



A PATH TOWARD ZERO WASTE AT HI NYC - USA

This project addresses the following Sustainable Development Goals (SDGs):

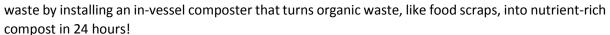






SUMMARY

Project description: Help one of the largest hostels across HI get one step closer to zero



An in-vessel composter will give the hostel a key tool to implement a complete waste separation program with the aim of one day achieving zero waste. The hostel currently recycles 25% of its waste, but this piece of equipment alone will help us get near 50%. With better communication and equipment as part of this project, our recycling rate will increase as well. Our goal is a 75% diversion rate (recycling plus composting) by 2020.

Project type: Energy efficiency, Education in sustainability, Other

National Association: HI USA

Project location: HI New York City

Estimation of number of reduced tonnes of CO2: 8.94 total metric tons of carbon dioxide

diverted (reduced plus offset) per year

Total funds requested: £10,000

Total project cost: £16,420

Why this project should be funded ahead of others: With over 75,000 people directly impacted by this project annually, it could have one of the largest direct-educational reaches when compared to other projects under consideration. Since HI NYC is a key hostel in the US, it also makes a clear statement of HI USA and HI's collective commitment to sustainability. In addition to improving the environmental footprint of the hostel and educating visitors, the project offers an opportunity to engage the community and staff through compost give-a- way events and a professional development opportunity for university students.





DETAILED PROJECT INFORMATION

Purpose/objectives of the project activity:

- 1. Increase overall waste diversion at the hostel to 75%
- 2. Educate guests, visitors, and staff on waste reduction and diversion
- 3. Create nutrient-rich compost to enhance onsite landscaping and/or give to staff/community

When most people think about sustainability, they immediately consider recycling. Each day, everyone throws something away and every time they do it is an opportunity to promote environmental stewardship. By setting the ambitious goal of working to get the largest hostel in the US to zero waste, we will be directly educating over 75,000 people annually on the role of waste in reducing our environmental impact. We hope that this will inspire them to adopt a similar environmental ethic into their daily lives.

Project Summary:

Help one of the largest hostels across HI get one step closer to zero waste by installing an in-vessel composter that turns organic waste, like food scraps, into nutrient-rich compost in 24 hours!

HI New York City is the largest hostel in the USA. Each year, the hostel welcomes 75,000 travelers and community members and hosts over 1,000 community events, gatherings, and educational programs. All that means a lot of waste...an estimated 288,000 pounds (130,635 kilograms) per year...the equivalent of 22 African elephants!

The hostel has a recycling program that collects aluminum, glass, plastic, paper, and cardboard; but a huge opportunity exists to collect organic waste like food scraps and paper products. In addition to the self-serve kitchen, HI NYC has an onsite café that serves approximately 200,000 meals per year. The hostel's rentable community space also attracts many catered events annually.

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Methodology (How) - project description:

Unlike traditional composting methods of turning a pile or a tumbler that can take 6 months or more to produce compost from organic waste, in-vessel composting uses a self-contained chamber and controlled heat and air to rapidly decompose organic waste into compost in 24 hours. The compost can then be used following a 2-week curing period outside the equipment. The equipment greatly reduces space and labour concerns which often prohibit traditional composting processes from being successful. Another benefit of these systems is their ability to turn a much wider array of organic waste into compost.

Because of the Big Apple Café, HI New York City is one of the few if not the only hostel across HI USA with the right mix of organic waste to warrant this type of composting equipment.





Once produced, the compost will be used in two different ways. First, the hostel has a large patio and backyard that has a vast number of flowers, shrubs, and trees. The hostel is converting its backyard into a community garden space, so onsite use of compost will be in ever-increasing demand. However, we do expect to generate more than we would have use for onsite, so we plan to have annual compost give-a-way and educational events for staff and the local community.

Equipment Overview



HI USA has evaluated in-vessel composting equipment and had an onsite visit from a vendor to discuss equipment feasibility. This was to ensure that the project would be successful if awarded. The vendor selected is EcoRich. More information on the equipment can be found here. We are looking at models that can process 150 pounds (68 kilograms) of organic waste into 10 pounds (4.5 kilograms) of compost per day.

Monitoring plan:

After the equipment is installed, the hostel will test batches of organic waste from various locations in the hostel including the café, self-serve kitchen, group kitchen, staff break rooms, and catered events.

After a few months of this testing, a final waste separation strategy will be put into place. Waste volumes and separation percentages will continue to be tracked and changes made to the program's communication, containers, and flow as necessary to increase our diversion rate.

Contribution of the project activity to sustainable development:

The project contributes to the following Sustainable Development Goals:



We will be reducing the amount of waste generated as well as adjusting product consumption and operations to increase organic composting.



In-vessel composting reduces our carbon footprint associated with waste generation.



The use of nutrient-rich compost replaces the need for industrial fertilizers which negatively impact public and environmental health.

Estimation of number of reduced tonnes of CO2:

According to the US EPA's Waste Reduction Model (WaRM), 0.2 metric tons of carbon dioxide equivalent are generated when mixed organic waste is put into a landfill. Greenhouse gases are produced not only from transporting the waste to the landfill but also the generation of methane during decomposition. On the other hand, 0.16 metric tons of carbon dioxide equivalent are reduced





per ton of organic waste composted. According to the WaRM model, composting is a carbon offset mechanism because it increases the amount of carbon storage in the soil. The WaRM model does not allow for differentiation in composting methodology. Our equipment will use a relatively small amount of electricity but greenhouse gas emissions from transportation to a commercial composting facility are reduced since the equipment is onsite. All this considered, we used the WaRM model's standards to calculate our greenhouse gas reduction potential.

- 54,750 pounds (24.84 m-tons) of organic waste diverted from the landfill annually (potential);
- 5,475 pounds (2.48 m-tons) of compost generated annually (potential);
- 4.97 m-tons of carbon dioxide equivalent produced from organic waste to landfill (baseline);
- 3.97 m-tons of carbon dioxide equivalent offset from composting organic waste (potential);
- 8.94 total metric tons of carbon dioxide diverted (reduced plus offset) per year.

Communication plan:

Included in the project is the purchase of containers, carts, and signage to ensure that waste is separated and transported effectively. HI NYC will also develop in-hostel signs to educate guests and visitors on the waste separation guidelines and the overall benefits of the program. An interactive display is anticipated. The display will include reference to the HI Sustainability Fund and how this project fits into HI's overall commitment to sustainability. Additionally, all staff will be trained on the program and how to be green champions. Finally, HI NYC will work with local university students to help monitor the roll-out of the program and make improvements along the way.

Additional information:

The hostel rests inside a registered historic landmark building that is over 135 years old! It was designed by Richard Morris Hunt, who famously designed the pedestal for the Statue of Liberty! The building was initially occupied by the Association Residence for Respectable Aged Indigent Females and served as a home for women who were left widowed by the Revolutionary War or War of 1812.

Sustainability at HI New York City

Given its impact, HI NYC has made a deep and continued commitment to sustainability. In early 2017, it was recognized by the Hotel Association of New York City with the top honor at their annual sustainability awards ceremony, designating it as the most sustainable lodging accommodation in NYC that year. In 2017, the hostel was audited for Green Globe certification and anticipates recognition in the Fall of 2017. Highlights of the hostel's sustainability commitments include:

Environmental

- Purchasing renewable energy credits to match 100% of annual electricity consumption
- o LED lighting
- Variable frequency drives
- Energy Star certified appliances
- In-room occupancy-based energy controls





- Low-flow water-use-equipment
- Ozone laundry system
- Occupancy-sensor shower timers
- Rain barrels
- Linen and towel conservation program
- o Facility-wide recycling and waste reduction strategies
- o Green certified cleaners, soaps, and detergents
- Locally-sourced art, café ingredients, beer and food
- Onsite herb garden and local Community Supported Agriculture food box participation

Social and Community

- Annual Explore the World scholarships which bring together a community of local volunteers to award \$2,000 to 20 youth travelers from NYC
- Annual participation in Sleep for Peace including the dedication of an on-site peace garden last year to three local civil rights leaders who lost their lives
- Annual participation in Great Hostel Give Back where community groups get to stay in the hostel for free for volunteering in the community
- Open door to the community to use their space for various events and in many cases offering experiential programming for other community members or guests
- o Travel education classes including Travel Boot-camp for novice travelers
- o Intercultural education classes for local youth and all community members including
- o International Ingredients where participants learn how culture shapes food
- Bon Voyage, a first timer's guide to international travel, which gives advice on budgeting, itinerary planning and cultural sensitivity to make every journey an enriching experience

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