing or proposed resource recovery policies, regulations, or other legislation that will affect your waste operations? *(See Appendix for examples of waste management policies nationwide)*

- Do you have any budget for an ambassador program? If so, how much? Y/N

- Is there existing infrastructure (haulers, transfer stations, or processing facilities) to support an ambassador program? Y / N

- Do you know of other examples or approaches to waste diversion in your industry, community or network?
Y / N

- Do you have existing partnerships, outreach networks, funds or other community assets to leverage towards this program? Y / N

STEP TWO

Determine Objectives

- On a scale of one to five (one being not a priority, five being a top priority) rate these goals in terms of the level of priority and indicate whether it is a priority for materials, organics, or both:

					MATERIALS	ORGANICS
INCREASING DIVERSION						
1	2	3	4	5	_____	_____
REDUCING CONTAMINATION						
1	2	3	4	5	_____	_____
IMPROVE INFRASTRUCTURE/CAPACITY						
1	2	3	4	5	_____	_____
INCREASE PROGRAM PARTICIPATION						
1	2	3	4	5	_____	_____
EDUCATION AND COMMUNITY ENGAGEMENT						
1	2	3	4	5	_____	_____

- Which building-types, locations, or demographics would you like more engaged or educated?

- What are the main goals or targets of your program?



STEP THREE

Design and Develop Program

Capacity

- Has a staff person or staff capacity been identified to implement and/or administer the program? Y/N

- Is there a staff person and/or capacity to execute the following deliverables?
 - Organize program launch events and communications Y / N
 - Coordinate regular recruitment events and strategies Y / N
 - Plan and lead regular workshop trainings Y / N
 - Oversee ambassador retainment strategies Y / N
 - Collect and analyze data for reporting Y / N

Communications Strategy

- How do you plan to recruit Eco-Ambassadors? *(Choose all that apply or add)*
 - a. Email
 - b. Traditional mailer
 - c. Social media
 - d. Events
 - e. Personal recruitment
 - f. _____
 - g. _____

- Do you plan to stay in touch with recruits after initial contact or training workshops? Y / N
 - If so, how? _____

- What is the vision for overall program promotion? *(Describe below)*

Training Workshops: Coordination and Planning

- How often are you planning to host workshops?
 - a. Monthly
 - b. Quarterly
 - c. Yearly
 - d. Other _____

- Have you considered venue, duration or format? *(Describe below)*

- What is your recruitment strategy for: *(see Step 4 on the following page)*
 - Initial recruitment _____
 - Rolling recruitment _____
 - Retainment _____

- Which recruitment activities do you want to incentivize? *(Circle all that apply)*
 - a. Participation
 - b. Fulfillment
 - c. Retainment

- What are your incentives for participation? *(Circle all that apply)*
 - a. Credit on utility bill
 - b. Cash/ gift card
 - c. Certificate or award
 - d. Badge, bumper sticker, etc.

Global Green Methodology Template for Data Collection

Creating a successful waste diversion program and evaluating the impact of Eco-Ambassadors requires a deliberate methodology. Global Green recommends collecting outreach and waste audit information within the context of a **12-week pilot period** in order to compare pre/post program data. Compiling this information is essential to understanding program effectiveness and identifying opportunities to reduce costs associated with landfill disposal. Below is an outline for designing a custom methodology to identify key information and establish a data collection system:

- What, if any, relevant data do you already have?

- What type of data are you looking to collect? *(See Steps 1 and 2 for reference and context)*
 - a. Waste audit data
 - b. Participation data
 - c. Both

TRACKING PARTICIPATION

Tracking participation informs the effectiveness of enhanced outreach and allows for real-time program refinement as well as the sharing of best practices.

OUTREACH & PROGRAM DATA POINTS

- a. Number of Eco-Ambassadors recruited
- b. Number of hours spent conducting outreach
- c. Number of households reached/ people per household
- d. Number of buildings participating
- e. Number of resident/tenant participants per building and/or total
- f. Feedback on participation, engagement, understanding and satisfaction
- g. Program persistence and continuation (longevity)

Collection methods include: *(mark any of interest)*

- Eco-Ambassador surveys
- Resident surveys
- Event registration and attendance

Global Green recommends: 1) documenting all event attendees through a general registration form and establishing a formal list of certified Eco-Ambassadors after training workshops, 2) designing an Eco-Ambassador report sheet to collect outreach metrics like hours logged and households reached, and 3) designing pre/post-pilot period surveys to solicit feedback on outreach efficacy and program success (*see Appendix for sample surveys*).

TRACKING WASTE

Tracking waste over time establishes initial benchmarks and informs program performance with regard to diversion rate, contamination, participation and overall success. It also provides an opportunity to re-evaluate or renegotiate disposal fees and hauling rates.

WASTE DIVERSION DATA POINTS

- a. Fullness or contamination of recycling
- b. Fullness or contamination of organics
- c. Recyclables or organic materials in landfill bin
- d. Diversion rates over time

Collection methods include: (*mark any of interest*)

- “Lid-flip” visual waste audits performed by Eco-Ambassadors;
- Reports through surveys or data forms
- Deployment of waste bin sensor technology
- EPA’s ENERGY STAR Portfolio Manager

Global Green recommends: 1) deciding whether Eco-Ambassadors will log consistent “lid-flip” visual audits OR property managers will deploy bin sensor technology for digital data collection, 2) designating specific metrics desired on report logs or to be pulled from electronic data, 3) developing a consistent schedule of visual audits or electronic data collection with specific consideration for comparing pre-outreach and post-outreach audit data, and 4) uploading information from sensors or Eco-Ambassador reports to software like EPA’s ENERGY STAR Portfolio Manager to easily track waste data over time.

STEP FOUR

Recruit Participants

- What is the scope of your program?
 - a. How many ambassadors? _____
 - b. How many buildings? _____
 - c. How many tenants? _____

- Are there any demographics, locations or building-types you would like to target?

- If you DO NOT have an existing database of community members, volunteers or other partners for recruitment, will you create one? Y/N

- What type of recruitment events are you planning to host?

- Where?

- Are there any existing educational or community events that would help to recruit participants?

- Where have you identified particular need or interest?

Global Green Recruitment Strategy and Timeline



STEP FIVE

Lead Training Workshops

- What key information or overarching ideas do you want Eco-Ambassadors to learn?

- What time commitment do you expect from Eco-Ambassadors, including workshops?

- Will you need a translator for workshops? Y/N *(If yes, describe below)*

- Have you finalized a communications strategy for recruitment? Y/N
(If yes, describe below; see Step 3 for reference)

- Will you gather any participant data during training workshops? Y / N

Curriculum

The lesson plan of your Eco-Ambassador training workshop depends on the objectives of your program (*see Step 2*). Once revisiting your program objectives, consider including the following components to your curriculum:

- Explain program objectives and their relation to broader sustainability initiatives
- Explain Eco-Ambassador responsibilities
- Practice examples of outreach scenarios and messaging
- Guide discussion activities and group sharing exercises
- Written commitment
- Optional Eco-Ambassador workbook hard copy or digital PDF

Extended Curriculum

Assuming your Eco-Ambassador program serves to expand the implementation of organics collection in your area, we recommend the following components to your curriculum, in addition to those listed above:

- Characterization of waste streams (trash, recycling, organics, hazardous and electronic waste)
- Explanation of how materials are recycled in your area (transfer station, MRF, compost facility, anaerobic digester, etc.)
- Waste sorting activity
- Strategies to prevent wasted food
- How to perform “lid-flip” visual audits
- If applicable, how to set up organics collection service at your building
- Logistics & signage
- Tools (kitchen food scrap pails, compostable bags & liners, etc.)
- Explanation of closed-loop system & environmental benefits

Time Commitment and Responsibilities

The time commitment and responsibilities of Eco-Ambassadors will vary depending on the objectives of the program (*see Step 2*). In a 2017 survey, Global Green found other Eco-Ambassador program workshops required initial training ranging from one 2.5 hour training session (Global Green Eco-Ambassador program and Seattle’s FORC program) to a day and a half session (WaterWise Neighborhood Champions program). Other initial training workshops may require multiple sessions over time (e.g. two 3-hour sessions).

In addition to the workshop training, there are also committed service hours to consider. For example, many ambassador programs require a minimum amount of hours spent performing outreach and other duties. Global Green's Eco-Ambassador program asks recruits to devote an additional 10 hours per year of outreach and other duties while the Master Recycler/ Composter Program in Dakota County, Minnesota asks an additional 30 hours of outreach per year. Consider here the duties and responsibilities you're asking of ambassadors, and solicit their input when determining their service hour commitments.

1. Are ambassadors setting up organics collection service at their building, or are they already serviced?
2. Will ambassadors be performing "lid-flip" visual audits?
3. Will ambassadors be performing public outreach outside of their building?

Community Culture and Language Materials

Community culture, identity, and demographics are important, potentially challenging, considerations. Locally based Eco-Ambassadors help to overcome communication issues like language or cultural barriers without the need to contract out costly translation services. One of the greatest assets of an Eco-Ambassador program is that they are often representative of their communities and better able to engage meaningfully with neighbors.

While Eco-Ambassadors may speak the different languages of their respective communities, it is still important to address these potential barriers and cultural considerations in your training workshop.

Further, it will be important to consider any language barriers or cultural norms for the training workshop itself. Consider the demographics of your city and of those living in your area's multi-family dwellings. If necessary, find translation services for the initial training workshop and development of educational materials.

Stakeholder Engagement

Depending on how deep a dive your training workshop takes into explaining the waste processing infrastructure in your area, you may consider involving staff from multiple agencies to participate in the training session(s). For example, a representative from your waste hauler could present on the characterization of different waste streams and how they're processed in your area, or how to set up an organics collection service at your building. Consider all departments, stakeholders, and parties involved in the components of your curriculum and if their involvement is feasible and/or beneficial.

Communications

It is important to explore existing communication networks as well as new ways, like social media, to promote your recruitment events or training.

The following listed medias and groups are examples of the networks Global Green utilizes when promoting our training workshops:

- Global Green’s social medias (Facebook, Instagram, Twitter, newsletters, blogs)
- City sustainability groups (e.g. Sustainable Santa Monica newsletter)
- Chamber of Commerce newsletters & meetings
- Local or neighborhood events
- Community bulletin boards
- Email contact lists from recruitment efforts (*see Step 4*)

Incentives

The following items are examples of popular items offered to recruit and engage ambassadors:

- Raffle prizes for games played during training workshop
- Gift cards or sustainable gift baskets
- Certificate of completion

Additional Recommendations

- Consider a social or digital media promotion schedule leading up to the event; Global Green’s strategy is to promote 4 weeks out, then 1 week out, and once more the day before a training workshop
- Consider a deliberate schedule for email messaging and reminders to align with events or promotion
- Create an Eventbrite invitation where ambassador recruits can register, and if applicable, pay for the training session
- Create a Facebook page or web-based platform for program announcements (*see Step 6*)

STEP SIX

Engage and Retain

Eco-Ambassador retainment is key to a thriving resource recovery program. From our research and experience piloting these programs, we've found that in order to keep these programs continuous, they must be routinely energized through enhanced communications, events, and various engagement strategies.

Examples of enhanced engagement strategies include:

1. **Creating a website or online platform** through which resources and announcements can be shared, but also where ambassadors can communicate to each other and to the administrators of the program. This strategy also offers opportunities for the following:
 - a. Providing digital copies of educational or other related materials
 - b. Messaging and/or Q&A forum
 - c. Recognizing the efforts of exceptional ambassadors
 - d. Announcements & updates

2. **Events** through which ambassadors can share lessons learned, best practices, and experiences. Examples include:
 - a. Happy hours
 - b. Movie nights
 - c. Potlucks
 - d. Beach and park clean-ups
 - e. Community garden tour

3. **Surveys** to check in with ambassadors on their progress, responsibilities, issues, and concerns.

LOOKING AHEAD TO MARKET TRANSFORMATION

The long-term goal of our Eco-Ambassador program is to transform the waste market. Effective community outreach and education at the ground level is critical for creating awareness about our waste streams and sparking behavior change. A culture of instant gratification and disposability has led many consumers to ignore the impacts, and potential opportunities, around waste. When communities are educated about waste they make better choices about preventing, re-using, recycling or converting waste to maximize the benefits of these precious resources.

There is an opportunity for waste market transformation through organics management and examples from across the country show that reducing landfill waste can lower hauling rates or other disposal costs. Incentives can also be aligned to encourage diverting, composting or converting organic material into biofuels. Global Green is also exploring the potential for closed-loop waste streams to recycle and convert waste locally in a way that captures value and keeps benefits within the community. Understanding the new value of what was once 'waste' is essential for capitalizing on these emerging markets.

The Eco-Ambassador program objectives are to empower communities to manage resources sustainably and to understand the benefits of preventing, recycling and converting waste. Global Green understands this is a fundamental part of transforming the waste market to encourage behavior change and reward sustainability.

References

(1) FAO, 2015. *Food Wastage Footprint & Climate Change*. <http://www.fao.org/3/a-bb144e.pdf>.

(2) Murdock, Andy. "What you need to know about food waste and climate change: a surprisingly large problem with some simple solutions". University of California Carbon Neutrality Initiative. <https://www.universityofcalifornia.edu/longform/what-you-need-know-about-food-waste-and-climate-change>.

(3) Buzby, Jean C., Wells, Hodan F., and Hyman, Jeffrey, 2014. "The Estimated Amount, Value, and Calories of Postharvest Food Losses at the Retail and Consumer Levels in the United States". United States Department of Agriculture (USDA) Economic Research Service. *Economic Information Bulletin No. EIB-121*.

(4) Coleman-Jensen, Alisha, et al., 2016. "Household Food Security in the United States in 2015". United States Department of Agriculture (USDA) Economic Research Service. *Economic Research Report No. ERR- 215*.

(5) Gustavsson, Jenny, et al., 2011. "Global Food Losses and Food Waste". United Nations Food and Agriculture Organization (UNFAO). www.fao.org/food-loss-and-food-waste/en/.

(6) de la Houssaye, Matt and Miller, Rebecca, 2016. "Why Methane Matters". <http://thecorr.org/Methane%20Matters.pdf>.



APPENDIX

POLICY MAP

A sample of regulations and emerging policies related to resource recovery in the United States

Oregon

- SB-263 Opportunity to Recycle: Goal and Recovery Rate Updates (2015)

California

- AB-341 Mandatory Commercial Recycling (2012)
- AB-1826 Mandatory Commercial Organics Recycling (2016)
- Model Water Efficient Landscape Ordinance (2015)

City and County of San Francisco, CA

- Mandatory Recycling and Composting Ordinance (2009)

Alameda County, CA

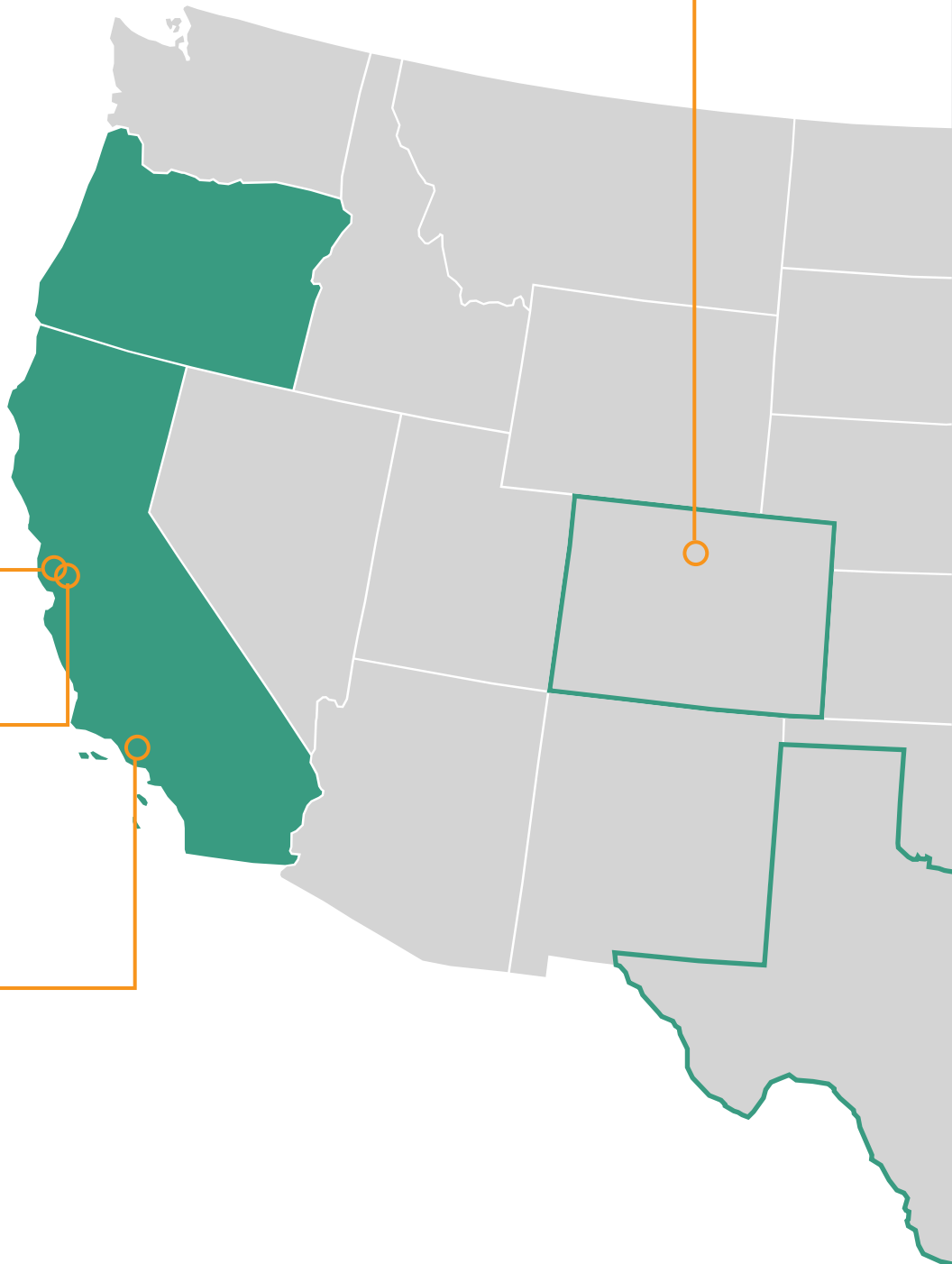
- Plant Debris Landfill Ban (2009)
- Mandatory Recycling Ordinance (2012)
- Mandatory Organics Recycling Ordinance (2014)

Los Angeles, CA

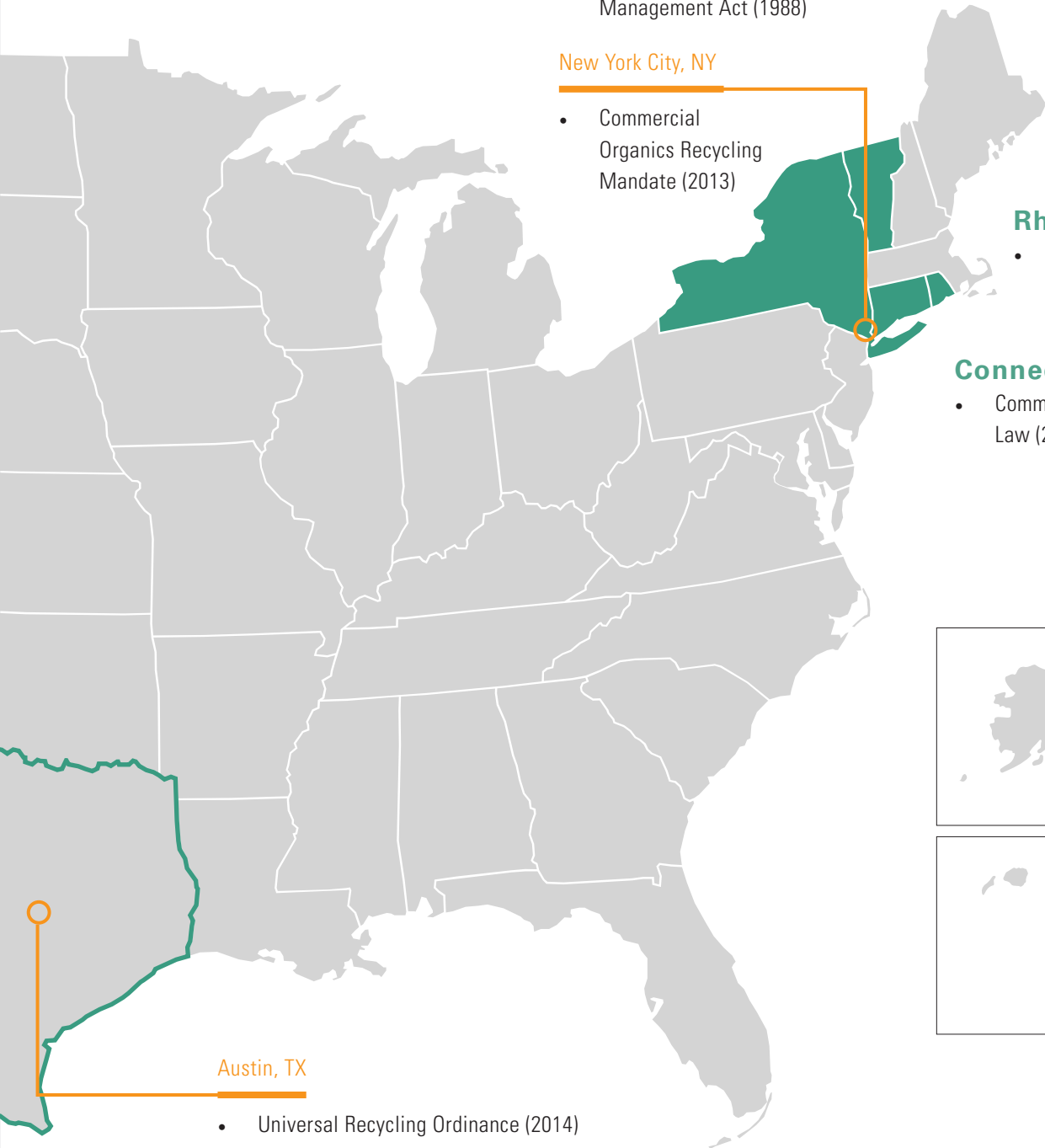
- RecycLA (2016)

Boulder, CO

- Universal Zero Waste



Waste Ordinance (2015)



New York

- Solid Waste Management Act (1988)

New York City, NY

- Commercial Organics Recycling Mandate (2013)

Vermont

- Act 148 Universal Recycling Law and Landfill Bin (2014)

Rhode Island

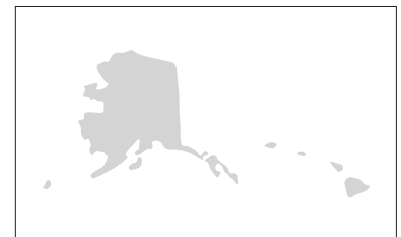
- Commercial Food Waste Ban (2016)

Connecticut

- Commercial Organics Recycling Law (2014)

Austin, TX

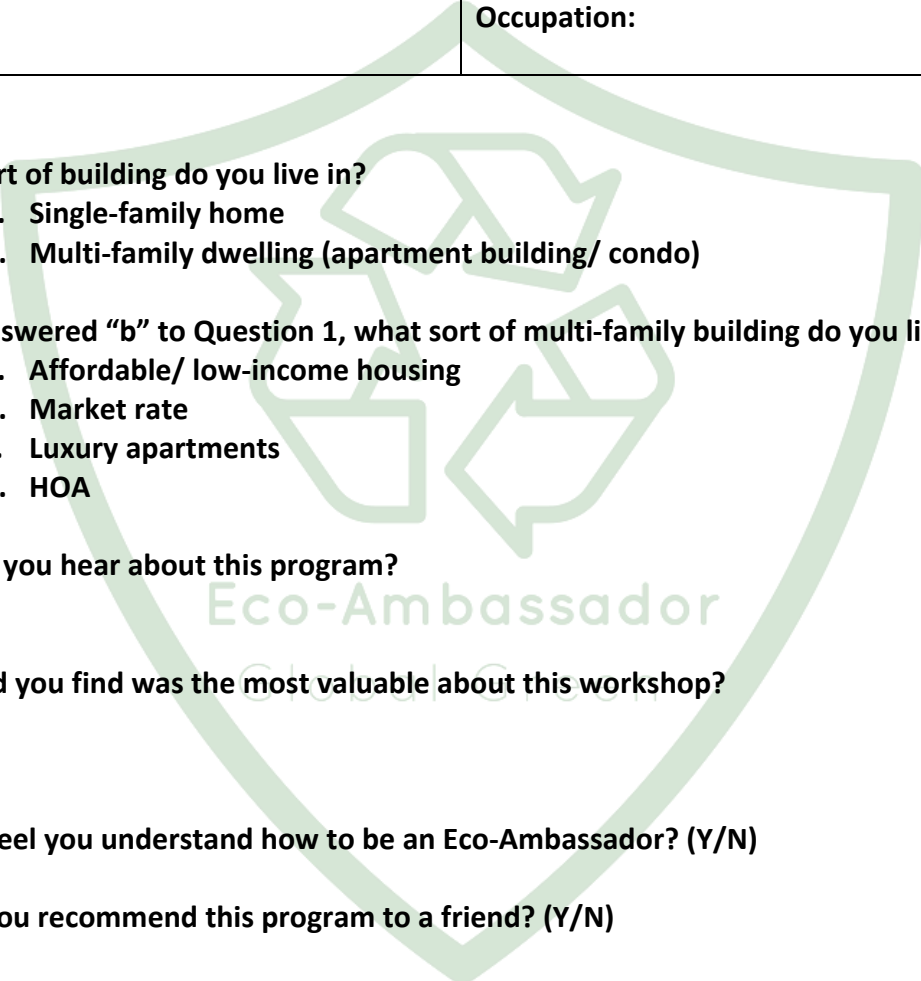
- Universal Recycling Ordinance (2014)



Eco-Ambassador Workshop Survey

Presented By:
Workshop Date:

Name:	What city do you live in?
Phone Number:	Email Address:
Age:	Occupation:

- 
1. What sort of building do you live in?
 - a. Single-family home
 - b. Multi-family dwelling (apartment building/ condo)
 2. If you answered “b” to Question 1, what sort of multi-family building do you live in?
 - a. Affordable/ low-income housing
 - b. Market rate
 - c. Luxury apartments
 - d. HOA
 3. How did you hear about this program?
 4. What did you find was the most valuable about this workshop?
 5. Do you feel you understand how to be an Eco-Ambassador? (Y/N)
 6. Would you recommend this program to a friend? (Y/N)
 7. What is the best way to reach you for updates?
 - a. Phone call
 - b. Email
 8. Do you have any other comments, questions, or concerns about the workshop or your duties as an Eco-Ambassador?
 9. I commit to investing 10 hours per year in the Eco-Ambassador efforts. (Y/N)

Eco-Ambassador Post-Workshop Survey

Name:	Street Address:
Phone Number:	Email Address:
Workshop Date:	

GENERAL PROPERTY INFO

1. What sort of building do you live in?
 - a. Single-family home
 - b. Multi-family dwelling (apartment building/ condo)
2. If you answered “b” to Question 1, what sort of multi-family building do you live in?
 - a. Affordable/ low-income housing
 - b. Market rate
 - c. Luxury apartments
 - d. HOA
3. How many units are in your building?
4. Who manages your building?
 - a. Building owner
 - b. Property management company
 - c. HOA
5. If you answered “b” to Question 3, what is the name of your building’s property management company?
6. Does your building owner/ property manager/ landlord live on-site? (Y/N)



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