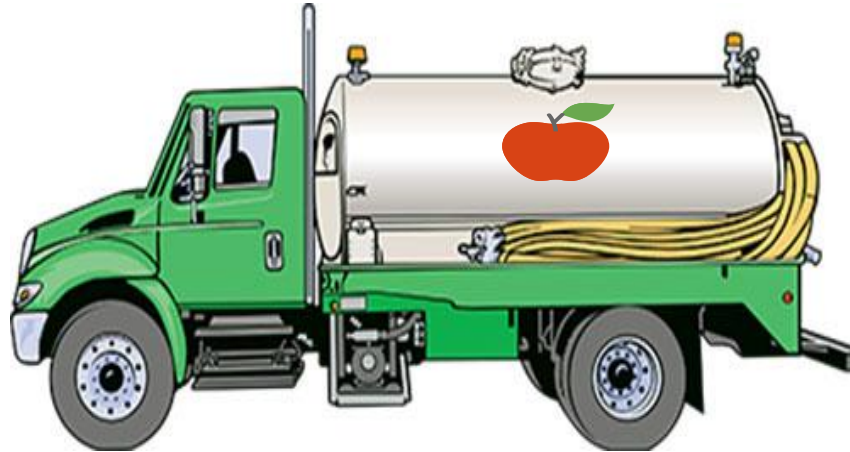


# Food Power



# The Team



Sheila Kaiser -  
Chief Financial  
Officer



Grace Rapaski -  
CEO



Rayne Rivera -  
COO



Madeleine Taft -  
Chief Marketing  
Officer

# The Bigger Picture

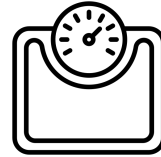


Each year, **22 million pounds** of food waste is generated at universities.

United States spend around **\$1 billion every year** just to dispose its food waste.



Food waste accounts for **10% of global greenhouse gas emissions**.



The average student generates roughly **142 pounds of food waste** a year.



Removing food waste would have the same effect as **removing 1 in 5 cars** from the roads.



Food scraps make up **22% of landfill materials**, which produce large amounts of methane.

# Roadmap: Interviews



“When I eat at the dining hall, I never can finish my meal because the cafeteria serves excessively large portions of food.”

Lily, University of California, Berkeley



“My school doesn’t allow me to take leftovers to go, so I’m forced to throw out whatever is left on my plate when I leave the cafeteria.”

Nishi, University of Texas at Austin



“I never intend on creating food waste, but sometimes my University makes such bad meals, I end up throwing it out.”

Nadia, Boston University

**Takeaway: food waste is inevitable**

# Roadmap: Observations



We are all students and bear witness to the ritual of food waste. Everyday, we see garbage cans overflowing with half-eaten food. Food waste is disheartening and most certainly an environmental issue worth considering.

**Takeaway: food waste at schools is significant.**

# **Our Mission Statement**

**Food Power seeks to create value out of food waste at universities in the US! Through supporting effective ways to circularize unfinished food and derive clean, affordable energy, we work to combat two pressing sustainability issues: excessive food waste and greenhouse gas emissions in the energy sector.**

# Our idea

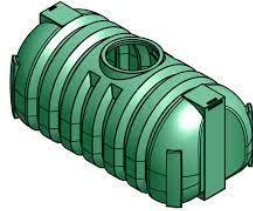
Partnering with universities in the United States to collect their food waste

Transporting food waste to local anaerobic digestion facilities

Anaerobic digestion process converts food waste into renewable energy

Cycling food waste and creating clean energy in one, for an affordable price!

# The Process





# Our Values

1. Affordable and Clean Energy
2. Climate Action
3. Responsible Production and Consumption



# Target Market

- Universities and Colleges
- Primary and secondary schools
- Restaurants
- Grocery stores

First Partner: Rutgers University



# The Impact

- Rutgers University produces up to 50 tons of food waste per day by its dining halls and spends at least \$120,000 a year to get rid of the waste each day.
- Sending this waste to a landfill would emit the equivalent of 37.5 tons of CO<sub>2</sub> emissions per day
- We reduce the equivalent of almost 14,000 tons of CO<sub>2</sub> emissions per year through our work at Rutgers
- Using anaerobic digestion processes, 50 tons of food waste a day could power 400 to 700 homes a year.



# Customer Relationships

Saves money:

- Rutgers University pays \$120,000 a year to dispose of food waste
  - Our service would cut this cost by over half. We charge them \$50,000 a year

More information:

- We provide details on amount of food waste by weighing the collected waste before transport
- Website for customers to keep track of food waste generated and energy produced from it

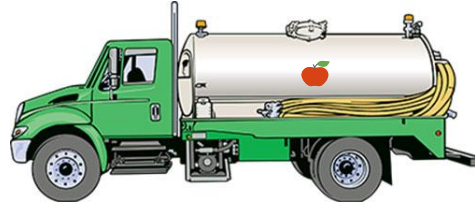
Incentives:

- Amount of energy depends on food waste generated - we will provide additional collection bins at no extra cost to collect more food waste (ex. from dorms)

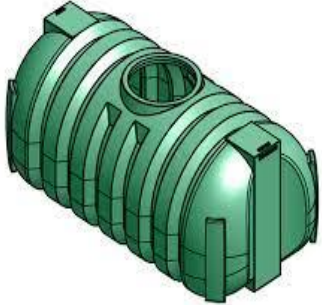
# Capital cost



Grinder: \$6,000



Truck: \$50,000



Septic Tank: \$2,000



Trash bins(10): \$500

**Capital cost: \$58,000 + maintenance  
cost and salaries = Total \$100,000**

# Revenues



From our business:

- Our price: \$25/ton of waste
- Willingness to pay: average cost to landfill food waste in the United States was 53.72\$/ton of waste
- Turnover: within a year; Rutgers generates around 18,000 tons of waste annually  $\times 25 \text{ $/ton} = \$450,000$  annually

Funding:

- Personal contributions (\$5,000 per team member)
- Donations/Investments from university sponsors and alumni (hoping for \$50,000 to start)
- Bank loan of \$100,000 (capital costs) with quarterly annual return

# Our Partners

- Rutgers University
- Trenton Renewables
- Other Universities / Schools
- Sustainable Nonprofits



Trenton Renewables

Food waste recycling and renewable energy  
in Trenton, New Jersey

# About Trenton Renewables


## Our Impact Each Year

 110,000 tons

food waste  
diverted from landfills

 225,000 MMBtu

renewable biogas  
produced

 480,000 tons

reduced CO<sub>2</sub> emissions

 29,000 MWh

renewable energy  
generated

 \$5,000,000 +

cost savings  
for our partners

 23,000 tons

organic compost  
produced for local farms



# Marketing the Business

- Place adverts on target community – the schools! We would specifically target student newspapers, radio and TV stations
- Leverage on the internet and social media platforms like YouTube, Instagram, Facebook, Twitter, LinkedIn, etc.
- Market directly to the university through emails, fliers, and personal networking

**Idea:** photograph food waste created by student body and post around campus.

This is what YOU did:



## Sources:

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[Food Waste at Rutgers Universityhttps://rucore.libraries.rutgers.edu › rutgers-lib › PDF](https://rucore.libraries.rutgers.edu › rutgers-lib › PDF)