

# FOOD WASTE TOOLKIT

FOR LEAGUE ACTION

March 2023



LEAGUE OF  
WOMEN VOTERS®



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March 2023

LWVUS Climate Interest Group  
Food, Soil and Agriculture Team  
[www.lwv.org](http://www.lwv.org)

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## HOW TO USE THIS TOOLKIT

## GOAL

**T**his LWV US Food Waste Toolkit contains information and resources about the economic, environmental and climate impacts of food waste. League members can use this toolkit to develop presentations and programs to both educate fellow League members as well as encourage and advocate for personal and community action regarding this very important issue. All information provided in this toolkit is from reliable sources including EPA, USDA, IPCC and others, and is properly cited.

**T**his toolkit can be used by local Leagues to educate members about the impacts that food waste has on climate change, to inspire members to reduce wasted food, help alleviate food insecurity, and to save valuable resources used to produce and procure food – including money, water and energy.

## PROBLEM

**F**ood waste is a significant problem both in the United States and worldwide. Enormous resources – including energy – are consumed to produce and distribute food that is lost or wasted. Importantly, rotting discarded food is a significant source of methane (CH<sub>4</sub>), a powerful greenhouse gas (GHG). Though methane has a shorter lifetime in the atmosphere than carbon dioxide (CO<sub>2</sub>), it has a **higher**

**global warming potential** than CO<sub>2</sub>. Over a period of 100 years, the pound for pound comparative impact of methane is 25 times greater than that of CO<sub>2</sub>. *Reducing food waste can have a major impact on climate change. Because municipal solid waste is managed at the community level, local Leagues can make an enormous difference on how their community's waste is managed.*

According to EPA, food waste is the single largest component of landfills (EPA). Landfills account for one-fifth of the US's methane emissions. More than 30% of available food in the United States is lost or wasted (USDA). In addition to the methane emissions that come from wasted food sent to landfills, the assets used to grow and distribute the food are wasted: fertilizer, seed, water, fuel for farm equipment and transportation. Figure 1 shows the resources used just to produce the food that is lost and wasted in one year in the United States. The numbers in this figure exclude resources and emissions associated with the disposal of wasted and lost food.

### Environmental Impacts of U.S. Food Waste:

What resources go into a year of food loss and waste in the U.S.?

\*excluding impacts of waste management, such as landfill methane emissions



**Greenhouse gas emissions** of more than 42 coal-fired power plants

**Enough water and energy** to supply more than 50 million homes



The **amount of fertilizer** used in the U.S. to grow all plant-based foods for U.S. human consumption

An **area of agricultural land** equal to California and New York



Learn more: [www.epa.gov/land-research/farm-kitchen-environmental-impacts-us-food-waste](https://www.epa.gov/land-research/farm-kitchen-environmental-impacts-us-food-waste)

Figure 1. Environmental Impacts of Food Waste, source: <https://www.epa.gov/land-research/farm-kitchen-environmental-impacts-us-food-waste> accessed 9/19/2022

## HOW BIG IS THE PROBLEM?

In 2018, EPA estimated that 63.1 million tons of food waste were generated in the commercial, institutional, and residential sectors. Food waste accounted for 21.6 percent of the total amount of waste that is sent to municipal solid waste facilities (MSWs). ([EPA, 2018](#))

Figure 2 below, from [US EPA's Waste Food Report \(2018\)](#), shows the percentage distribution of wasted food generation by sector excluding the industrial section.

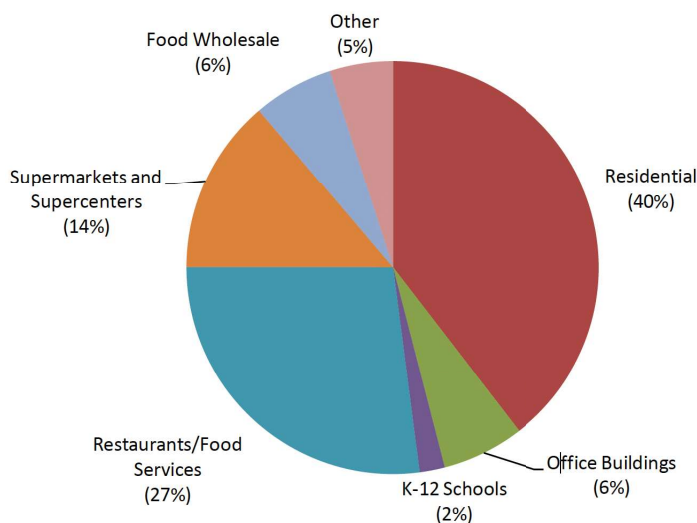
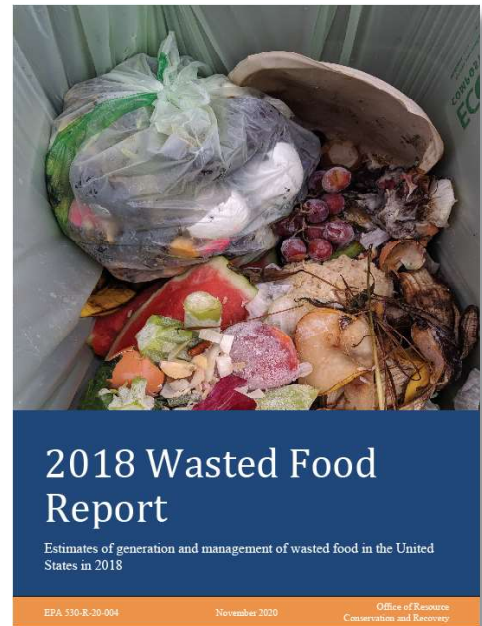


Figure 2. Food waste generation by sector (excluding industrial), US EPA (2018)

*Food waste occurs throughout the production-consumption process. It's a burden on our planet that we can all help remedy. By reducing food waste, we can reduce methane emissions and make a positive impact on our climate. Because waste is managed at the city or local level, local Leagues can have a major impact on how their community handles organic waste reduction efforts and subsequent disposal.*



[Learn more by downloading and reading EPA's 2018 Wasted Food Report](#)

Reducing food waste is both a national and international priority. US EPA, USDA and FDA have partnered to tackle this problem. In 2015, the US set a goal to reduce food waste by 50% by 2030. ([EPA](#)) Together, these agencies are creating tools and resources for communities to use to reduce food waste. Refer to the report's section on resources for more information about these agencies' programs and resources. Two important resources are listed below.

- [USDA's Food Waste website](#) provides resources to help schools, farmers, consumers and other sectors both better understand the problem and alleviate it.
- [US EPA's Preventing Food Waste at Home](#) website provides resources including a [Food Waste Implementation Guide and Toolkit](#) that aims to reduce wasteful household food management practices.



## TACKLING FOOD WASTE

**A**void waste with better shopping and storage. The average American household wastes \$1,500 of food every year. There are tips, videos and graphics to help avoid wasted food at the USDA site: (<https://www.usda.gov/foodlossandwaste/consumers>)



United States Department of Agriculture

## Easy Steps to Prevent Food Waste

Everyone is shopping smarter these days. It is important for the environment to keep food waste out of landfills where it produces methane, a powerful greenhouse gas.

**Use these tips to save on groceries and help the environment.**

### 1. Plan ahead



Before you go to the grocery store or order online, make a list so you don't buy more than you need.

### 2. Serve smart



Portion control is good for your waistline, and good for reducing plate waste.

### 3. Love your leftovers



Pack leftovers in small portions in shallow containers, mark the contents and date, refrigerate and use within 3 to 4 days or freeze immediately.

### 4. Compost, don't trash



Food scraps can be recycled into compost, an organic material that can be added to soil to help plants grow. Set up a home compost bin or drop your food waste at a local compost center.

Learn more about food loss and waste prevention at [www.usda.gov/foodlossandwaste](https://www.usda.gov/foodlossandwaste).

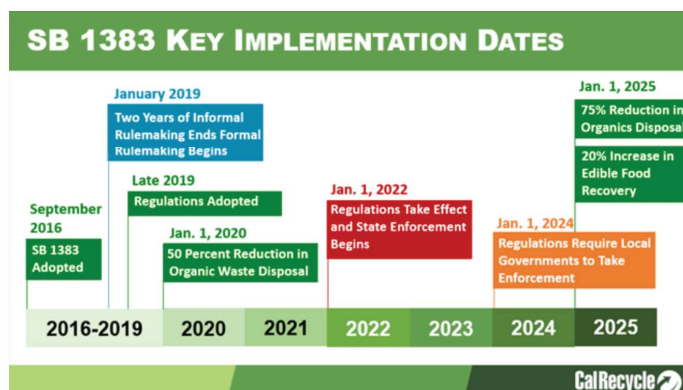
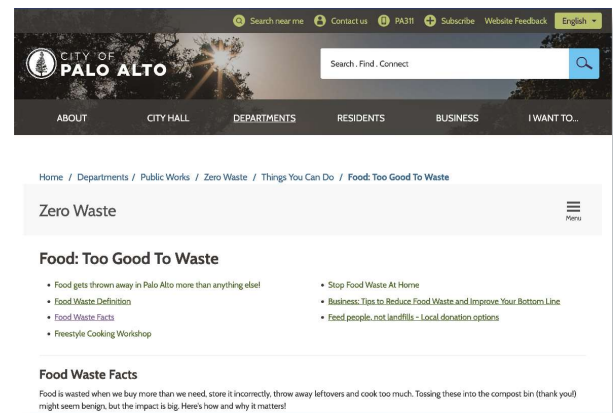
## DO YOUR RESEARCH

Communities and organizations across the globe are taking action to reduce food waste and recover edible food. Ask:

- What is your state and/or federal region doing to help the US meet its goal to reduce wasted food by 50% by 2030? Visit [US EPA's Wasted Food Programs and Resources Across the United States webpage](#) and learn what's happening in your state and region.

A few states are taking aggressive action to combat food waste. The state of California has mandated by law that communities slash the amount of organic waste they send to landfills. By 2025, communities can send only 25% of organic waste to the landfill, compared to 2014 levels ([CalCities](#)). The state will also require that 20% of edible food that would otherwise be sent to landfills be recovered and used to feed people in need.

- Does your community have a food waste program designed to both educate community members and provide them with tools to reduce their food waste? To find out, contact your local city government and/or the waste disposal company that picks up your trash. Check out the waste reduction programs of other cities. One example is the [City of Palo Alto](#).
- Is reducing food waste included in your community's **Climate Action Plan**? To find out, contact your local city government.
- Are there food recovery organizations collecting food for the underserved and homeless in your community? Much wasted food could be recovered for people in need and thereby reduce GHG emissions from landfills.





## FOOD RECOVERY

**F**ollowing the Food Recovery Hierarchy Pyramid is a good way to save food from being wasted: reduce surplus food, then feed people, then animals, then compost.

### FOOD RECOVERY ORGANIZATIONS

There are many **food recovery organizations** that pickup food and take it to food banks. This requires organizing drivers, donors and recipients when excess food is available. Two well-known examples include:

- Food Recovery Network – <https://www.foodrecoverynetwork.org>
- Feeding America – <https://www.feedingamerica.org>

### FOOD RECOVERY APPS

Use food recovery apps. There are two types:

Apps that let the user buy food before it is thrown out. Restaurants and grocery stores can use one of the many apps now available to sell or give away food at the end of the day. Several examples include:

- Too Good To Go – <https://toogoodtogo.com/en-us>
- FoodForAll – <https://foodforall.com>
- Hungry Harvest – <https://hungryharvest.net/>
- Flash Food – <https://www.flashfood.com/>

The second type of app asks for volunteers to sign up to drive excess food to a food bank when it becomes available and before it is wasted.

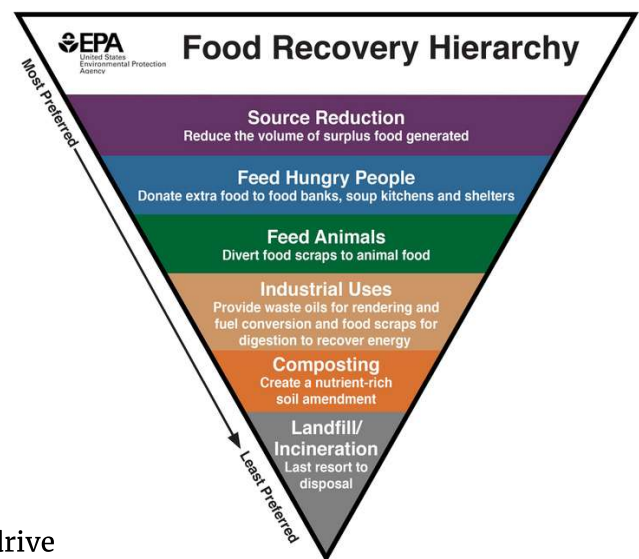
- Food Rescue US – <https://foodrescue.us>
- Copia – <https://www.gocopia.com>

More apps that cater to specific regions are being developed every day. Check your phone's app store or your favorite blog such as [Happy Sprout](#) to identify more food recovery apps.

### FOOD WASTE REDUCING ORGANIZATIONS

There are also Food Waste Reducing Organizations that work to reduce food waste on a large scale and throughout the food production process.

- One organization, [Upcycled Food Products](#) connects food manufacturers with ingredients from food byproducts that would otherwise be wasted
- [ReFED](#) is a national nonprofit dedicated to ending food loss and waste across the U.S. food system by advancing data-driven solutions.
- [ReGrained](#) uses spent grain from the beer brewing process to create food products for sale.





## PUBLICIZE THE PROBLEM

**W**rite a League newsletter article about the problem of food waste and ask members to do their part.

Develop a webinar, presentation, or seminar for your local League to educate members. A webinar or presentation is the best way to educate a group of people and to engage them.

Food waste reduction webinar topics range from:

- Personal: how to shop, organize your fridge, and cook to reduce your own food waste; how to compost.
- Local (food recovery organizations such as, one that take unsold produce food from farmers markets to food banks such as [Produce Good](#), or city waste departments that transports unsold food from grocery stores to food distribution centers for the hungry such as in [Oceanside, CA](#))
- See what other Leagues have done
  - [LWV San Diego](#)
  - [LWV North County San Diego](#)



## LOCAL ADVOCACY

**C**heck with your local schools to see if they need help with developing a food recovery or waste collection [program](#).



## LWV STATE ADVOCACY

**C**reate a Climate Smart Agriculture and Food Action Policy for your state, as LWVC has done. The action policy is located [here](#). This action policy provides suggestions of actions based on already existing positions established by LWVC and LWV US.



## RESOURCES

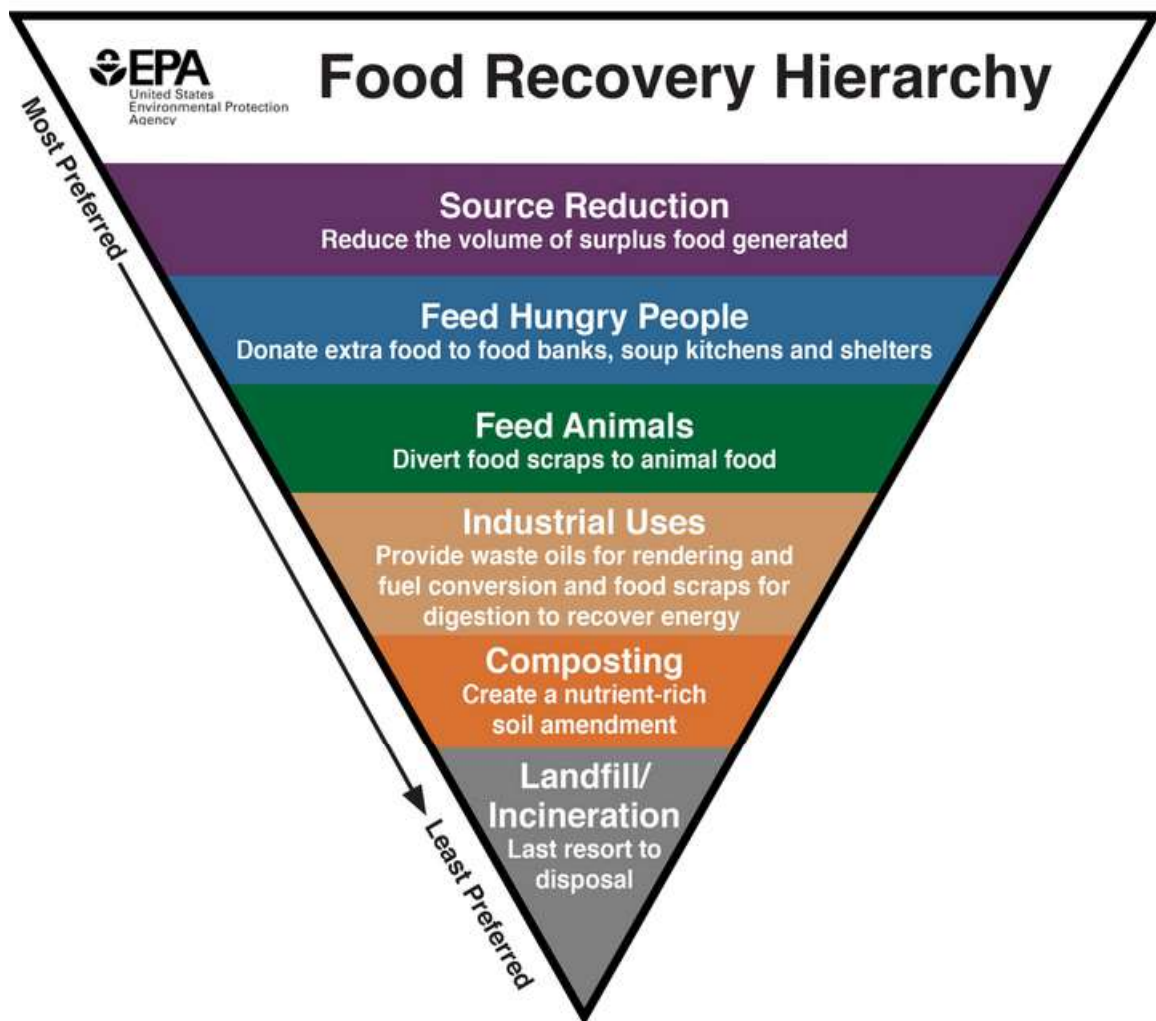
**E**xisting toolkits for food waste/food recovery

- EPA [Food: Too Good to Waste Implementation Guide and Toolkit](#)
- [USDA](#)
- [FDA food loss and waste](#)
- Harvard Food, Law and Policy Food Waste Toolkit [Oct 2017](#)
- Harvard Food, Law and Policy – Designing and Implementing Organic Waste Bans and Mandatory Organic Recycling Laws, [July 2019](#)
- Palo Alto [Zero-Waste](#)

Suggested books to read

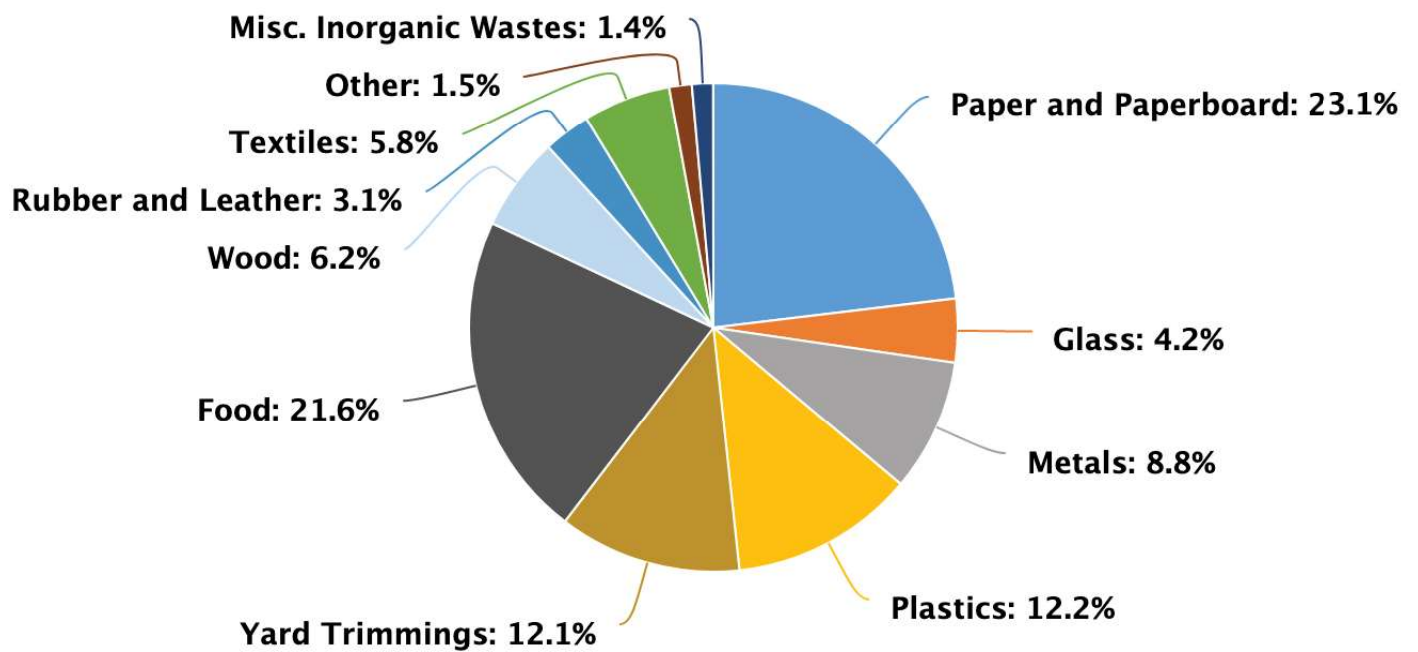
- *Waste: Uncovering the Global Food Scandal*, by Tristram Stuart
- *An Almost Zero Waste Life*, by Megean Weldon
- *Waste-Free Kitchen Handbook: A Guide to Eating Well and Saving Money by Wasting Less Food*, by Dana Gundars
- *The Zero-Waste Chef*, by Anne-Marie Bonneau





## Total MSW Generated by Material, 2018

292.4 million tons





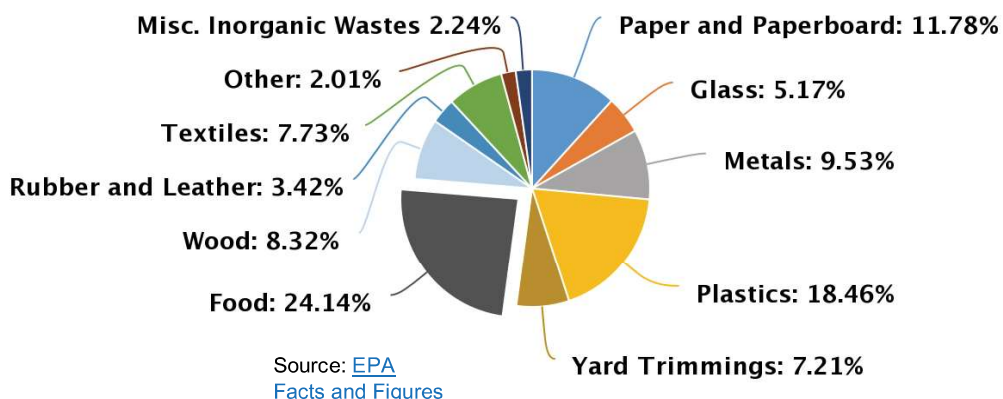
## FOOD WASTE FACT SHEET

# Food Waste, Our Climate, and How We Can Help

Over 30% of the food in grocery stores is never eaten, due in large part to waste in our homes ([USDA](#)). Food waste occurs throughout the production-consumption process. It's a burden on our planet that we can all help remedy, starting in our homes. According to the [EPA](#), food waste is the single largest component of landfills.

When organic waste decomposes, it releases methane, which is a powerful greenhouse gas. One-fifth of the methane emissions in the U.S. comes from landfills. By reducing food waste, we can all make a positive impact on methane production and our climate.

### Total Municipal Solid Waste Landfill by Material, 2018 146.1 million tons

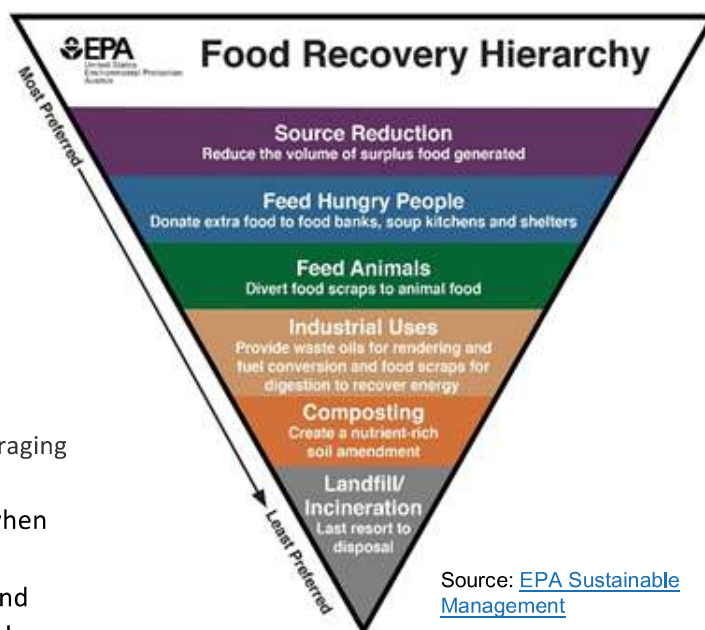


### What Is Being Done?

- The EPA is partnering with communities, organizations, and local government agencies to reduce food loss and food waste by 50% by the year 2030.
- State governments have mandated reducing organic material in landfills.
- Local waste management companies have built anaerobic digesters to convert organic material to fuel and soil amendments.

### What Can We Do?

- We can become waste-reduction advocates, encouraging governments to both prevent and divert food loss.
- We can choose whole, unprocessed foods, and when possible, buy food that is locally produced.
- We can compost table and home garden waste and donate unused fruit and vegetables from our gardens.
- We can follow the EPA's many tips for [Reducing Wasted Food at Home](#).



All across the country communities are composting and diverting waste to useful purposes. See what other municipalities are doing and how you can help your local community reduce food waste in landfills.

[EPA: Expanded Municipal Collection](#), [Food Loss and Waste 2030 Champions](#), and [Composting Council Toolkit](#)



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