



Urban Food Waste Research

Shannon Kenny, U.S. EPA Office of Research and Development

August 5, 2019

Why reduce food waste?

Over one-third of the food produced in the U.S. is never eaten:

- Wasting energy and water used to produce the food
- Impacting water quality through pesticide and fertilizer use
- Emitting carbon dioxide from food transportation
- Creating the largest single waste stream entering MSW landfills (22%)
- Emitting methane from landfills
- Contaminating plastics recycling streams

Why reduce food waste?

Sustainable management of food can help businesses and consumers save money, provide nourishment for those who do not have enough to eat, and conserve resources for future generations.

Federal Government & Food Waste

- **The U.S. has set a goal to cut food waste in half by 2030.**
- In 2018, this Administration launched the “Winning on Reducing Food Waste” initiative.
- This year, EPA, USDA and FDA together prioritized six areas for action:
 - Interagency coordination
 - Consumer education and outreach
 - Measurement
 - Information on date labels, food safety, and donations
 - Collaboration with private industry
 - Encouraging federal agencies to reduce food waste

EPA Activities (non-research)

- Education and outreach
- Sharing best practices
- Challenges, awards and recognition
- Tools
- Grants
- Improving measurement



Reaching U.S. Goal

- **The U.S. has set a goal to halve food waste by 2030.**
- ReFED's 2016 report estimates that full use of existing education campaigns, best practices, and technologies can reduce U.S. food waste by **20% by 2030.**
- Research and development of new science-based solutions for all food system stakeholders are essential to meeting the U.S. goal to cut food waste by **50% by 2030.**

EPA Research

First step:

Synthesize the “State of the Science” by analyzing the latest scientific findings and identifying the most important knowledge gaps related to food waste prevention, reuse and recycling strategies. Our goal is to help U.S. meet 2030 goal in most environmentally beneficial way.

EPA Research



Other projects in the pipeline:

- **Build a more thorough understanding of the life cycle impacts of food waste reduction strategies;**
- **Evaluate environmental impacts of food waste technologies** marketed to retailers, commercial kitchens, composters and anaerobic digesting facilities, including digesters and de-packagers to remove plastics; and
- **Develop environmental indicators for food waste.**

Additional Research Needs

- **PREVENTION**
 - Potential – feeding today's hungry and the growing global population
 - Measures
- **CONSUMERS**
 - Simple actions
 - Messages and messengers
 - Systems approach – moving beyond “blaming the consumer”
- **Impact of broader food system trends**
 - Online grocery shopping
 - Household demographics, preferences, diets
 - Technologies like Blockchain and active packaging
- **Nexus between water treatment and waste management “worlds”**