

Oregon's Wasted Food Strategy:

Highlights of current work, recent research and next steps

EPA SMM Webinar
September 16, 2019



Why Wasted Food?

25-40%

OF ALL FOOD

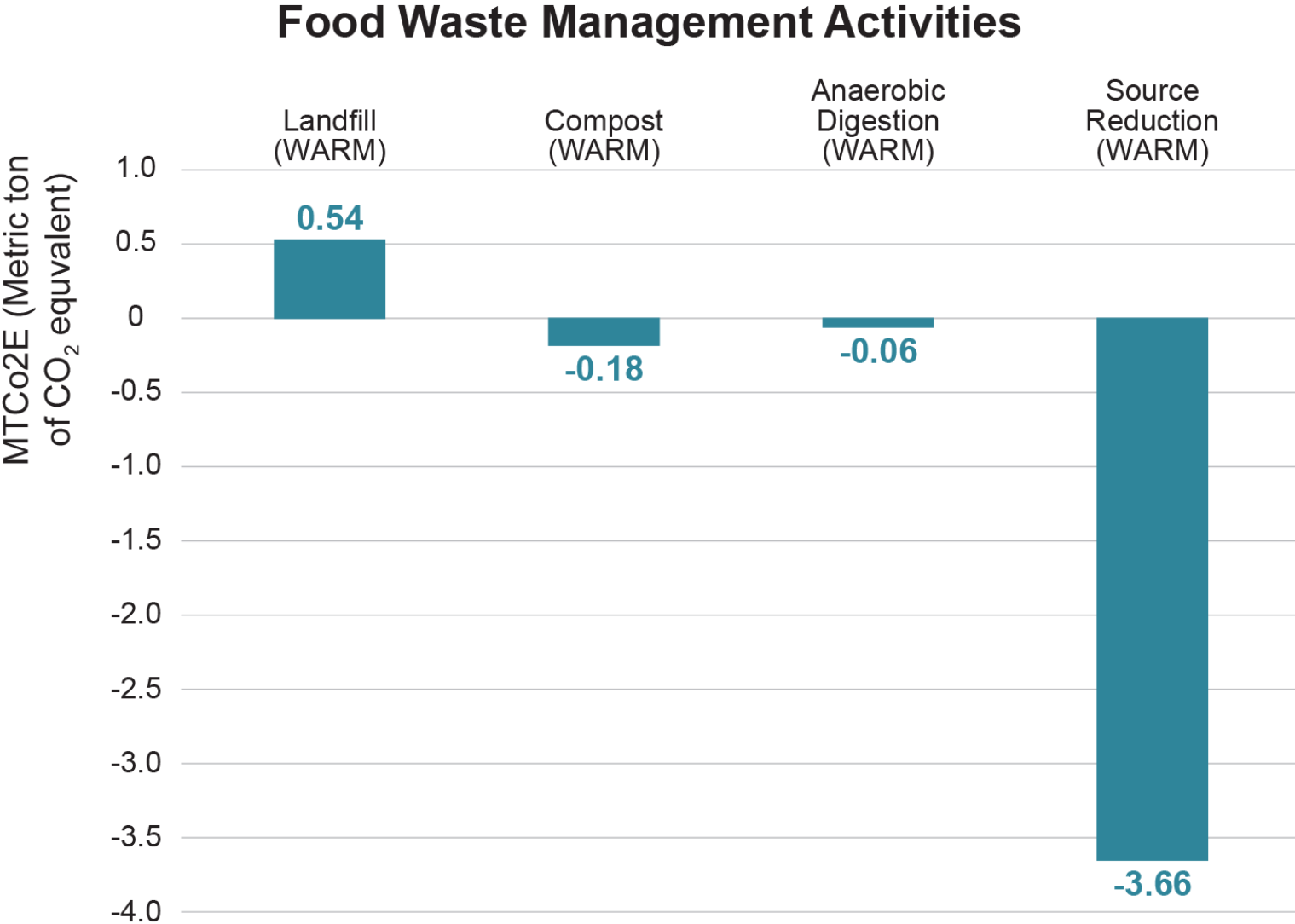
grown or
imported into the
U.S. for human
consumption is
never eaten



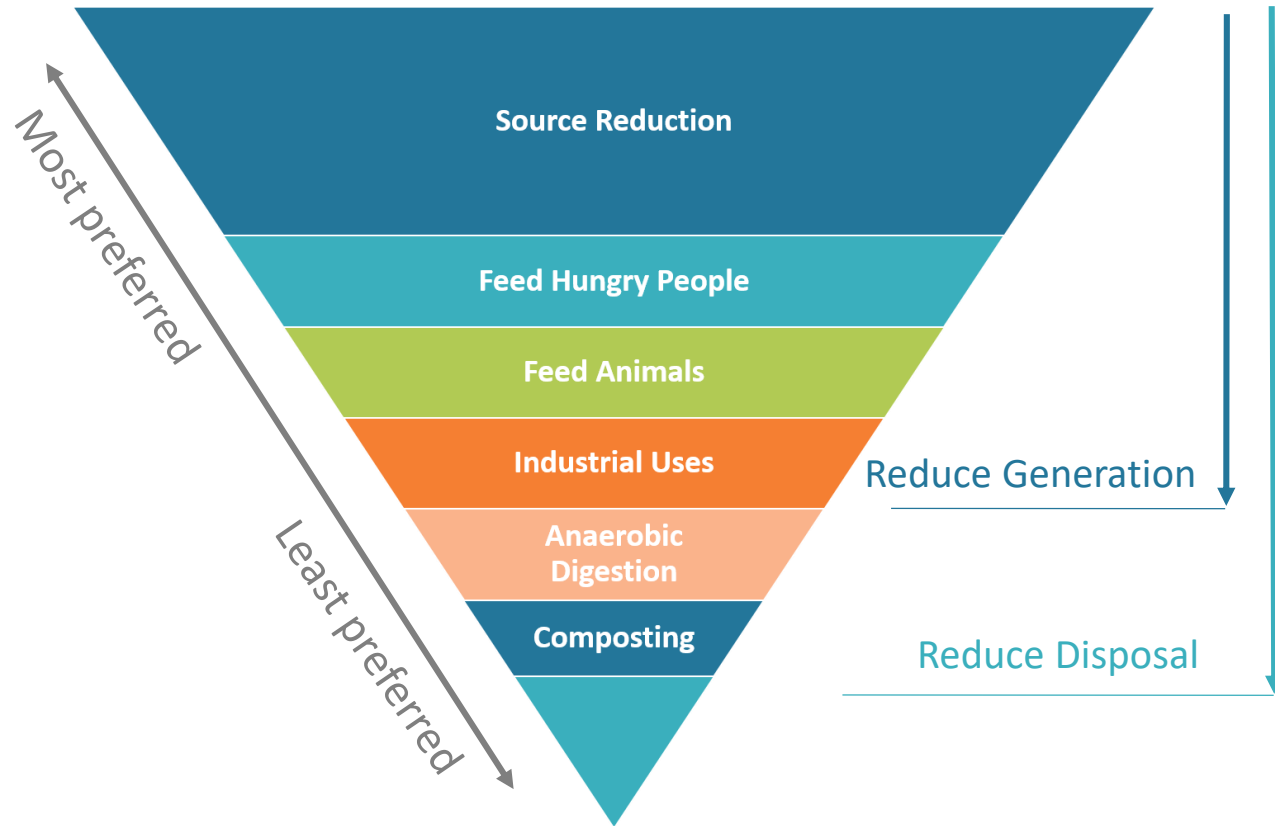
Food Matters



Relative GHG impacts



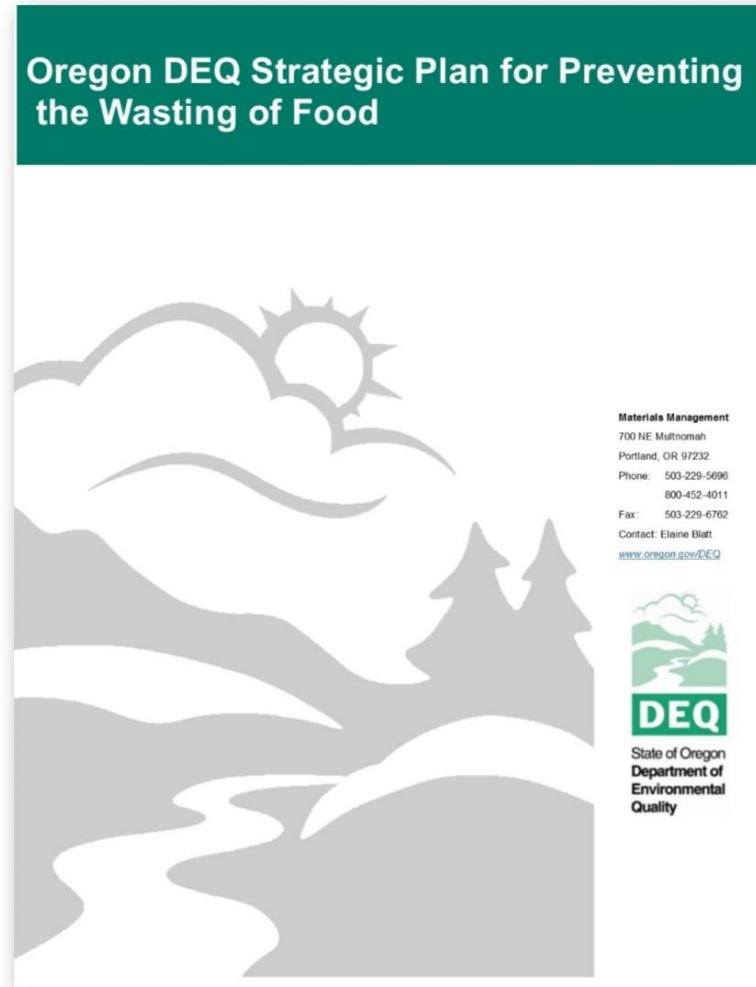
We want to “change the conversation”



We're stuck at the bottom of the hierarchy

- Recovery offers a “technical fix”
- Prevention requires behavior change and systemic fixes

Oregon's Strategic Plan



<http://www.oregon.gov/deq/mm/Pages/foodwastestrategy.aspx>



Oregon Wasted Food Measurement Study

Comprised of two parts:

- In-depth study of Oregon households

<https://www.oregon.gov/deq/mm/food/Pages/Wasted-Food-Study.aspx>

- Case studies involving 15 food service businesses

<https://www.oregon.gov/deq/mm/food/Pages/Commercial-Case-Studies.aspx>



Oregon Wasted Food Measurement Study

Household Study Design

Phase I: In-depth interviews

Phase II: Statewide phone survey

Phase III: Mixed methods



Measurement study: findings

Of the food waste we throw away ...



Measurement study: findings

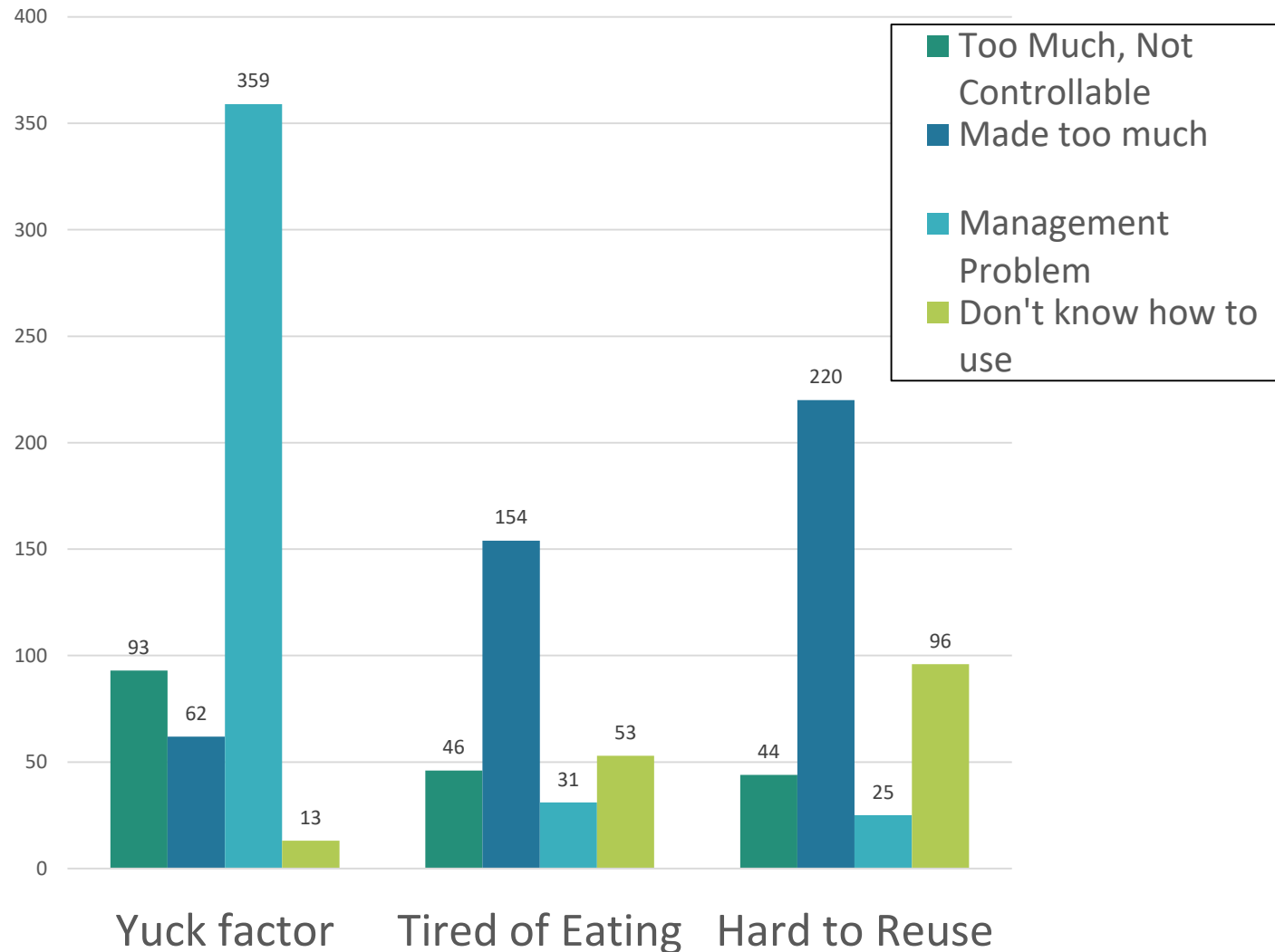
Waste sort results:

	Urban (n=134)	Rural (n=96)	Total (n=230)
Food Category	% of food	% of food	% of food
Inedible	32.1%	31.2%	31.8%
Vegetables & Fruits	25%	21%	23.5%
Prepared Foods & Leftovers	11.4%	13.1%	12%
Baked Goods	6.8%	10.9%	8.3%
Meat & Fish	5.6%	7%	6.9%
Snacks, Condiments, Sauces	5.3%	1.8%	5.9%
Dry Foods	6%	.5%	4.4%



Measurement study: findings

Relationship of Immediate and Root Loss Reasons To Each Other



Measurement: findings

Pre-Diary - Statement: I feel less guilty about throwing out food that is composted

	Urban	Rural	Total
Disagree	5.3%	3.7%	4.6%
Somewhat Disagree	2.3%	1.2%	1.9%
Neither Agree or Disagree	13.6%	32.1%	20.4%
Somewhat Agree	30.3%	30.9%	30.1%
Agree	48.5%	32.1%	41.7%



Commercial Case Studies

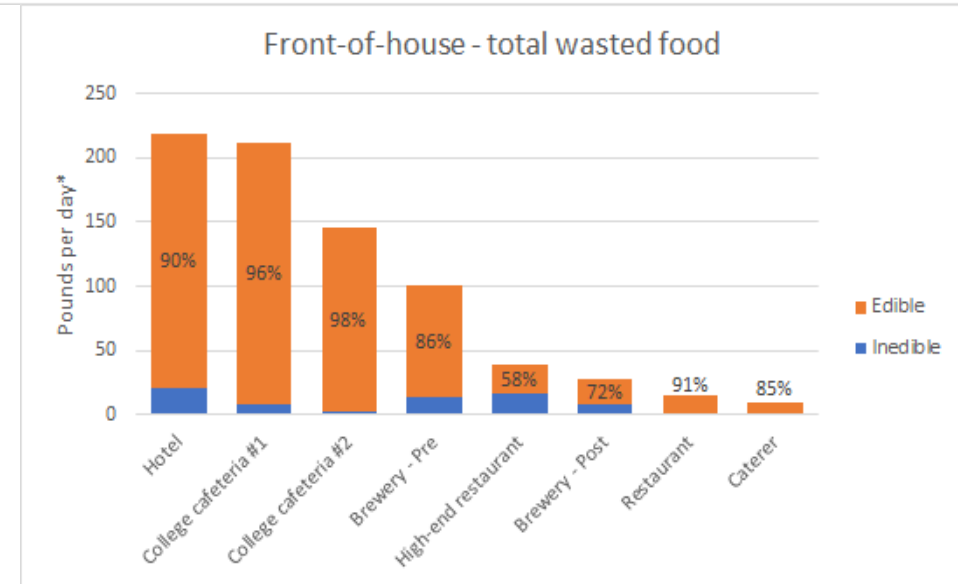
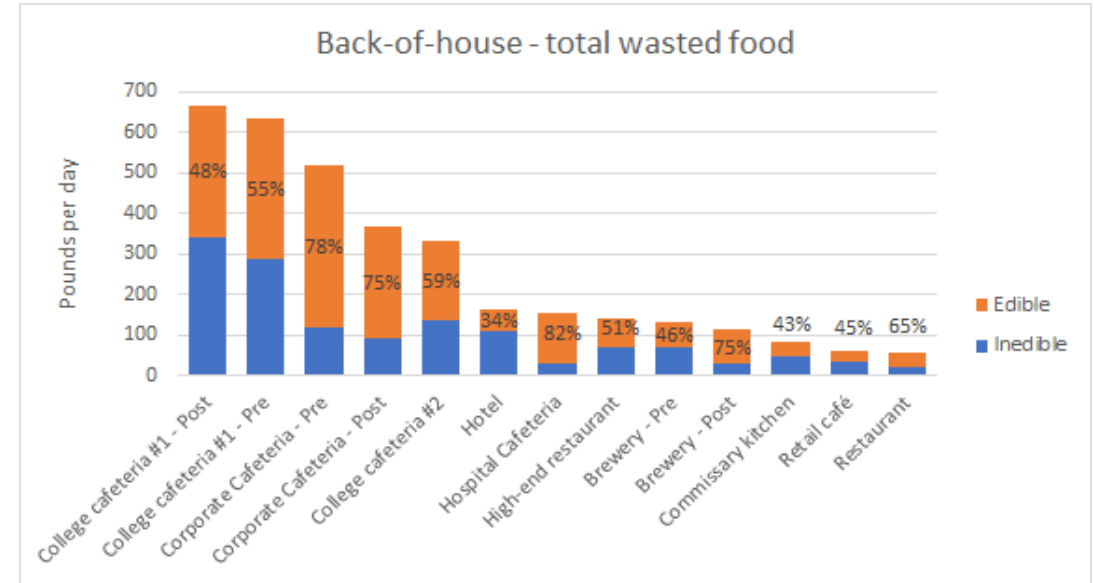
- Also conducted by PSU CES
- Methodology
 - ✓ Waste assessment
 - ✓ Staff interviews
 - ✓ Environmental impact analysis (where possible)
 - ✓ Cost savings estimates (where possible)



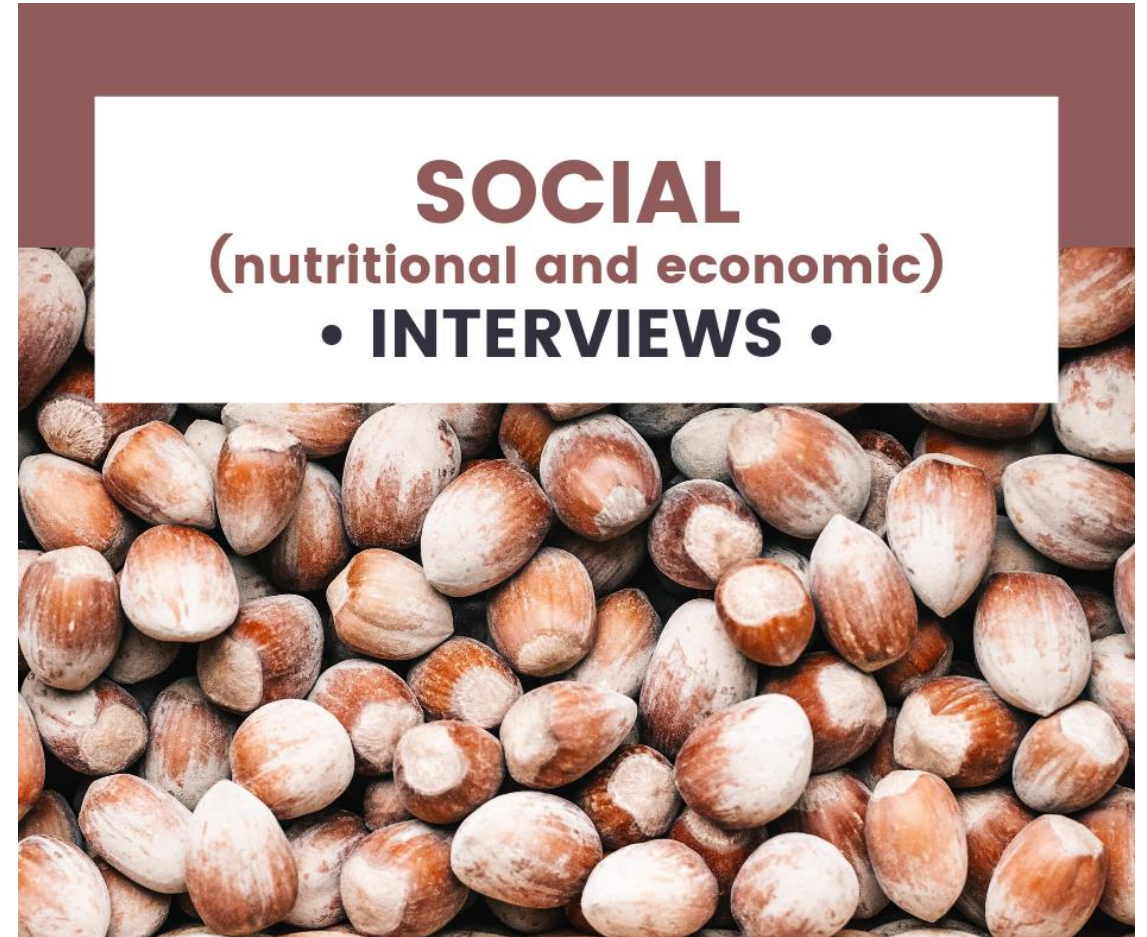
Commercial Case Studies

- Report summarizes barriers and recommended practices involving:

- ✓ Valuing food
- ✓ Role of quality standards
- ✓ Valuing staff and other labor issues
- ✓ Fear of running out
- ✓ Role of culture
- ✓ Role of standardization
- ✓ Assessment methods



Food Rescue Study

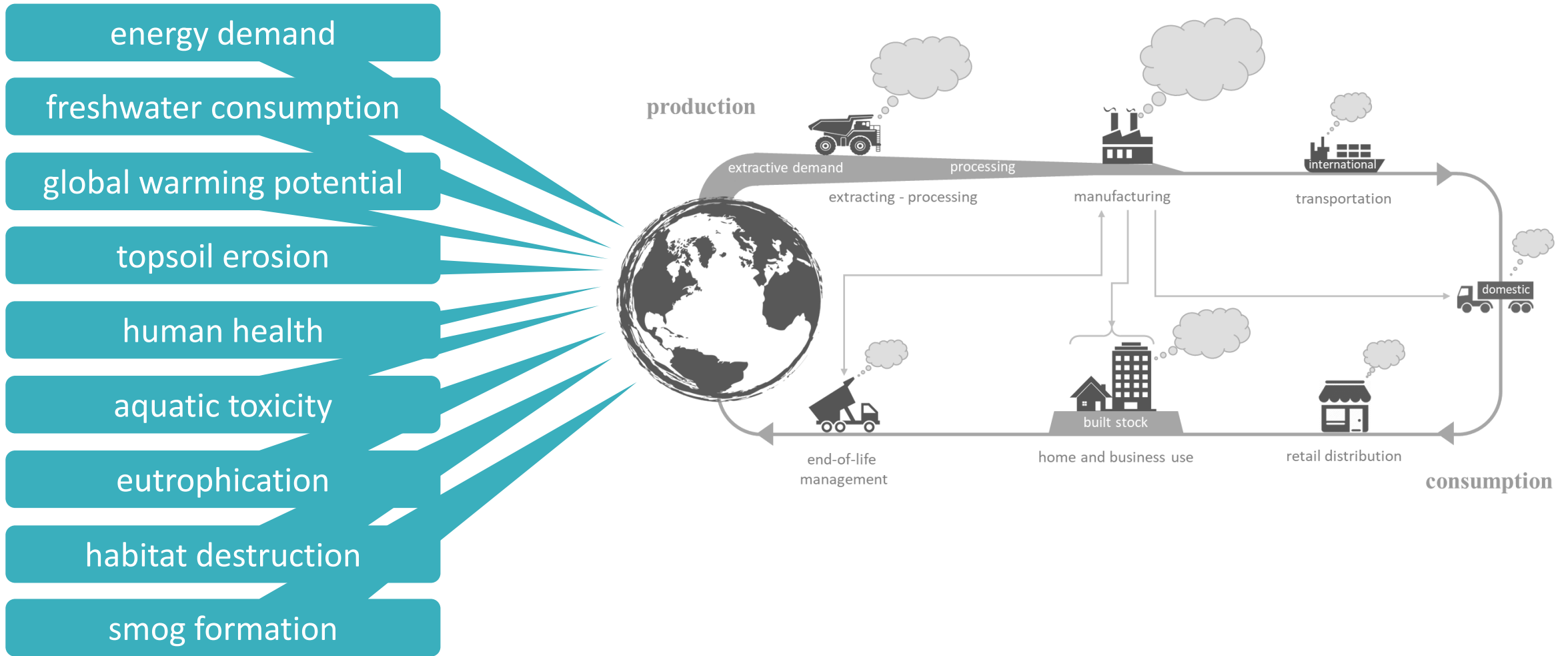


Key Takeaways: Social

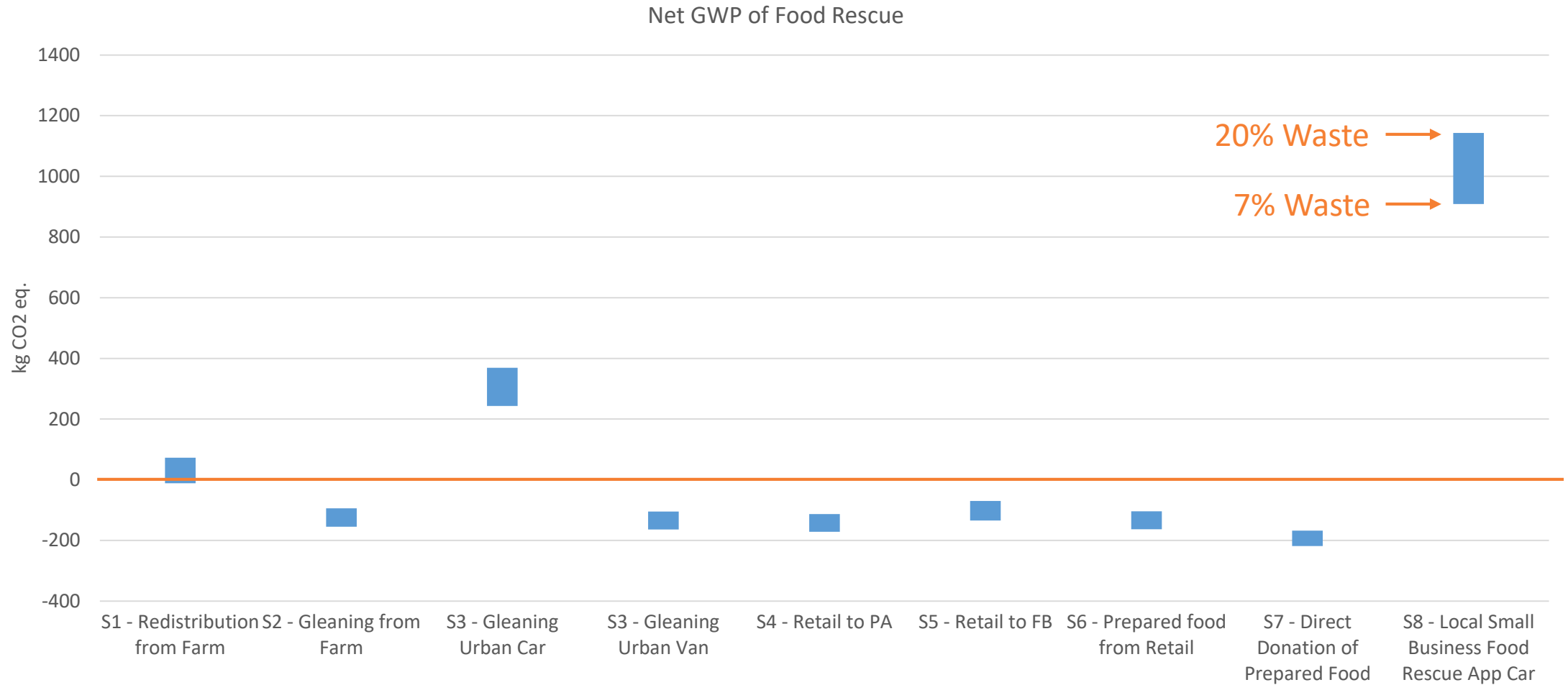
1. The need has changed
2. Supply doesn't always match the need
3. Measurement helps tell the story
4. Food rescue organizations and their clients know best



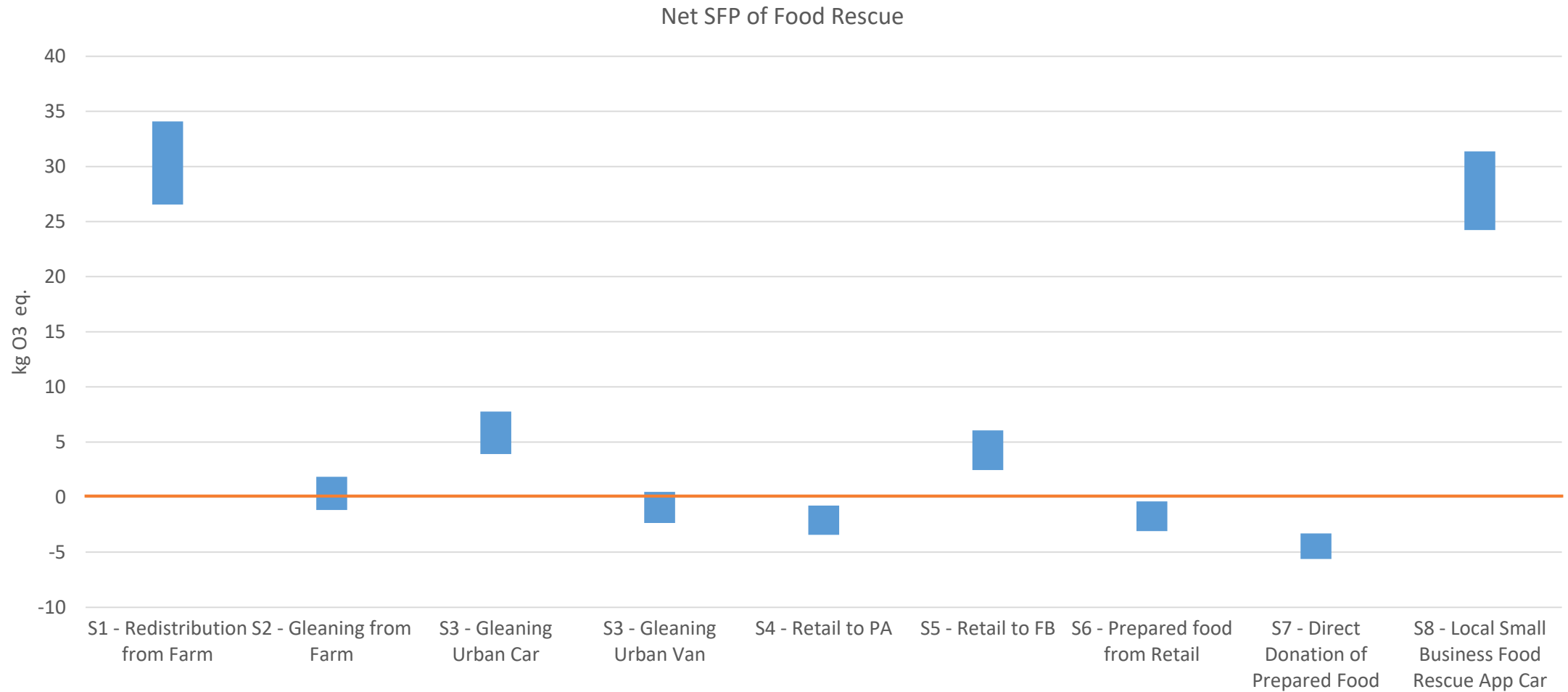
Life Cycle Assessment



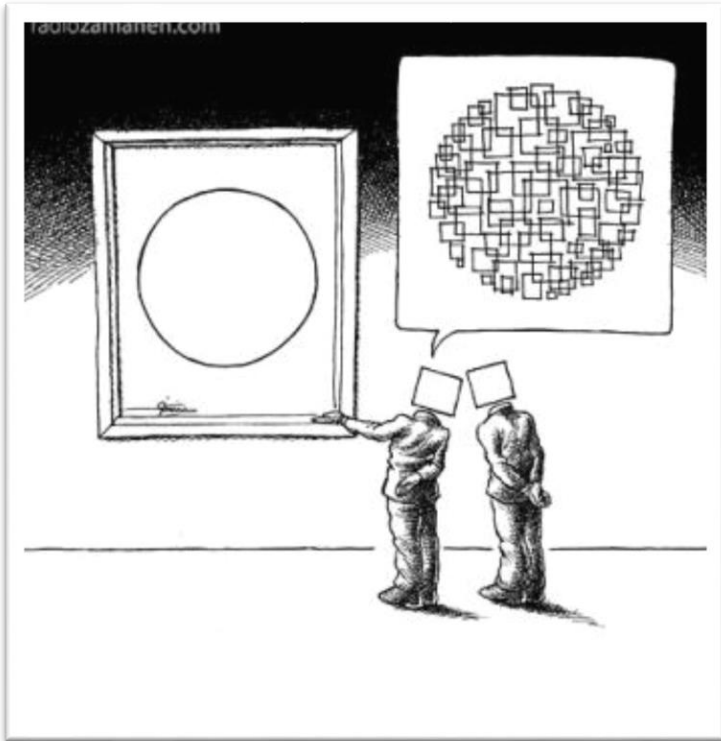
Global Warming Potential



Smog formation potential

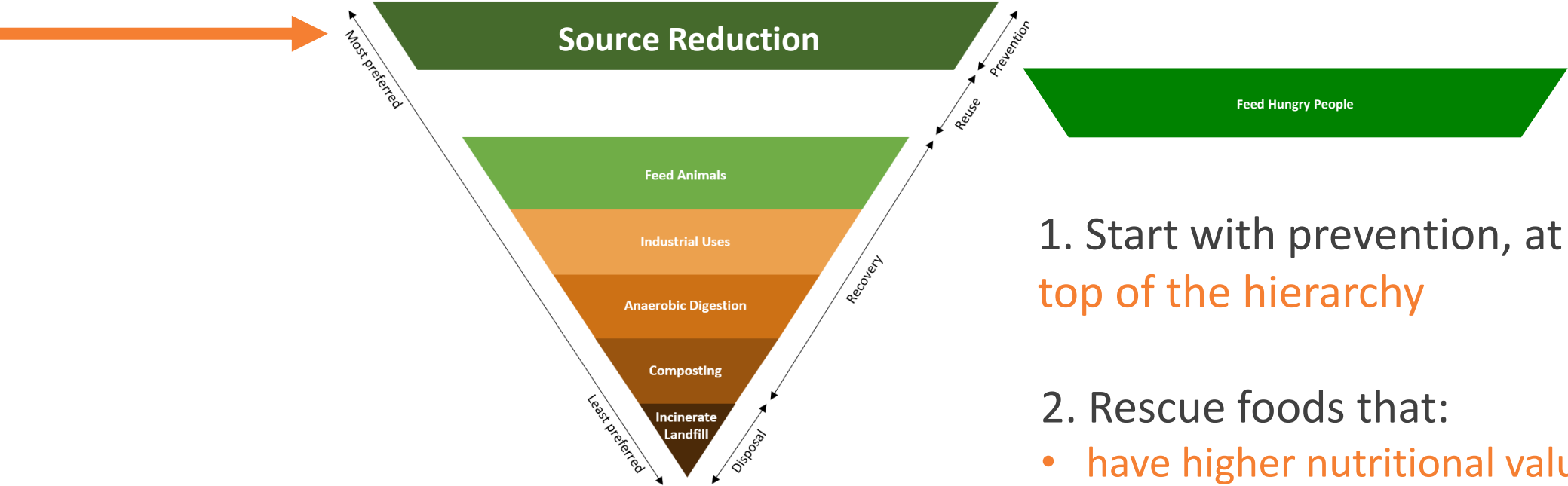


Key Findings - LCA



- Waste and loss matter most
- Transport is important
- Landfill diversion benefits vary
- Facilities are small contributors
- Disposal of loss and waste
- The relevance of upstream food production

Recommendations



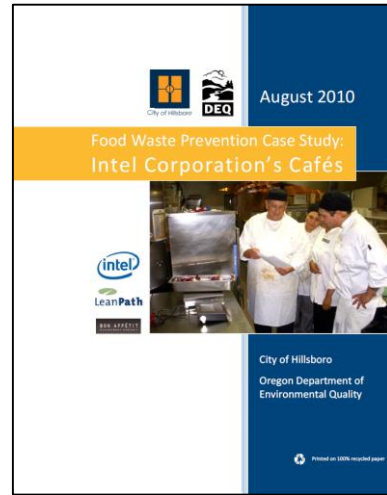
1. Start with prevention, at the top of the hierarchy

2. Rescue foods that:
• have higher nutritional value and
• are most likely to be consumed

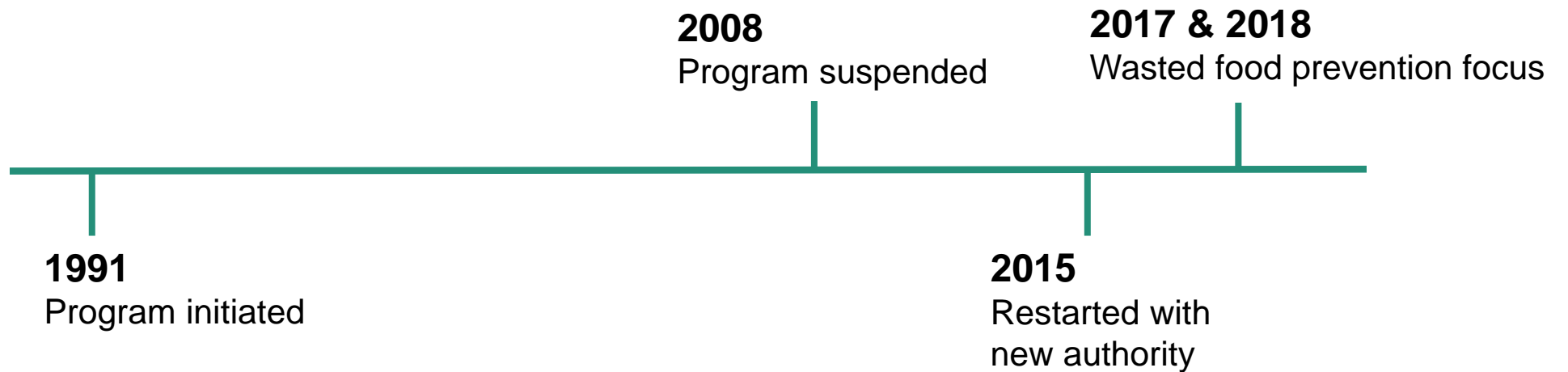
3. Rescue foods using the most efficient most of transport and from as close to recipients as possible



Grants



Timeline



Food grants: Cafeteria plate size



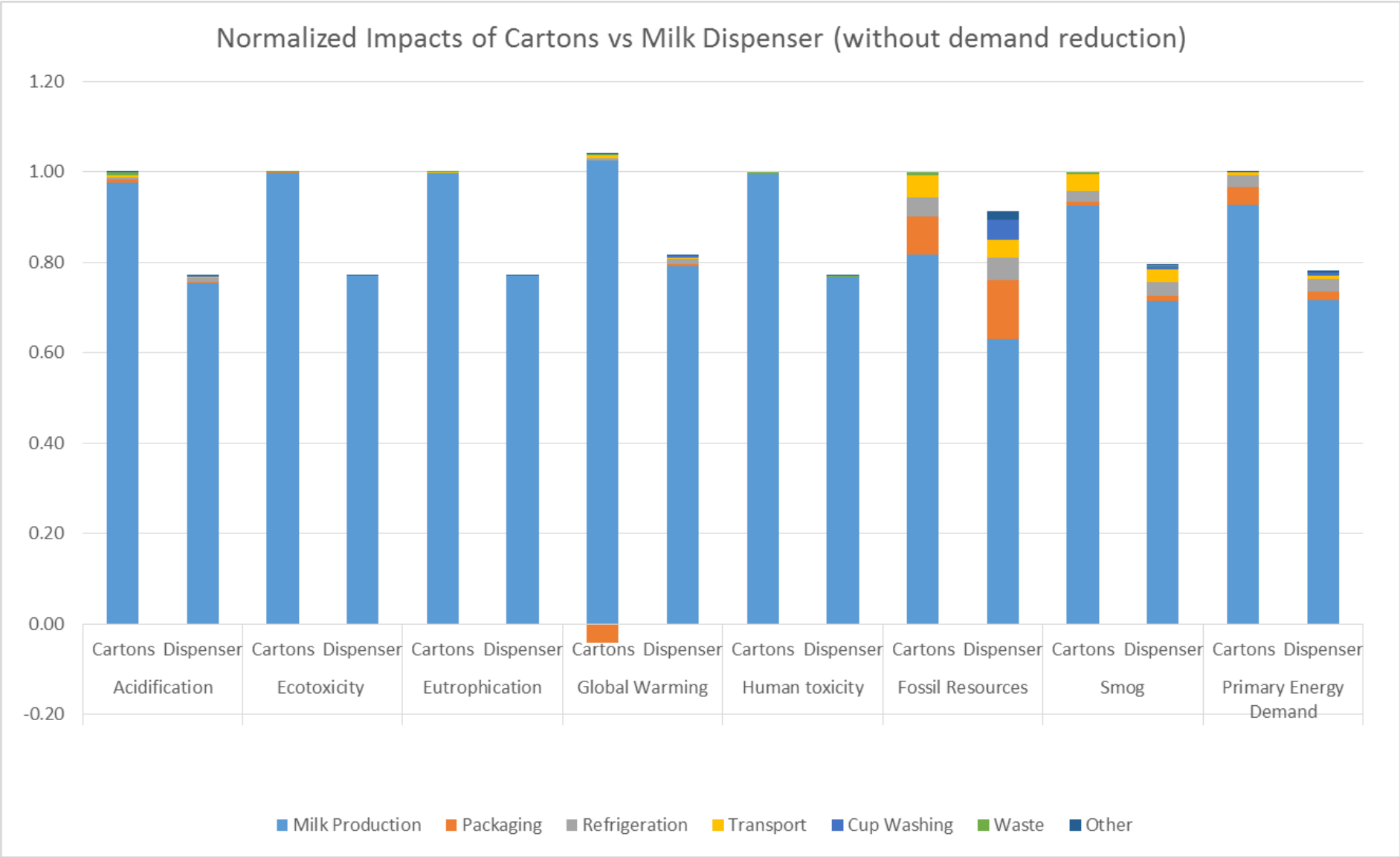
Food grants: Community engagement



Food grants: School cafeteria milk dispensers



Milk dispenser vs. carton streamlined LCA (DEQ)



Engagement with Commercial Food Service



Commercial campaign



WASTED FOOD WASTED MONEY

Save money. Save resources. Be a leader.

Join other Oregon businesses and be part of the solution to stop wasted food.

Each year, an estimated 25 to 40 percent of all food produced or imported for consumption in the United States is never eaten. That's as much as 63 million tons of wasted food. Of that food, 40 percent is estimated to come from consumer-facing businesses—businesses like yours. And that wasted food means wasted money, by some estimates as much as \$57 billion annually for U.S. businesses.

The good news is that reducing waste isn't hard and really pays off.

Studies show that nearly all businesses that try to reduce their wasted food through wasted food measurement, employee training, and waste prevention practices experienced a positive return on investment. Over half of businesses studied had more than a 1,400% return on investment—a \$14 return on every dollar invested. It's as simple as joining other Oregon businesses in taking four simple steps.

4 STEPS TO SAVE MONEY

- Figure out where you are wasting food and how much that waste is costing you.** Is it coming from spoilage, preparation or plate waste? Check out our simple measurement tools to get started and take the one-week measurement challenge.
- Engage staff to identify and make small shifts in how you do business.** Changes in purchasing, storage, food preparation, training, inventory management, or merchandising practices can save money and waste less food.
- Once you know where your waste is coming from, find the strategies that are right for you.** The free Wasted Food Wasted Money Resource Guide provides simple, step-by-step solutions.
- Document your progress by tracking purchasing and waste so you can see how much you saved.** You'll be pleasantly surprised!

Flyer front

BY SAVING MONEY, YOU'RE SOLVING A LARGER PROBLEM.

While reducing wasted food will improve your bottom line, small shifts in your business can lead to big changes in addressing this significant environmental, economic and social problem that affects Oregonians and generations to come.

Know the Facts

- \$** In the U.S., nearly \$218 billion—close to Oregon's entire GDP—is spent annually growing, processing and preparing food that is never eaten.
- 🌱** One in six people living in Oregon is food insecure.
- ⚡** Two percent of energy use in the U.S. is dedicated to growing, manufacturing, transporting, refrigerating, and cooking food that is never eaten, or enough electricity to power all of the homes in Oregon for the next 30 years.
- 💧** Twenty-five percent of the fresh water supply in the U.S. is used to produce food that is never eaten.
- 🚗** Food contributes to 15 percent of Oregon's consumption-based greenhouse gas emissions. Only our use of vehicles contributes more to Oregon's carbon footprint.

DID YOU KNOW?

The true cost of wasted food for a business is **10-20 times** the cost of waste disposal.

4% to 10% of food purchased is thrown away before reaching the customer's plate.

Food costs are **28% to 35%** of all restaurant revenue.

17% of meals are left uneaten by diners.

WASTED FOOD WASTED MONEY RESOURCE GUIDE

(Name of local government) and Oregon Department of Environmental Quality have created a resource guide to help your business measure, identify and solve food waste challenges. This guide is designed for businesses of every type and size.

www.website.com

Join other Oregon businesses and be part of the solution to stop wasted food. **Save money. Save resources. Be a leader.**

Visit www.website.com for more information.

Flyer back



Next Steps: Commercial campaign and engagement



Postcard front

Postcard back



Oregon Restaurant and Lodging Association



FoodWasteStopsWithMe.org



Pacific North America Voluntary Alliance

Commitments:

- Regional goal of 50% reduction by 2030
- Jurisdiction-specific (state/province/city) strategies, including prevention goals
- Engage industry in voluntary agreements



West Coast Voluntary Agreement to Reduce Wasted Food

- Based on successful effort in UK and includes CA, OR, WA, and BC.
- Engagement with grocers and brand manufacturers to gain their commitment to reduce wasted food
- Just starting to put together a coalition of businesses; looking to launch by end of 2019



Next Steps: Messaging research and consumer campaign

- Builds on household measurement study
- Messaging Research
 - ✓ Objective to ID messages that will best motivate Oregonians to reduce wasted food
 - ✓ Combo of qualitative and quantitative research
- State-wide campaign
 - ✓ Based on research
 - ✓ Materials also available for use by local governments
 - ✓ To be deployed early 2020



Thanks!

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Oregon's 2050 Vision for Materials Management:

Oregonians in 2050 produce and use materials responsibly – conserving resources – protecting the environment – living well