



Policy Issues Involving Food Loss and Waste

The 118th Congress has continued to introduce legislation addressing food loss and waste, building on enacted provisions in the Agriculture Improvement Act of 2018 (P.L. 115-334, 2018 farm bill). The 2018 farm bill created authorities supporting composting initiatives and expanded coordination among federal, state, and local activities at the U.S. Department of Agriculture (USDA) to reduce the incidence of food loss and waste. Congress may consider changes to federal food loss and waste initiatives as it debates farm bill reauthorization.

Terms and Definitions

Definitions of food loss and food waste vary and continue to evolve. Neither term is defined in U.S. statute or regulation. In general, *food loss* refers to unused product at the farm level, such as unharvested crops, but may include loss in other production stages up to (but not including) the retail level. Unharvested crops may be due to, for example, market price volatility, labor cost and availability, cold chain infrastructure, and quality-based contracts and standards, according to USDA. Losses may occur if food is unintentionally damaged or destroyed by pests or mold during the production, manufacturing, transportation, or distribution of food. In contrast, *food waste* occurs at the retail, food service, and residential levels and refers to food that is ultimately not consumed but is instead discarded or recycled. This may include food that is suitable for human consumption but discarded by retailers or consumers due to quality concerns or undesirable product attributes (such as food not meeting retailers' size, color, and appearance standards, or consumer preferences). This may also include food that is served but not eaten (plate waste), spoiled food, or food considered inedible (such as peels and rinds).

Estimated Food Loss and Waste

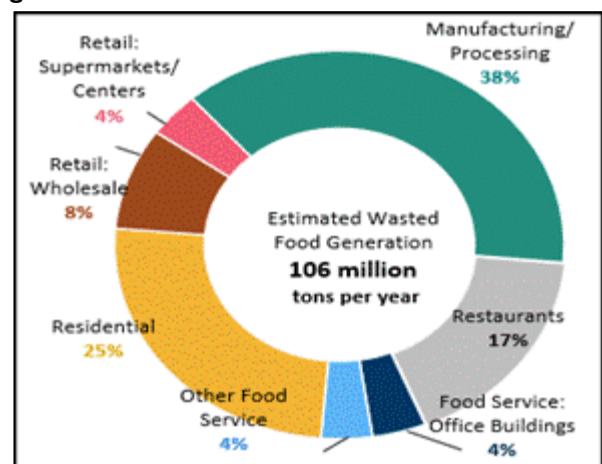
Food loss and waste is associated with a series of policy concerns spanning economic, social, and environmental impacts. Economic impacts occur throughout the supply chain and include financial and disposal costs to food producers, processors, and distributors as well as financial impacts to consumers from food that is uneaten or thrown away. Social impacts include concerns about food insecurity and related nutritional needs. Natural resource and environmental impacts include the use of land, water, energy, and other inputs (including labor) needed to produce, process, and distribute food. Food loss and waste further contribute to greenhouse gas emissions throughout the supply chain and when food is sent to landfills.

In the United States, 30%-40% of the food that is produced is unsold and uneaten, according to USDA. This costs the U.S. economy an estimated \$218 billion, or 1.3% of GDP, annually. USDA notes that, among other societal impacts, "land, water, labor, energy and other inputs are used in producing, processing, transporting, preparing, storing, and disposing of discarded food." The Environmental

Protection Agency (EPA) estimates that food accounts for 24% of solid waste sent to U.S. landfills. EPA claims this uneaten food contains enough calories to feed "far more than the 35 million estimated food insecure Americans."

By volume, EPA estimates 62% (66.2 million tons) of wasted food was generated in the retail, food service, and residential sectors. The food manufacturing and processing sectors generated the remaining 38% (40.1 million tons). (See **Figure 1**.) These data do not include farm-level losses and may be underestimated. Of the estimated tonnage generated in the retail, food service, and residential sectors, an estimated 40% was from households, 40% was from food service providers, and 20% was from food retail. Food loss and waste occurs across all major food groups.

Figure 1. Estimated Annual Wasted Food Generation



Source: EPA, 2019 Wasted Food Report, April 2023 (Table 3-4, 2019 data). Other food service includes schools/colleges, hospitals, nursing homes, hotels, sports venues, military installations, and prisons.

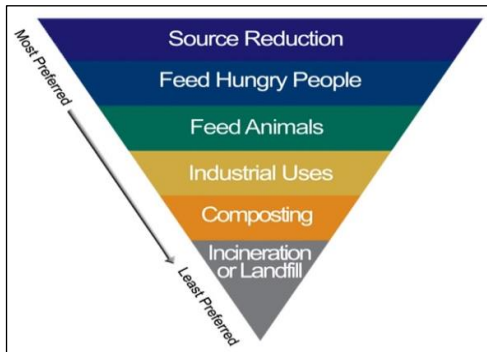
Globally, the United Nations claims about one-third of all food produced for human consumption is lost or wasted. Of this, 14% is lost from harvest and the manufacturing and processing sectors (excluding retail) and another 17% is wasted at the retail and consumer levels. Estimates of loss and waste worldwide vary by country, income status, and food type. Growing attention to food loss and waste—and the potential to help address global food insecurity if addressed—is now part of the United Nations 2030 Agenda for Sustainable Development (Target 12.3).

Administration and Industry Efforts

In 2015, USDA and EPA launched the *2030 Food Loss and Waste Reduction Goal*, building on prior efforts initiated by both agencies. The goal seeks to reduce food loss and waste by 50% by 2030. In 2018, USDA, EPA, and the Food and Drug Administration (FDA) entered into an interagency agreement to coordinate federal food loss and waste efforts. Ongoing federal efforts include investment in USDA's

Composting and Food Waste Reduction (CFWR) cooperative agreements as well as support for EPA's Solid Waste Infrastructure for Recycling and the Consumer Recycling Education and Outreach grant programs. EPA's Science to Achieve Results grants have supported research of household food waste. Some of these efforts have been supported by agency funding provided through the American Rescue Plan Act of 2021 (P.L. 117-2) and the Infrastructure Investment and Jobs Act (P.L. 117-58).

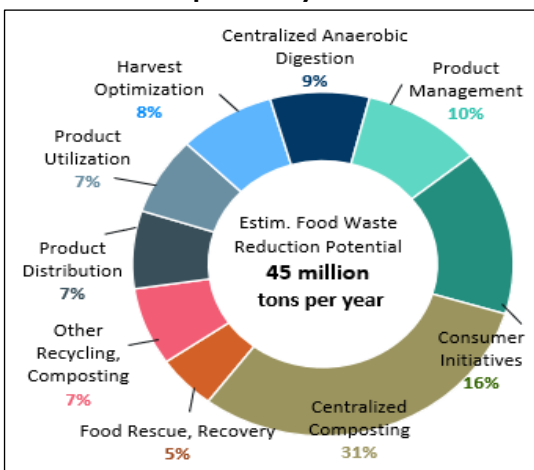
Figure 2. EPA's Food Recovery Hierarchy



Source: EPA.

EPA's *Food Recovery Hierarchy* highlights ways to address food loss and waste (**Figure 2**). Source reduction and distributing to those in need represent the "most preferred" actions and incineration or landfill represents the "least preferred" action. Similarly, nongovernmental groups recommend ways to address loss and waste across the food supply chain. For example, ReFED proposes the following action items: (1) harvest optimization (such as avoiding overproduction), (2) product distribution (using technology to efficiently move products), (3) product management (aligning purchases with sales), (4) product utilization (upcycling surplus and byproducts into food products), (5) consumer education, (6) rescue and recovery, and (7) composting and recycling. ReFED claims these actions could reduce annual food loss and waste by 45 million tons given its diversion or reduction potential (**Figure 3**).

Figure 3. ReFED Proposed Key Action Areas



Source: CRS from ReFED's *Roadmap to 2030: Reducing U.S. Food Waste by 50%*. Based on diversion or reduction potential. *Other Recycling, Composting* includes co-digestion at wastewater treatment plants, home and community composting, and reuse as animal feed.

Considerations for Congress

In recent years, Congress has enacted legislation that takes steps to address food loss and waste. The 117th Congress passed P.L. 117-362, amending the Bill Emerson Good Samaritan Food Donation Act (42 U.S.C. §1791). P.L. 117-362 allows for direct food donations to individuals from grocery stores, restaurants, schools, and more. It also clarifies existing guidance and best practices to help businesses donate food safely and without risk of litigation. It built upon previously enacted changes in 2015 (P.L. 114-113), when Congress made permanent the (formerly temporary) enhanced charitable deduction for contributions of food inventory, extending and expanding the charitable tax deductions for food donations. Generally, food donors are protected from liability, unless they are negligent.

The 2018 farm bill (P.L. 115-334) also addressed food loss and waste. It created new grant authorities, providing USDA with the ability to establish cooperative agreements to support pilot projects for planning and implementing municipal compost and food waste reduction plans under USDA's CFWR program (§12302; 7 U.S.C. §6923). The farm bill also established a micro-grants program to support locally grown food that allows the use of subgrant funds to buy or build composting units (§4206; 7 U.S.C. §7518). It also established a Food Loss and Waste Reduction Liaison at USDA to coordinate federal, state, local, and nongovernmental programs (§12504; 7 U.S.C. §6924). USDA has continued to develop information resources and support activities such as food recovery and gleaning efforts to collect crops left in fields unharvested, crop insurance guidance for gleaning crops, and information on liability protections for donated foods. (USDA defines *gleaning* as "collecting excess fresh foods from farms, gardens, farmers markets, grocers, restaurants, state/county fairs, or any other sources in order to provide it to those in need.")

In the 118th Congress, bills addressing food loss and waste have continued to be introduced. The Zero Food Waste Act (H.R. 652/S. 177) would create grant authorities to study food waste generation and management planning, as well as expand data collection and reporting. The COMPOST Act (H.R. 651/S. 179) would make composting a conservation practice and activity under USDA's conservation programs and would authorize grants and loans to expand food waste composting. In addition, Members of Congress have continued to introduce legislation that would standardize federal date labeling requirements for USDA- and FDA-regulated foods. (See CRS In Focus IF10398, *Uniform Date Labeling of Food May Address Food Waste*.) Congressional appropriators also are seeking to expand waste education and prevention information (H.Rept. 118-124). Previously introduced legislation included other waste and recovery proposals such as support for energy generation and co-composting projects as well as changes to federal procurement policies. A coalition of advocacy groups has developed a series of recommendations that includes some of these proposals. As noted above, Congress may consider these or other proposals as it debates the next farm bill.

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