

**Compost**

**Challenge**

# COMPOST CHALLENGE



Can you reduce your food waste by 50%, or more ?



In 2015 the EPA (US Environmental Protection Agency) and USDA (US Dept. of Agriculture) announced a domestic goal of reducing food loss and waste by 50% by 2030.

# The difference between

## FOOD LOSS

&

## FOOD WASTE

takes place at

**Production**

**Postharvest**

**Processing stages**

**Distribution**

happens at

**Retail**

**Consumption**



Food and Agriculture Organization  
of the United Nations

#ZeroHunger

Food loss is defined as the food that spills, spoils, or is reduced in quality through bruising or wilting, so that it is lost before getting to the consumer.

Food waste is good quality food that does not get consumed because it is thrown out, either before or after spoiling. Food waste goes to landfills and combustion

Sending food waste down your food disposal, does not “dispose” of the problem, but just passes the waste to Branford’s Wastewater Treatment Plant (75 Block Island Road), which must filter the water to remove the food waste, then treat it, and then ship it off for disposal.

Furthermore, food disposal waste can lead to grease plugs at the treatment plant, or even plugs elsewhere in the sewer sys-



Branford's Wastewater Treatment Plant spends ~\$35,000/month\* on electricity for waste treatment. Credit for electricity from the solar farm below Tabor Ecology Park will be used to partially offset the current cost of waste treatment, but it would be even better to reduce the overall electricity needs, by decreasing the amount of waste entering the plant for treatment.

\* 3/27/19 Conversation with Brian Devlin, Branford's Wastewater Treatment Plant Manager

From Branford-ct.gov>Town Department>Solid Waste and Recycling>Yard Waste/Organics :

A recent waste characterization study by the CT DEEP found that 22.3% of the trash that is thrown away in Connecticut is food waste.

Branford has 12,500\*tons MSW/year, 22% is 2,750 tons, at \$75/ton\* disposal cost =

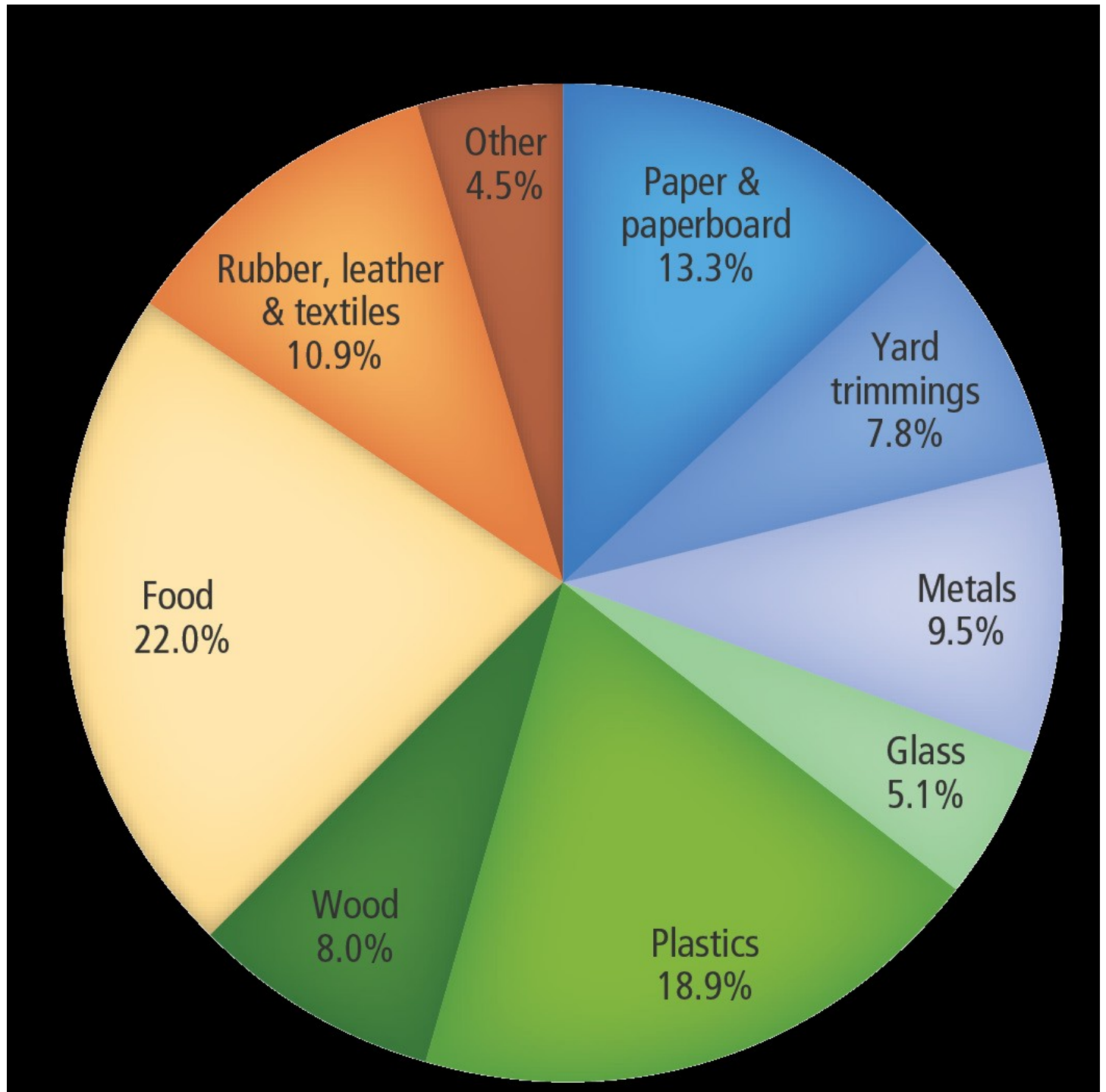
**At current Branford rates, that equates to roughly \$200,000 spent by Branford taxpayers annually to dispose of food, so after 5 years,**



Total Municipal Solid Waste (MSW) Landfilled in 2015 (138 Million Tons)

22% of our trash is FOOD!, the single largest category.

From: Advancing Sustainable Materials



# Why reduce food waste?

- 1) We pay money for the wasted food and then to haul it away to landfills, so it's costing us!
- 2) Reducing food waste will help address climate change, as 20% of U.S. methane (a greenhouse gas) comes from landfills and is produced by anaerobic (without oxygen) decay of foods.
- 3) By keeping wholesome and nutritious food in our communities and out of landfills, we can help the 42 million Americans in food insecure

Each person produces (on average) 220 pounds of food waste each year, which is sent to landfills and combustion facilities. Can you reduce this to 110 pounds per person, (or much less)?

From: United States 2030 Food Loss and Waste Reduction Goal: [epa.gov](http://epa.gov)

# What can you do to reduce food waste?

- 1) Be a **smarter consumer** (don't purchase more food than you can eat), which both saves you money and prevents food waste. See [www.epa.gov/sustainable-management-food](http://www.epa.gov/sustainable-management-food) for more tips on how to prevent food waste.
- 2) If you have a garden, **donate** your overabundant produce to the Branford Food Pantry and the Community Dining Room, thereby helping people in Branford, rather than wasting it.

3) **COMPOST** your food waste, rather than sending it to the landfill or down the drain

through the food disposal.



Compost  
Bins Made  
from  
Pallets

**For more information, take a picture of this sheet, then go on-line:**

1) Tips on how to prevent food waste: [www.epa.gov/sustainable-management-food](http://www.epa.gov/sustainable-management-food)

2) Proper Food Storage Tips: [www.branford-ct.gov/filestorage/285/562/2938/2973/too-good-food-storage-guide.pdf](http://www.branford-ct.gov/filestorage/285/562/2938/2973/too-good-food-storage-guide.pdf) (From [www.branford-ct.gov](http://www.branford-ct.gov)>Town Departments>Solid Waste and Recycling Center>Yard Waste and Organics>Fruit and Vegetable Storage Guide)

3) How to Compost: From UConn: [www.ladybug.uconn.edu/FactSheets/index.php](http://www.ladybug.uconn.edu/FactSheets/index.php), look at Soils/Compost/Mulch.

And from Connecticut Agricultural Experimental Research

# Three ways to Compost:

1) Indoor Composting with Worms, called Vermicomposting. Worms turn your food scraps into fertilizer for your plants.



2) Outdoor Traditional Backyard Composting of grass clippings, egg shells, food scraps (only plant based, no meats, oils or dairy), plant material and chopped leaves. Finished compost is



# From Garbage to Garden

*It's Compost Time!*



# Composting

**Why Compost?** Composting can help to reduce methane gas by reducing rotting waste in landfill. Methane gas, a greenhouse gas, will contribute to Global Warming. So Save the Earth and start Composting!

**26%**  
of the U.S. solid waste consist of yard trimming and food residuals

**30**  
times  
Methane gas is 30 times more potent than CO<sub>2</sub>

**43%**  
of waste in bins can be composted!



Compost Bins come in many different styles

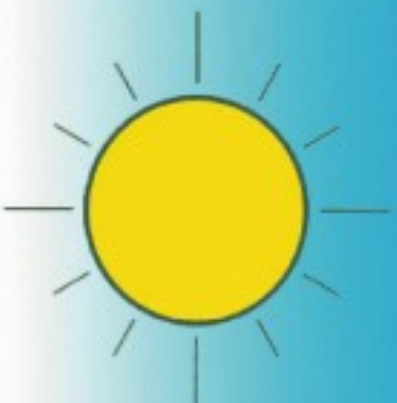


### 3) Green Cone Solar Compost Digester

An outdoor earth friendly companion to traditional backyard composters. It can compost some materials that don't go in regular outdoor compost bins, like bones, meats, seafood, dairy, grease and small amounts of pet waste. It doesn't take up much space and is critter proof.

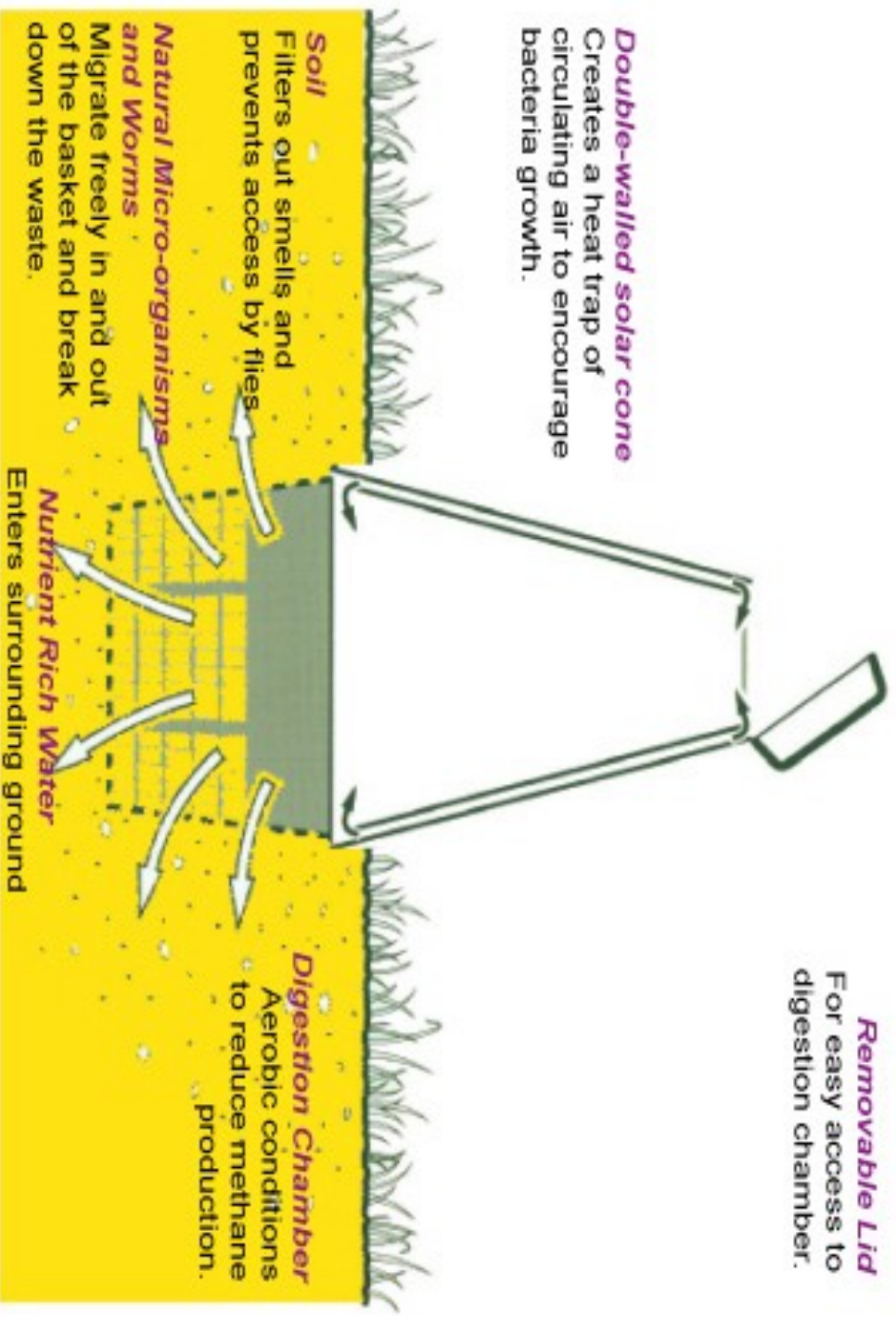
# How the Green Cone Works

**Sunlight**  
Provides energy source for the digestion process.



**Removable Lid**  
For easy access to digestion chamber.

**Double-walled solar cone**  
Creates a heat trap of circulating air to encourage bacteria growth.



**Over 90% of the waste material in your Green Cone will be absorbed as water by the soil.**

**YES!**

**NO!**

Add these to your cones:

Keep these out:

Fish ~ Meat ~ Poultry

Metal ~ Wood

All bones

Plastic ~ Glass

Bread

Paper ~ Straw

Fruit (including peelings)

Bulk oil

Vegetables (including peelings)

Disinfectant ~ Bleaches

Dairy products

Grass cuttings ~ Hedge clippings

Raw and cooked food scraps

Large amounts of coarse vegetable matter

Crushed egg shells

(corn husks, pea shells, etc.)

Tea bags

Coffee grounds (but not coffee filters)

(While digestible, large quantities fill a cone — compost it instead!)

Small amounts of animal excrement

# What to Feed Your Green Cone

(and what not to)



A Green Cone, here in action in Branford, surrounded by plants in summer.



# How does the Green Cone Composter Work?

- 1) It accelerates the natural decomposition process by raising the temperature (up to 122° in the summer).
- 2) Decomposition is aerobic (no nasty smells and no methane produced)
- 3) Pests and animals cannot access the waste food, because its underground.

4) Requirements are to place the Green Cone in sun, with good drainage (need to dig a hole 18” deep and 24” wide for the digestion basket). The cone is about 26” tall.

5) 90% of waste is turned into water, which drains away in the soil. 1 ton of food waste will turn into 10” in the digestion basket at the bottom, which will need to be removed every few years.

6) Digests ~2 pounds of food waste per day in



Green Cone Solar Compost Digester consists of Green Outer Cone, which goes over Black Inner Cone, over the Digestion Basket, which goes into the ground. Retailing ~\$170-\$210 on-line.



Compost.....Because a  
Rind is a  
Terrible  
Thing to  
Waste

