



grind²energy™

**You'll Never
Look At Food Waste
The Same.**

Transforming food waste into renewable energy.


EMERSON



The Environmental Impact of Food Waste* is Staggering

When food goes to the landfill, it's like tying food in a plastic bag - the nutrients in the food never return to the soil. The wasted food rots and produces methane gas. Methane is a potent greenhouse gas with more than 25 times the global warming potential compared to carbon dioxide.

- According to the U.S. EPA, 95% of all food waste is either landfilled or incinerated - over 80 billion pounds
- If food waste were a country, it would be the third largest producer of greenhouse gases in the world, behind China and the U.S.¹

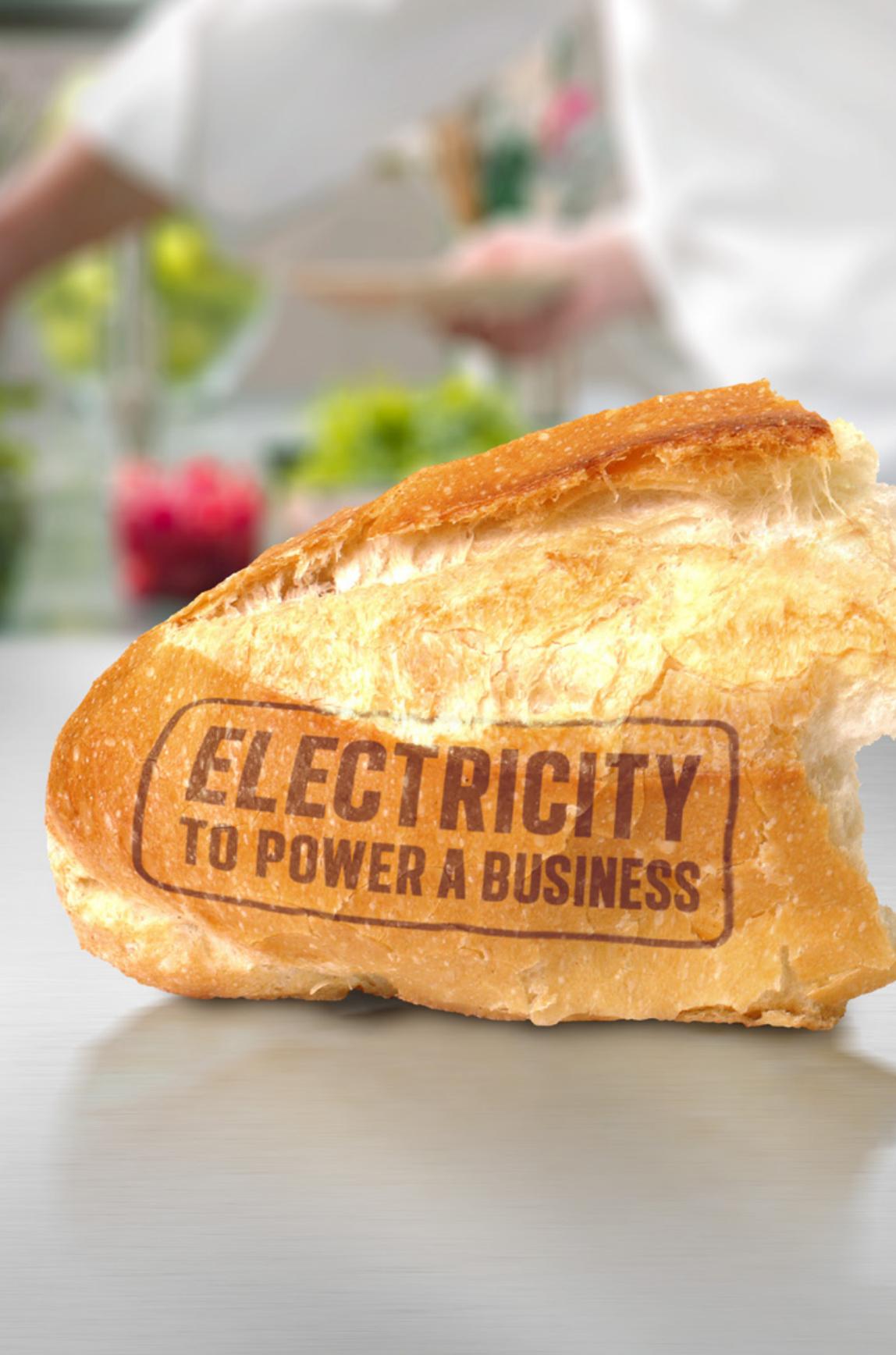
State and Local Governments Are Implementing Landfill Waste Diversion Bans

To help ease the impact on the environment, states like Massachusetts, Connecticut, Vermont, Rhode Island, and California are mandating regulations to divert commercial organics from landfills. Similarly, cities such as Austin, New York, San Francisco, Seattle, and Portland, Oregon are following suit. States soon projected to enact bans include Florida, Maryland, Minnesota, and New Jersey.

- As states begin to ban the future use of landfills, large volume food waste generators need a sustainable solution that's better for the environment

*Food waste can be defined in many ways. For the purposes of this paper, the following definition is helpful: "Any solid or liquid food substance, raw or cooked, which is discarded, or intended or required to be discarded. Food waste is the organic residue generated by the processing, handling, storage, sale, preparation, cooking, and serving of foods."

1. World Resources Institute (2012)

A close-up photograph of a golden-brown, crusty loaf of bread, possibly a baguette, resting on a light-colored surface. The bread is stamped with the words "ELECTRICITY" and "TO POWER A BUSINESS" in a bold, black, sans-serif font. The stamp is contained within a dark, rounded rectangular border. The background is blurred, showing a person in a white shirt and a basket of fresh produce, including green leafy vegetables and a red bell pepper.

ELECTRICITY
TO POWER A BUSINESS

You'll Never Look At Food Waste the Same

Non-sewer based Grind2Energy™ is more than an alternative to landfills and traditional compost programs. The system actually recycles food waste into clean water and renewable energy – in the form of electricity, heat, or compressed natural gas.

Through Grind2Energy's innovative process, food waste is ground on-site using a customized, industrial-strength foodservice grinder. Food waste is converted into energy-rich slurry and transported to an anaerobic digestion facility where methane is extracted for energy production. The remaining biosolids become nutrient-rich fertilizer.

The system enables you to dispose of all types of unavoidable food waste – including fats, oils and grease – faster, cleaner and easier. Improve your operations, minimize avoidable food waste, and reduce odors, pests, emissions, and labor costs – all while protecting the environment.

- Transforms food waste into renewable energy
- Produces electricity, heat, or compressed natural gas
- Reduces odors, pests, vehicle emissions, and labor costs
- Provides data that monitors the tank, predicts maintenance, and maximizes system uptime
- Provides visibility into food loss with real-time data that can be used to optimize operations and manage avoidable food waste





**NATURAL GAS
TO HEAT A HOME**

Improves Sanitation As Effectively As It Promotes Sustainability

Grind2Energy increases operational efficiency by cutting down on trips to the dumpster and reducing the number of trash pickups. Food waste is stored in the system's onsite storage tank, not in bins and dumpsters – potential eyesores and harbors for bacteria growth that create unpleasant odors and pest problems. Your employees, customers, and health inspector will all benefit from a convenient and hygienic solution for sustainably managing food waste.

The system's IoT-enabled technology automates sustainability reports for your facility, detailing how much waste was diverted from landfills, the reduction in greenhouse gas emissions, and the amount of renewable energy your system generated. You can use this data to promote your reduced environmental impact and sustainable stewardship to those customers and communities you serve.

Sustainability Report:



A close-up photograph of an orange with a dark brown stamp. The stamp is shaped like a rounded rectangle with a double-line border and contains the text "COMPRESSED NATURAL GAS" on the top line and "TO FUEL A TRUCK" on the bottom line. The orange is partially peeled, with several strips of peel curled away. The background is a blurred indoor setting with a person in a white lab coat. The orange is on a white surface, casting a soft shadow.

**COMPRESSED NATURAL GAS
TO FUEL A TRUCK**

Grind2Energy Makes Organic Waste Disposal Cleaner, Easier and More Efficient

- Reduces odors and pest problems
- Cuts down on trips to the dumpster
- Decreases number of trash pickups
- Reduces disposal fees and truck emissions
- Diverts food waste from landfills
- Decreases levels of methane released into the atmosphere
- Transforms food waste into clean water, renewable energy, and beneficial fertilizers

Engineered to Process Organic Waste, Including Fats, Oils and Grease

Raw and cooked meats • Fruits and vegetables
Dairy • Bread • Seafood • Bones • Fats, oils and grease







Grind2Energy is the Only Full-circle, Closed-loop Organic Waste Recycling System of Its Kind

1. Organic food waste is collected and placed into the grind chamber.
2. Grind2Energy grinds food waste quickly and efficiently.
3. The resulting slurry goes into a holding tank.
4. A liquid waste hauler transports the slurry to a local anaerobic digestion (AD) facility.
5. The AD facility recycles the food slurry by recovering water and converting captured methane into renewable energy.
6. The remaining nutrient-rich organic material can be used as a beneficial natural fertilizer.
7. The natural fertilizer is utilized to grow more food.



Food Waste Isn't the Only Thing It Handles

Grind2Energy's IoT-enabled technology provides real-time and historical data through the online customer dashboard, including tank alerts, water pressure, grinder voltage, system events and alarms – all to help customers optimize uptime, track organics diversion, report sustainability, and reduce operational costs. With 24/7 access to big data from the cloud, you can monitor system performance from a web portal, mobile device or downloadable report – anytime, anywhere.

Visibility to Data That Tracks Performance

Building visibility into every Grind2Energy system means that food disposal trends can be monitored daily, weekly or monthly. These usage metrics can be leveraged to track performance, optimize uptime, and minimize costs:

- **Total weight of food scraps processed (tons for a given period)**
- **Average tonnage processed (tons per week)**
- **Average processing session duration (minutes per session)**
- **Average processing sessions (times per day)**
- **Cumulative system run time (hours)**



Good for Business, Good for the Environment

Grind2Energy simplifies the food waste management process, adding visibility to food disposal trends, while providing a sustainable option that makes a big difference for the environment.

The Grind2Energy team can assist you with determining everything you need to effectively manage your food scraps – from system installation, tank monitoring, hauling and sustainability reporting to equipment service and repair. Contact your Grind2Energy representative to learn more.





Learn more at Grind2Energy.com

1-800-845-8345

Grind2Energy.com

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