

COMPOSTING 101

CIRCULAR ECONOMY MFG





INTRODUCTION

COMPOSTING

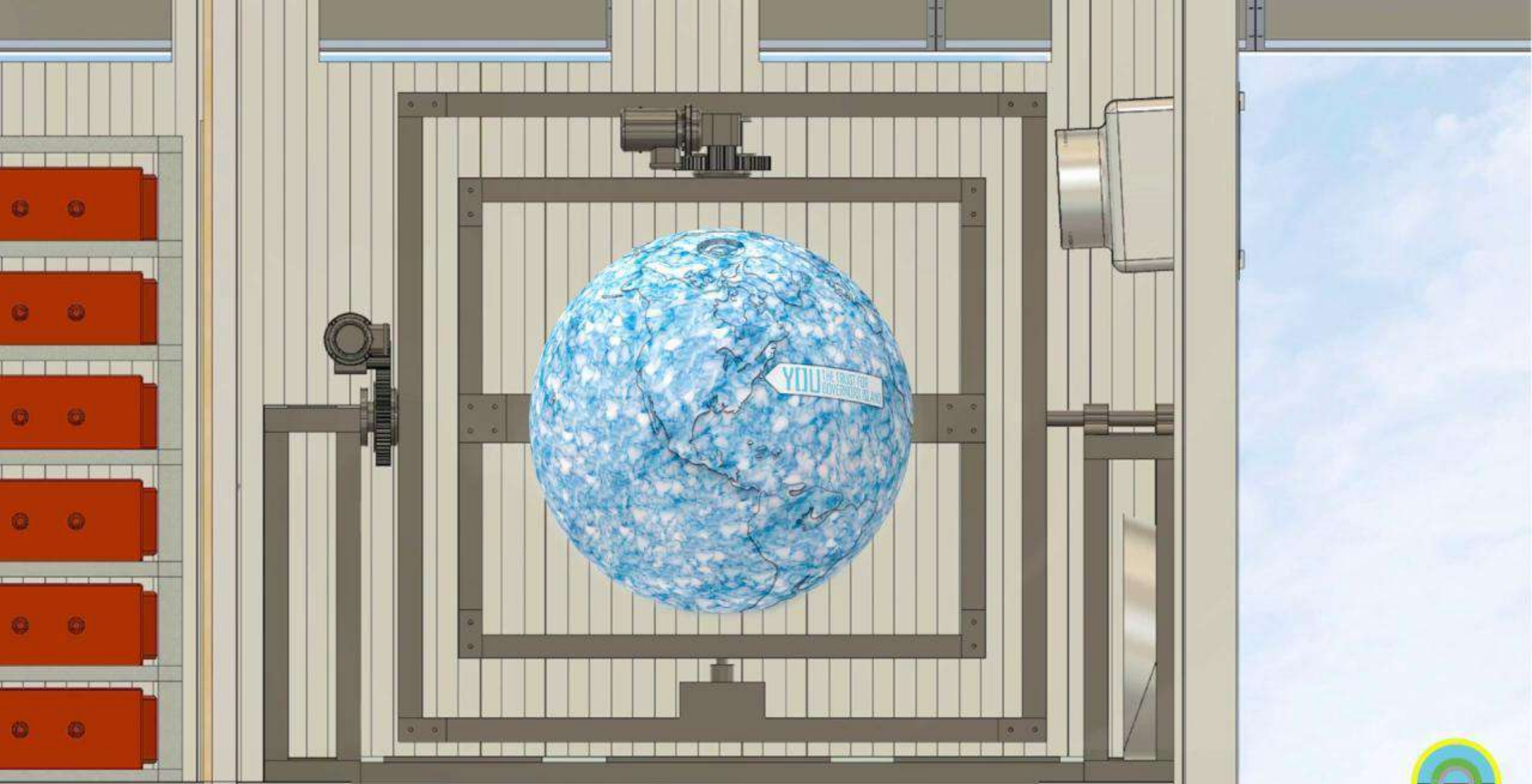
- Food Scrap Collection
- Worm Bins
- Coir + Ash
- Bokashi

Q&A

Panelists

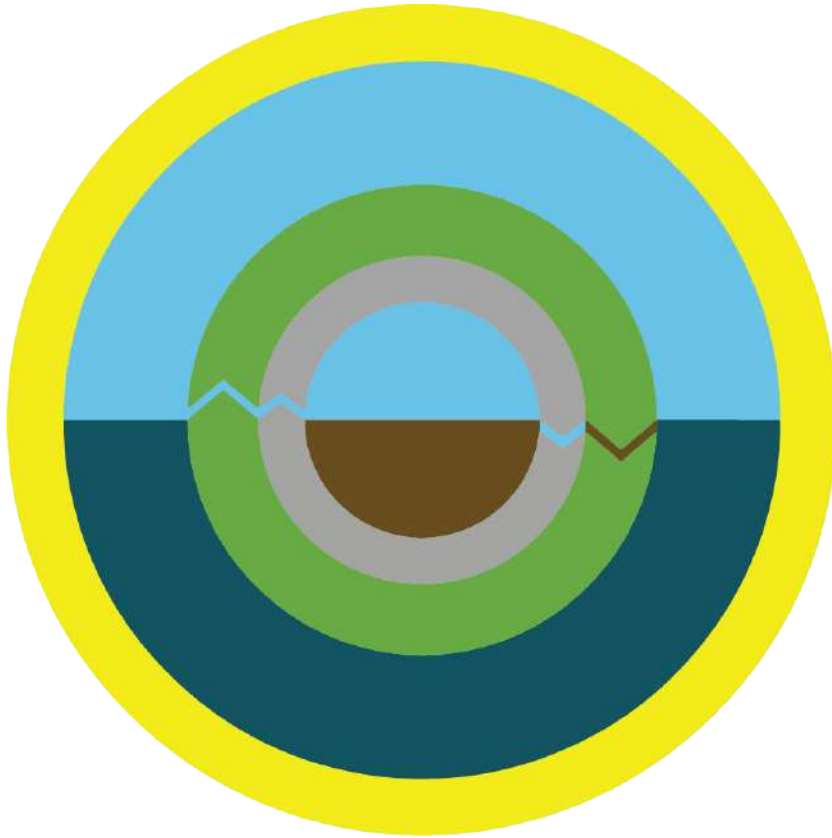
- Barent Roth: Director + Co-Founder
- Maite Ortiz: Designer
- Bella LaMartina: Designer
- Celeste Rose: Designer





HOLLOW PRODUCT





INTRODUCTION

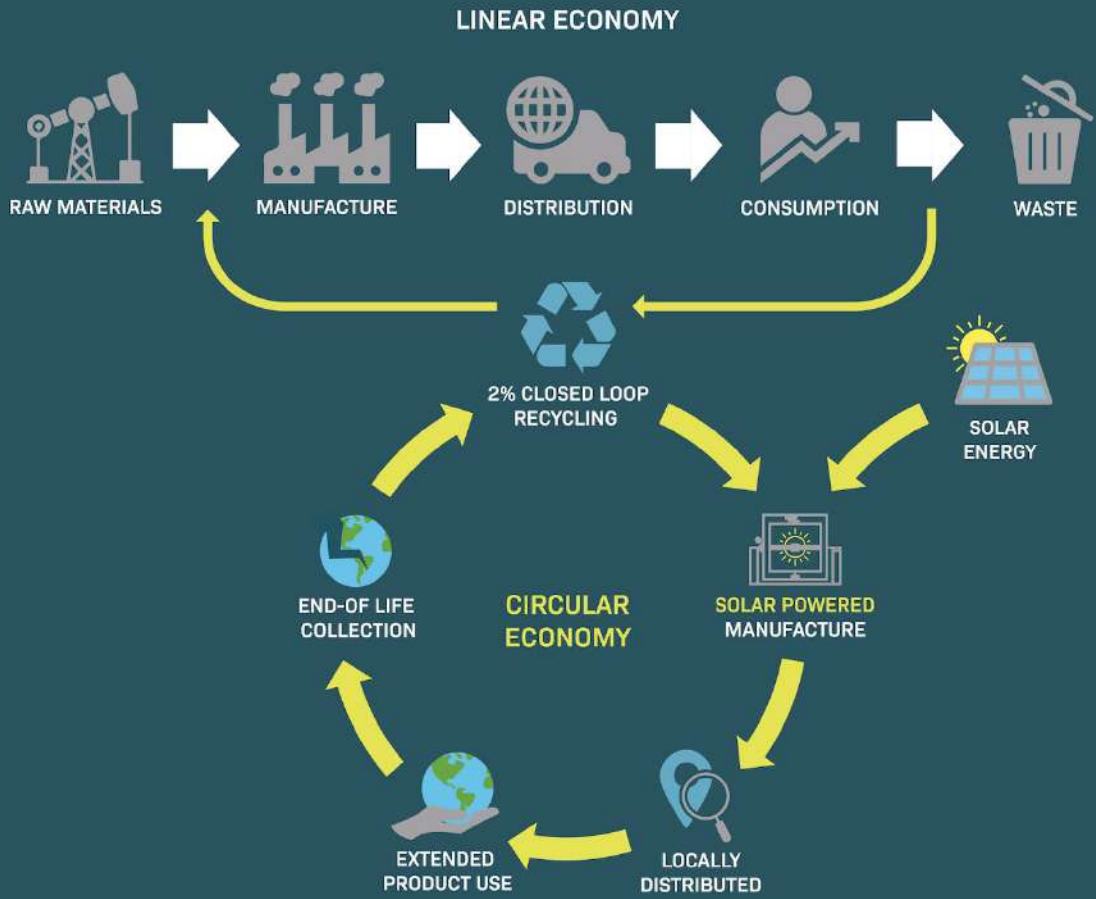
COMPOSTING

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Q&A

CEMfg Logo: Our Mission Revealed

- Sunlight - Renewable Energy
- Grey Arrows : Technical Cycle
Reuse / Repair / Recycle
- Green Arrows: Biological Cycle
Compost
- Repair and Protect
 - Air
 - Land
 - Sea



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Q&A

Linear vs. Circular

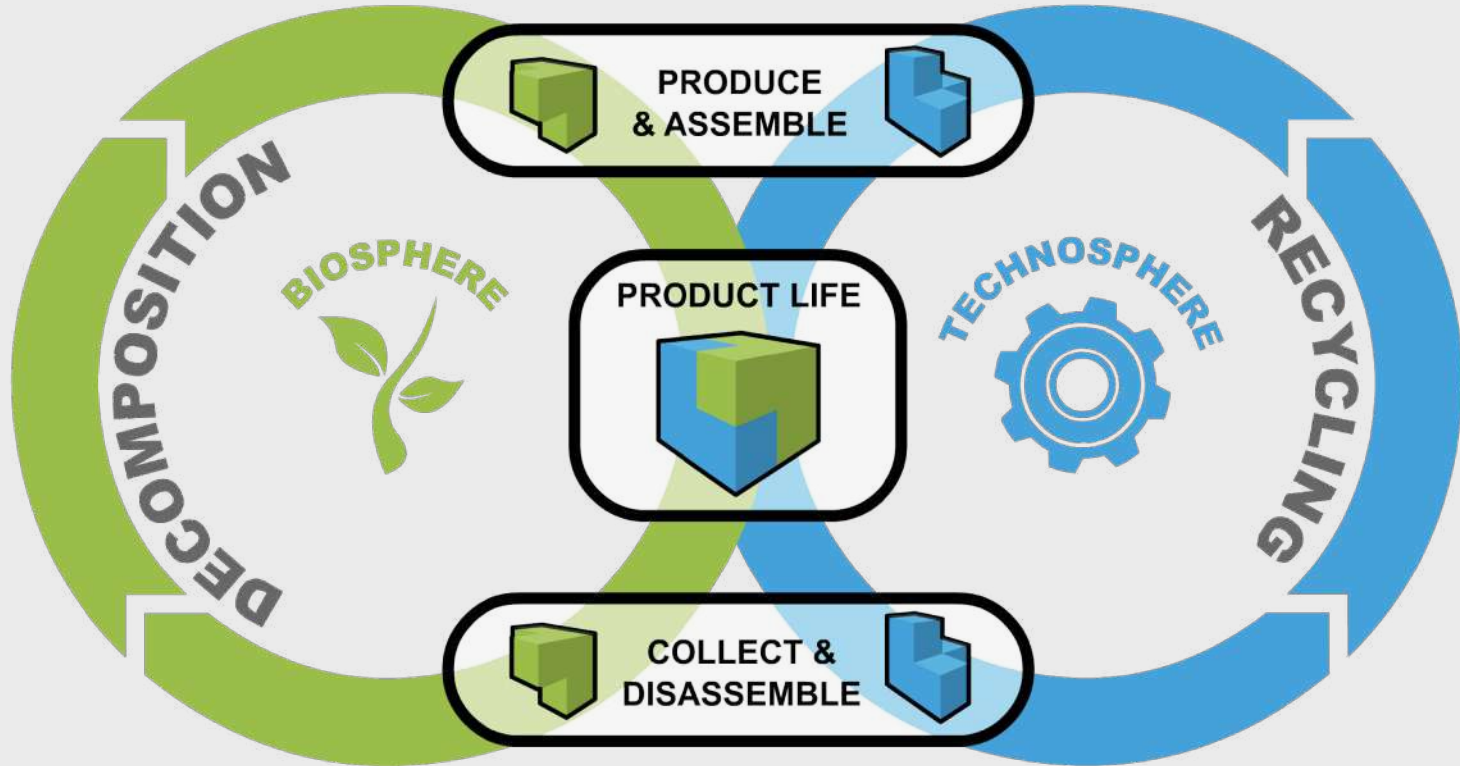
- **Linear Economy**

Materials are collected, made into products, and discarded as waste

- **Circular Economy**

Keep products in use and designs out waste and pollution

CRADLE TO CRADLE





A close-up, top-down view of a large pile of diverse food waste. The scraps include banana peels (some dark brown, some yellow), green lettuce leaves, red and yellow tomato slices, onion skins, and pieces of bread or other carbohydrates. The colors are vibrant and varied, creating a textured and busy visual. The word "COMPOST" is overlaid in the center in a clean, white, sans-serif font.

COMPOST

A large, dense pile of food waste, including various fruits like apples, oranges, bananas, and grapes, along with vegetables such as lettuce, broccoli, and cauliflower. There are also several pieces of clear plastic packaging and a blue tarp visible on the left side. The text "FOOD WASTE" is overlaid in the center in a white, sans-serif font.

FOOD WASTE

A close-up photograph of a basket filled with various food scraps. The items include several banana peels, some whole and some broken, scattered throughout. There are also orange peels, some whole and some broken. White rose petals are scattered across the basket, along with green herbs like basil and dill. A single purple flower is visible in the lower-left quadrant. The basket is made of light-colored wood or bamboo, and the background is dark and out of focus.

FOOD SCRAPS

Material Collection



The Ingredients



Nitrogen Rich
Material



Carbon Rich
Material



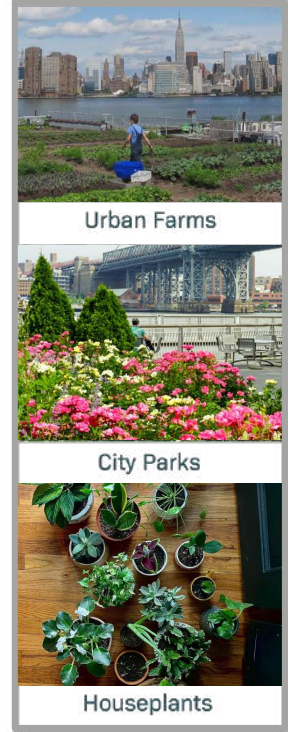
Processing Method



Compost Product



Compost Used By:



Urban Farms

City Parks

Houseplants



REDUCE HOUSEHOLD WASTE



REDUCE HOUSEHOLD WASTE

BY 60%







Credit: GardenHeroes.com/Alamy Stock Photo

COMPOSTING

REDUCE SOURCES > ■ Industry > Use Waste

2.14–3.13

GIGATONS

CO₂ EQUIVALENT
REDUCED / SEQUESTERED
(2020–2050)

-\$83.75--60.6

BILLION \$US

NET FIRST COST
(TO IMPLEMENT SOLUTION)

\$-173.16--127.43

BILLION \$US

LIFETIME NET
OPERATIONAL SAVINGS

PROJECT DRAWDOWN[®]



COMPOSTING METHODS



INTRODUCTION

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Q&A

Drop-Off Locations

- Located around the country
- Drop-off your compostable items
- Sites take your material and make nutrient-rich compost
- You can return to purchase the compost product

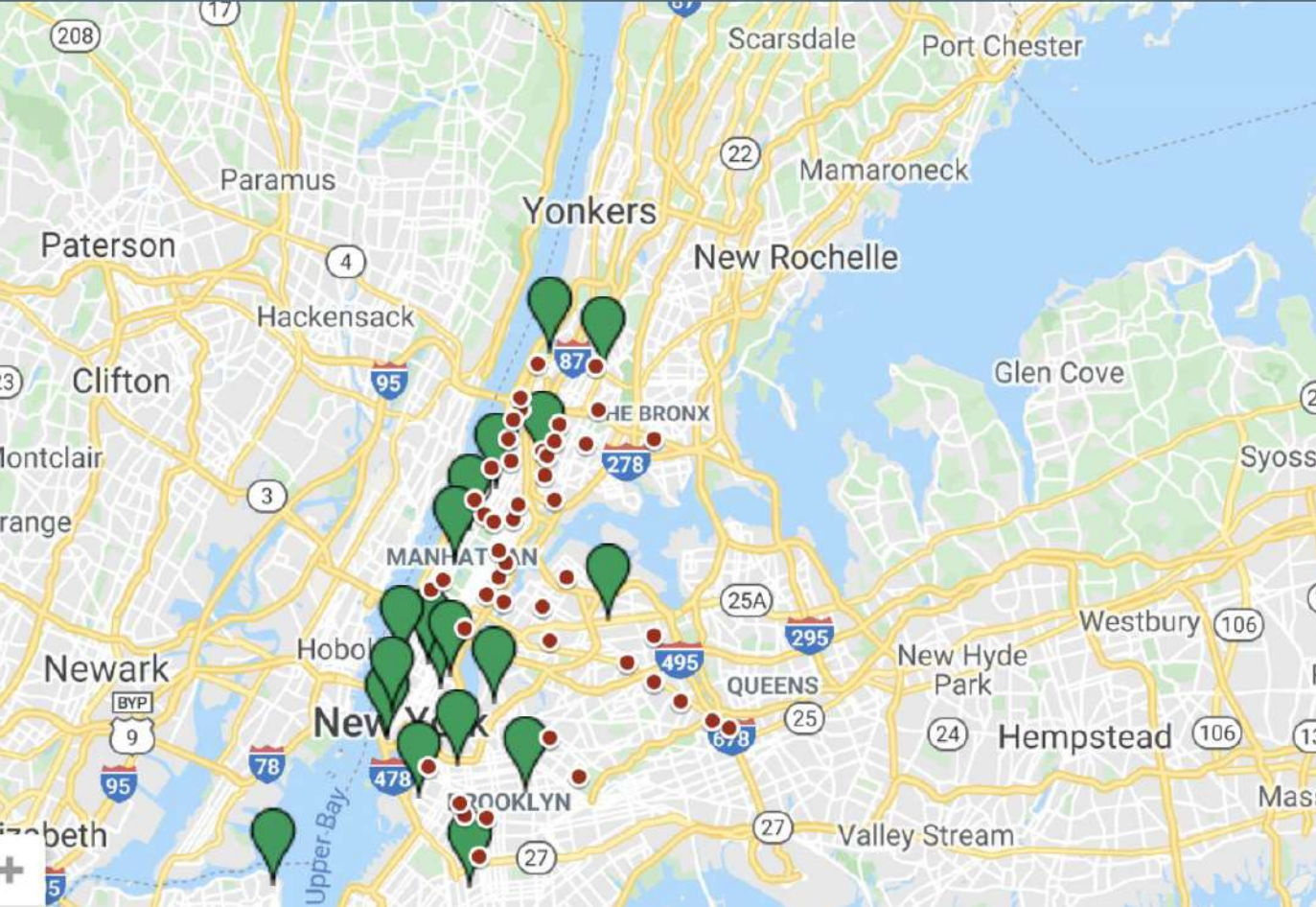
WHERE TO COMPOST

UNITED STATES

Alabama	Idaho	Michigan	New York	Tennessee
Alaska	Illinois	Minnesota	North Carolina	Texas
Arizona	Indiana	Mississippi	North Dakota	Utah
Arkansas	Iowa	Missouri	Ohio	Vermont
California	Kansas	Montana	Oklahoma	Virginia
Colorado	Kentucky	Nebraska	Oregon	Washington
Connecticut	Louisiana	Nevada	Pennsylvania	Washington DC
Delaware	Maine	New Hampshire	Rhode Island	West Virginia
Florida	Maryland	New Jersey	South Carolina	Wisconsin
Georgia	Massachusetts	New Mexico	South Dakota	Wyoming
Hawaii				

GrowNYC Food Scrap Drop-Off Locations

This map was created by a user. [Learn how to create your own.](#)



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NYC Locations

- Slowly returning after Covid closures
- Often located near farmers markets
- Open year round
- Visit: www.grownyc.org/compost



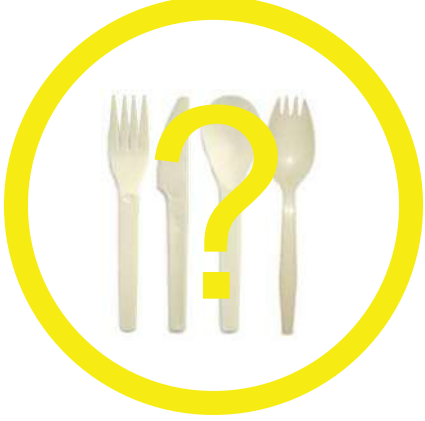








Image by : Cultured NYC



DROP OFF FOOD SCRAPS
PL, W, T, F, Sat, Sun 10am-4pm
LESE
ECOLOGY CENTER
LEARN MORE ABOUT
Volunteer opportunities
+ upcoming events at
→ LESECOLOGYCENTER.ORG
→ [@LESECOLOGYCTR](https://www.instagram.com/LESECOLOGYCTR)



Image by : GroWNYC



Image by : NYC.gov



Image by : DSNY



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Drop-Off Etiquette

- Rip open BPI certified bio-bags or do not use them
- Do not leave plastic in bins
- Rip apart paper bags



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Curbside Pick Up

- Visit your cities Department of Sanitation website to see if this service is available
- Compost processed in an industrial facility
- Meat and dairy may be accepted



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Q&A

Vermiculture aka Worm Bins

- Worms break down organic material
- Aerobic (with oxygen)
- Can eat ½ lb of organics each day
- Keep bin in 55-75 °F

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Q&A

How it Works

- Worms migrate upward to the tray with food scraps
- Produces compost and “tea”

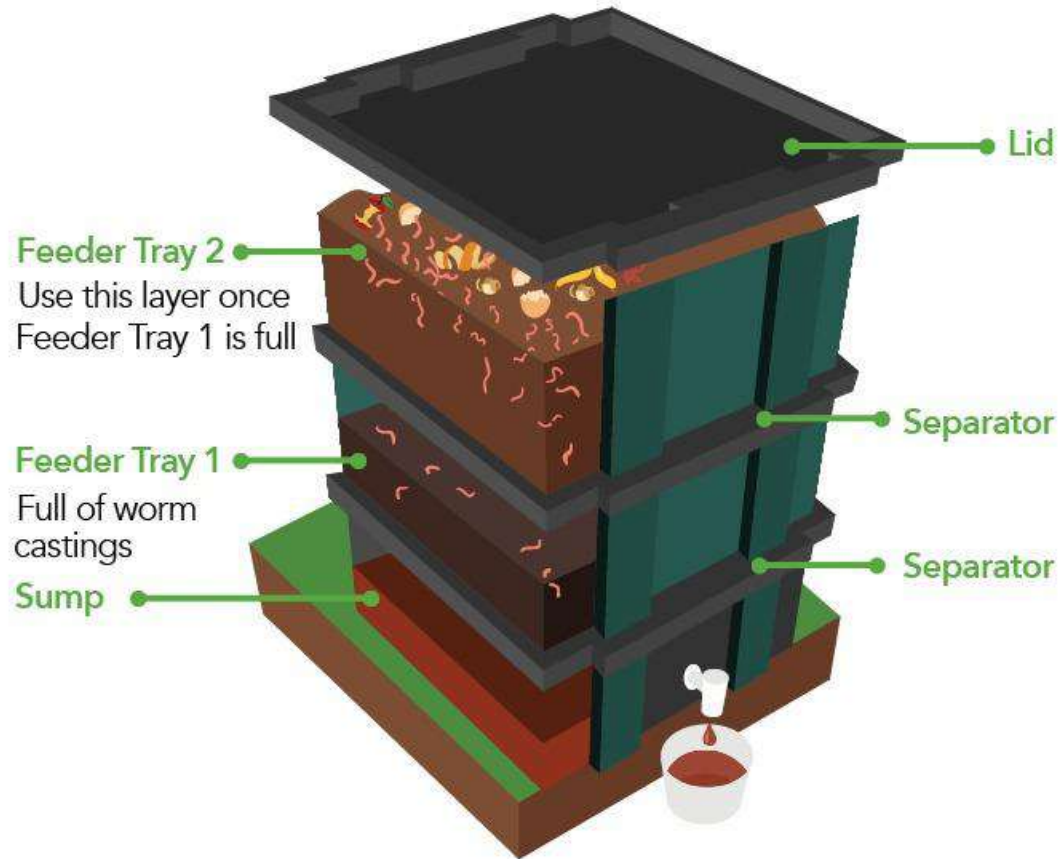




Image by : deepgreenpermaculture.com



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Q&A

Worm Tea

- Tea is a natural fertilizer that boosts plant growth
- Use to water your garden



DEEPA
greener
WORLD
www.deepgreenpermaculture.com



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Q&A

Coir + Ash

- Requires Coconut Peat and Wood Ash
- Aerobic (with oxygen)
- Coir material can be poisonous to dogs

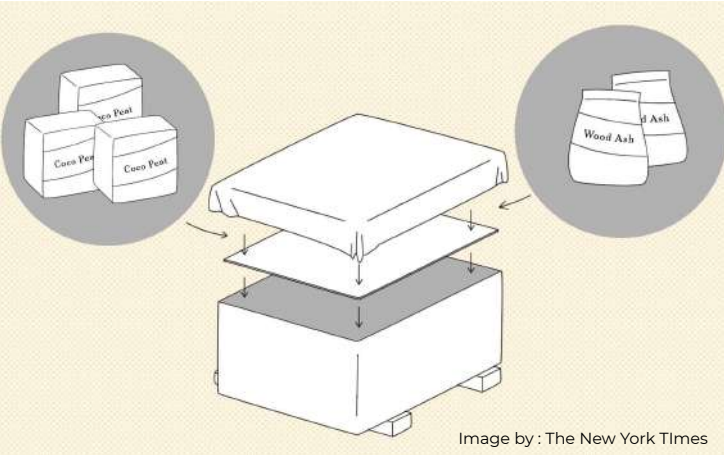


Image by : The New York Times



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Q&A

Coir + Ash

- Described by Hiroko Tabuchi in the New York Times
- Process can be done in a recycled cardboard box



Image by : The New York Times



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- **Bokashi**

Q&A

Bokashi

- Japanese for “fermented organic matter”
- Anaerobic (without oxygen)
- Requires airtight container and compost “activator”
- Can compost meat and dairy products
- Must be compressed daily



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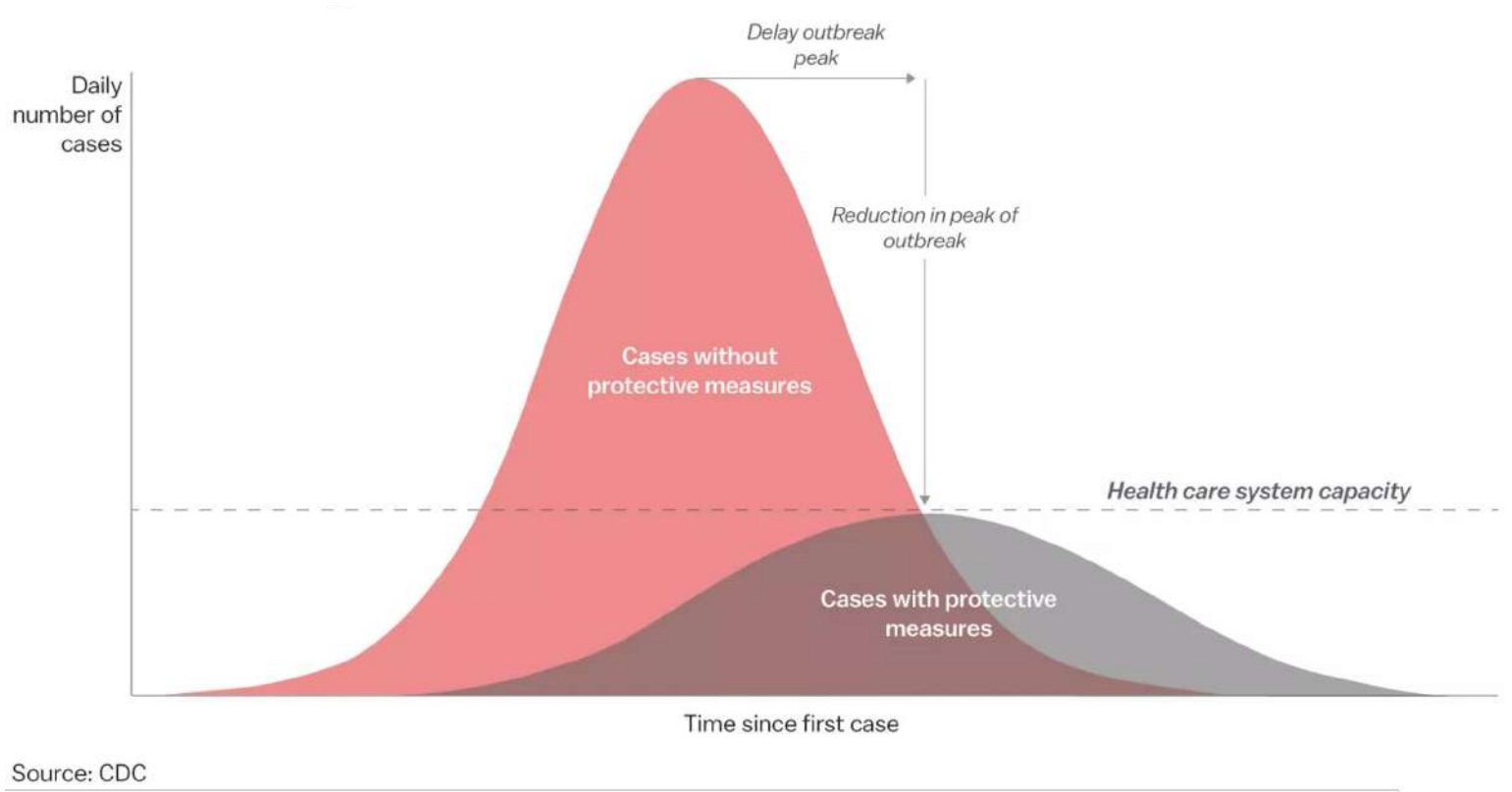
Bokashi Tea

- Liquid byproduct makes excellent fertilizer for directly feeding plants
- Tea can be poured down the drain to prevent clogged pipes

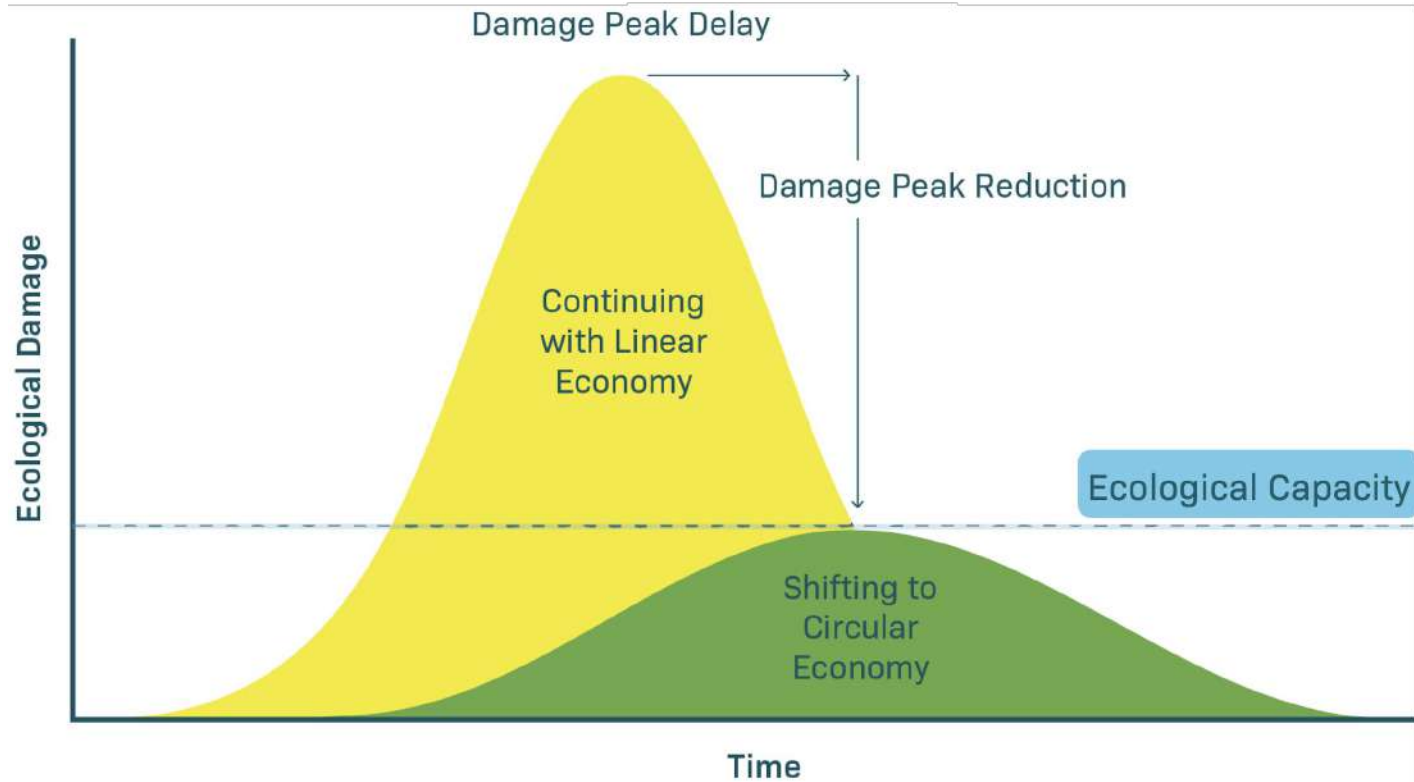
A detailed collage of various food scraps and waste. The image includes banana peels, vegetable peels (like lettuce, tomatoes, and onions), food scraps (like bread and meat), and other organic waste. The colors are vibrant, showing greens, yellows, oranges, and reds.

CONCLUSION

FLATTENING THE INFECTION CURVE



FLATTENING THE ECOLOGICAL DAMAGE CURVE





THANK YOU!

Questions?