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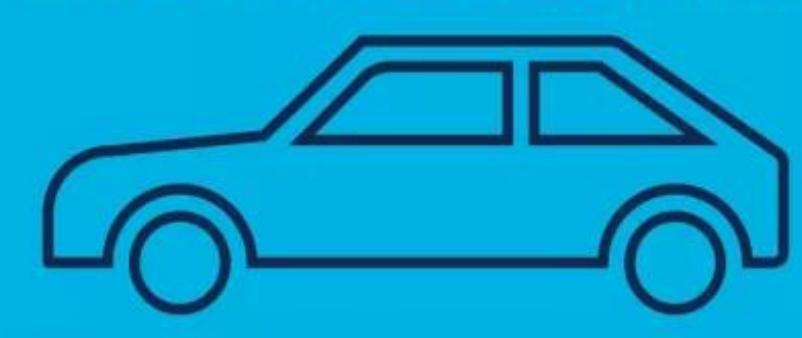
The global climate crisis is a problem that will affect all aspects of human life, and thus solutions need to be implemented in all settings. It is our goal to find a way to start to mitigate BMCC's climate impact and begin a project towards that end. Thus, the question guiding my research: What can the BMCC community practically do to reduce their climate impact effectively? It is important to find a goal that is worthwhile, but also not unrealistic. It is easy to implement measures that do very little, and very difficult to take on entire crises. We believe that limiting food waste at BMCC is attainable and will actually make a difference. We will design and implement a project that will have a lasting effect on BMCC's food waste levels, and by extension its climate impact. Of course, this project alone will not alleviate the BMCC community's responsibility in the climate crisis, but it will serve as a demonstration to students, staff and faculty members that climate solutions can be practical, homegrown, and lasting. It will show BMCC community members that change is possible and may inspire people to take up projects of their own, at BMCC or beyond.

Food Waste Facts:

- 35% of all the US food supply ended up lost or wasted, a waste equivalent to "the annual CO₂ emissions of 42 coal-fired power plants" (Jaglo, 2021).
- One fifth of everything thrown in landfills is food waste (Gunders, 2017).

MORE THAN JUST FOOD THE U.S. WASTES TONS OF RESOURCES WHEN WE WASTE FOOD

2.6% OF ALL U.S. GREENHOUSE GAS EMISSIONS ANNUALLY



21% OF THE U.S. AGRICULTURAL WATER USAGE



1,250 CALORIES PER PERSON PER DAY
THAT IS HALF OF THE RECOMMENDED DAILY INTAKE FOR ADULTS

19% OF ALL U.S. CROPLANDS

21% OF U.S. LANDFILL CONTENT



18% OF ALL FARMING FERTILIZER

WHICH CONTAINS 3.9 BILLION POUNDS OF NUTRIENTS
THE NO. 1 CONTRIBUTOR BY WEIGHT

\$218,000,000,000

WHICH IS EQUAL TO 1.3% OF THE U.S. GROSS DOMESTIC PRODUCT (GDP)



Wasting food has outsized effects (image: Gunders, 2017).

- NYC colleges create over 30,000 tons of food waste per year, which accounts for only 2% of all NYC food waste. An estimated 68% of that total food waste was still edible (Hoover, 2017).

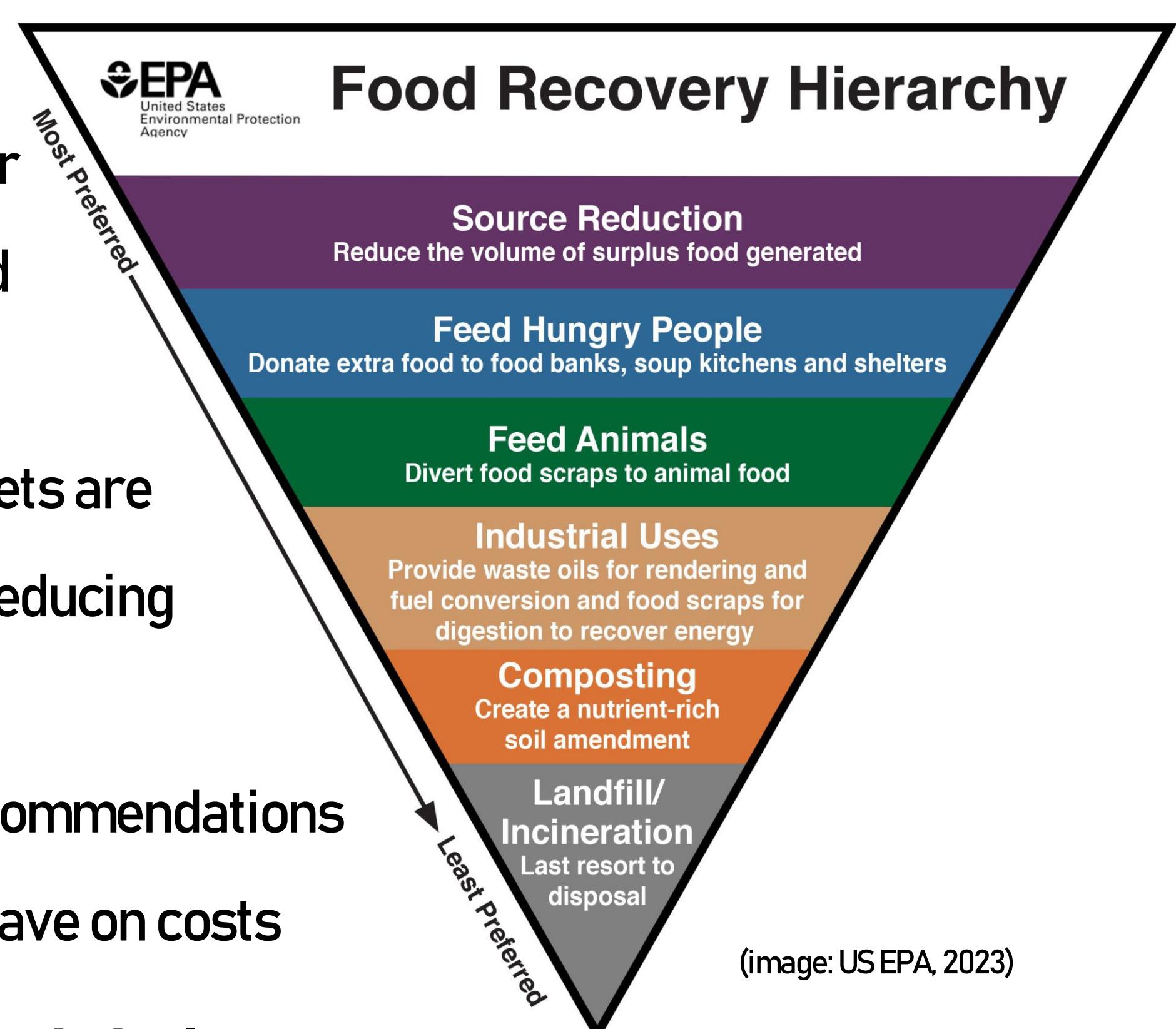


Every year, the water consumption of NYC college and university food waste is equivalent to three hours of flow over Niagara Falls.

(based on Hoover, 2017 and Niagara Falls State Park, n.d.)
Image: Robert F. Tobler, Wikimedia Commons CC-BY-SA 4.0

Why Reduction?

- Waste reduction is the highest priority solution for waste management, superseding composting and recycling (US EPA).
- Reducing food waste and promoting plant-rich diets are two of the most effective universal solutions for reducing CO₂ emissions (Project Drawdown, 2023).
- Waste tracking and low-waste menus are top recommendations for foodservice businesses to reduce waste and save on costs (ReFed, 2023).



(image: US EPA, 2023)

BMCC Cafeteria's Impact:



(image: Jaglo, 2021)

BMCC cafeteria food waste accounts for enough water to supply 33.2 households and GHG emissions equivalent to the energy use of 6.2 households.

(based on rates from EPA WaterSense, 2023 and EPA Greenhouse Gas Emissions, 2022)

Based on a 2017 waste audit by BMCC student Aleksandra Artyfikiewicz:

- Over a fifteen day period, the BMCC cafeteria produced 656 pounds of food waste, and disposed of it in the landfill.
- This food waste sent to landfill has the carbon equivalent of 1,995 pounds of coal burned, and the water equivalent of 8,681 showers drawn. This is based on the ReFed Impact Calculator (2023).

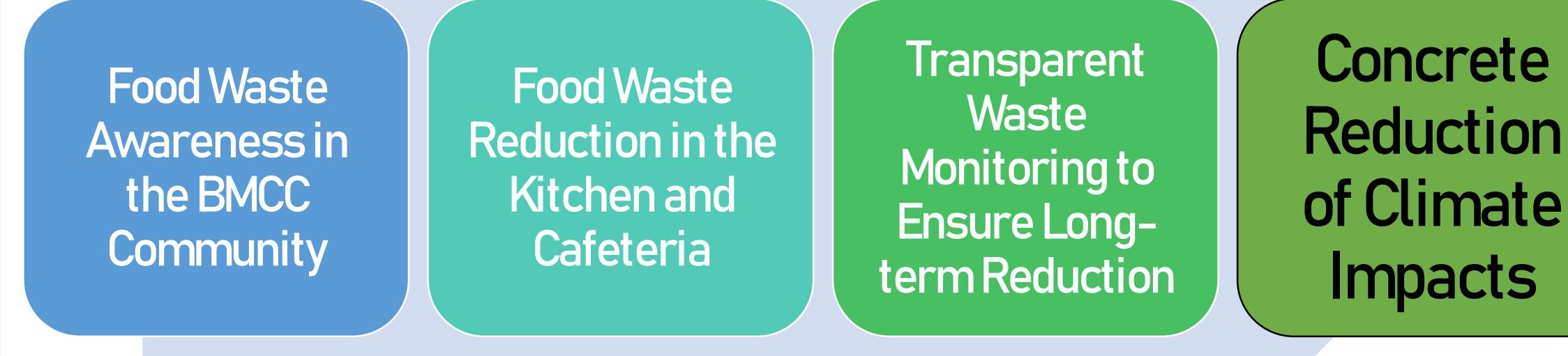
Project Goals:

Reduce BMCC's climate impacts by:

- Raising awareness among the BMCC community about how smart diet choices and food waste reduction can have meaningful effects on BMCC's climate impact.
- Working with campus cafeteria vendor MBJ to implement a food waste reduction program, with the assistance of BMCC administration and the community at large.
- Ensure with the support of BMCC administration that a long-term system of transparency is in place in the BMCC cafeteria, so that the BMCC community can monitor waste levels in perpetuity.

Next Steps:

- Survey the BMCC community: How often is the cafeteria used? Are people aware of the climate impacts of diet and food waste?
- Raise awareness as to how BMCC community members can reduce individual climate impacts. This can be done with social media, posters, and TV monitors inside campus buildings.
- Conduct a new audit to determine campus cafeteria's food waste levels. How much food is thrown away in the kitchen, in the cafeteria bins?
- Collaborate with campus cafeteria to find ways to maintain reduced food waste.



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