

Climate Action Through Food Waste Reduction on the West Coast



Food waste is a global problem that touches everyone. Preventing and managing wasted food offers significant potential to reduce greenhouse gases. While some food waste can be composted, leading to reductions in methane emissions from landfills, preventing the wasting of edible food in the first place must be a priority.

The United Nations has called for a 50 percent reduction in per capita global food waste by 2030, a goal the U.S. federal government has also adopted. In the U.S. and Canada, food manufacturers, grocers, restaurants, nonprofits and foundations are increasingly working to prevent the wasting of food.

This policy brief summarizes the Pacific Coast Collaborative's shared regional approach to reduce the amount of edible food that is wasted and the amount of inedible food that is landfilled through prevention, rescue and recovery.

THE WEST COAST COMMITMENT: 50% BY 2030

1. PCC partners—Washington, Oregon, California, British Columbia, Seattle, Portland, San Francisco, Oakland and Vancouver, British Columbia—have committed to a regional goal of halving food waste by 2030. This includes efforts to prevent, rescue and recover wasted food.
2. These PCC partners will engage industry, food retailers and brand manufacturers, in setting industry-wide voluntary agreements to prevent food and supply chain waste that will move the industry toward halving wasted food by 2030.
3. As a critical part of meeting this regional goal, these PCC partners also commit to the development of jurisdictional specific strategies, including prevention goals, that will reduce the amount of edible food that is wasted.

ABOUT THE PACIFIC COAST COLLABORATIVE

The Pacific Coast of North America represents the world's fifth largest economy, a thriving region of 55 million people with a combined GDP of \$3 trillion. Through the Pacific Coast Collaborative (PCC), British Columbia, Washington, Oregon, California, and the cities of Vancouver, Seattle, Portland, San Francisco, Oakland, and Los Angeles are working together to build the low carbon economy of the future.

In 2016, PCC partners committed to reduce carbon emissions by preventing and recovering wasted food.

Wasted food is responsible for at least 2.6% of all U.S. and Canadian greenhouse gas emissions, equal to more than 41 million passenger vehicles, or 1 in 7 road vehicles



25% of water consumed in the U.S. is used to produce food that is never eaten



42 million Americans and 4 million Canadians, including more than 14 million children, are food insecure



WHY REDUCE FOOD WASTE?

Between 25% and 40% of all food grown or imported into the US for human consumption is never eaten, costing businesses and consumers about \$218 billion annually. Approximately 30 to 40 percent of the food produced in Canada is discarded at an annual cost of about \$31 billion.¹ This means enormous amounts of food - and the resources used to produce it - are wasted. All this waste comes at a very high cost for consumers, businesses, and the environment. While billions of dollars' worth of edible food goes to waste every year, millions of people in the US and Canada lack access to sufficient, nutritious food every day.

HOW DO WE REDUCE WASTED FOOD?

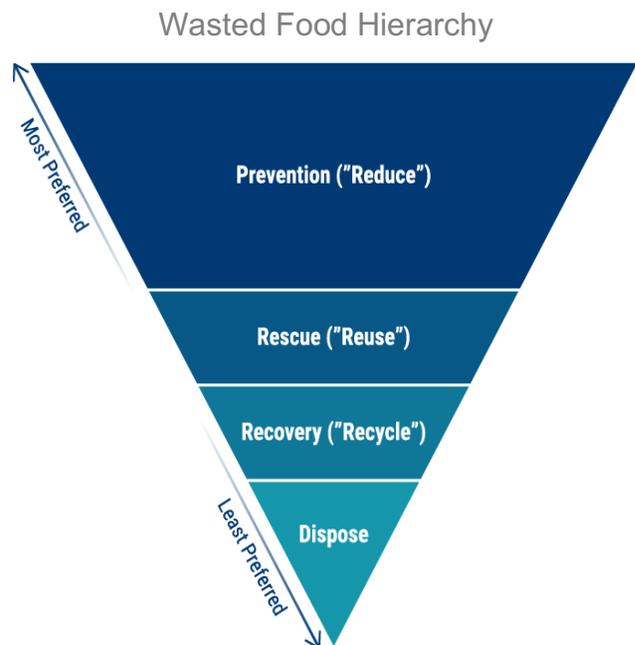
There are three primary pathways for reducing wasted food: prevention, rescue and recovery.

Prevention refers to avoiding the wasting of food in the first place and represents the greatest potential for cost savings and environmental benefits for businesses, governments, and consumers.

Of the three strategies needed to reduce wasted food, prevention has the greatest potential to reduce greenhouse gases. This is because most of the carbon footprint of food is in production, not disposal. By preventing edible food from being thrown away, we prevent the generation of greenhouse gases associated with growing, harvesting, transporting, preparing, and storing food that is never eaten.

Changes in manufacturing, packaging, retailing, food service and labeling all offer potential to prevent the wasting of food. Individual households, food and meal providers and consumers also have the ability to prevent the wasting of food through improved purchasing decisions, food storage, and meal planning.

Governments also play an important role in leading and informing prevention efforts. For example, governments can set food waste prevention goals and targets, develop baselines, tools and criteria for measuring prevention, lead or partner with the private sector to support public information and awareness campaigns, conduct an inventory of management and consumer norms, and conduct research to improve understanding of the impacts of wasted food recovery programs on wasted food prevention efforts. Governments at the state, provincial and local level can also leverage grants and partner with private organizations.



¹ [Value Chain Management Report](#)

Several West Coast jurisdictions at the state, provincial, and local level have already taken action to prevent the generation of wasted food:

- The Oregon Department of Environmental Quality adopted a prevention goal to reduce greenhouse gas emissions, water use, energy use and wasted resources by reducing the generation of wasted edible food by 15 percent by 2025 and 40 percent by 2050.
- The City of Vancouver and Province of British Columbia have recently taken steps to address food waste by partnering with Canada's National Zero Waste Council on a national Love Food Hate Waste (LFHW) campaign. The campaign is based on a successful model in the United Kingdom, where avoidable household food waste was cut by 21% in its first five years.
- City of Portland's Climate Action Now! provides residents with meal planning and food storage tools and information to help reduce food waste at home. Portland is also gathering food waste prevention case studies from restaurants to inform outreach efforts and develop waste prevention tools.
- In the Portland Metro region, Rockwood Rising, a neighborhood revitalization effort, received a grant to distribute information on preventing wasted food to startups in its food business incubator and to purchase equipment to help these businesses quick freeze or dehydrate food for later use or donation.
- San Diego County is using LeanPath,² a smart technology system designed to address food waste, in hospitality, colleges & universities, and corporate dining facilities to increase understanding of where and why food is being wasted.
- Alameda County received a grant to help the unified school district in Livermore and Oakland achieve a 25% source reduction goal through a student challenge, integrate food waste prevention curriculum at students' homes, and help nutrition services reduce food waste through tracking and measuring toward an overall reduction in the generation of wasted food.

Rescue involves redistributing surplus edible food to other users, such as a grocery store donating blemished but perfectly edible produce to food banks, or a caterer distributing uneaten meals to homeless shelters.

Many food rescue efforts face challenges including high costs, liability concerns, and ensuring the nutritional needs of recipients are met.

Governments can assist in rescue efforts by engaging with or formally convening food banks, hunger relief agencies and other appropriate stakeholders to reduce barriers and better enable food donation opportunities through funding infrastructure, building donor awareness and developing policies that help streamline and enhance the donation process. Governments can also direct research to better understand the social, economic and nutritional tradeoffs of different food rescue models and share results.

Examples of rescue efforts across the West Coast include the following:

- In 2017, CalRecycle provided \$9 million in funding to expand food rescue efforts by local governments and hunger relief organizations, in alignment with SB 1383, which requires at least 20 percent of edible food currently disposed to be recovered for human consumption by 2025.
- In Washington State, Thurston (county) Food Rescue was funded by the Department of Ecology through a comprehensive program grant that builds upon household food waste prevention campaigns previously implemented in the county. The program improved infrastructure to rescue and process more food within the county's food rescue network.

² <https://www.leanpath.com/>

- In Oregon, the Department of Environmental Quality partnered with the regional government supporting the Portland metro area to provide over \$100,000 to expand capacity for food donation infrastructure, including expanding the fresh produce donation program developed by the Oregon Food Bank.

Recovery refers to processing inedible food waste to extract value from it, typically through composting or anaerobic digestion. Composting and anaerobic digestion reduce methane emissions from landfills and produce soil amendments that can store biogenic carbon in soils and replenish nutrients. Anaerobic digestion also produces biogas which can displace fossil fuel use. Inedible food waste is also used to feed animals by turning it into feedstock. For example, West Coast corporate and college cafeterias operated by Bon Appetit and Compass Group currently provide inedible food scraps as animal feed for farmers who also serve as local suppliers.

Many governments are working on aspects of recovery. Studies show that using compost or digestate derived from food and other organic materials provides significant carbon sequestration benefits in soils, but further research is necessary to quantify the benefit, particularly in soils along the West Coast of North America.

After 10 years of research the Marin Carbon Project, along with associated science and soil institutions, have shown dramatic levels of carbon sequestered in grassland soils when treated with a thin layer of finished compost. The city of San Francisco's system for producing high quality, finished compost from the urban organics discards stream has collected over 2 million tons of organics and produced nearly 700,000 tons of finished compost over the last 20 years.

Governments can share information and take a collaborative approach to recovering wasted food by:

- Compiling existing study results that examine soil carbon sequestration impacts of compost, anaerobic digestate and other products that include food waste.
- Designing, funding and implementing additional research across a variety of soil conditions to improve understanding of the carbon sequestration impacts of compost, digestate and other products that incorporate food waste.
- If research suggests significant soil carbon sequestration benefits of compost and other recovery products that incorporate food waste, governments can work on creating new incentives, financial support and market development initiatives.

Through regional collaboration, we have an opportunity to address environmental, hunger, and climate change crises by reducing wasted food and increasing food recover.