

New Jersey looks to reduce food waste by 50 percent by 2030

If 50 percent of the nation's food waste was converted to energy in waste-to-energy facilities, it could power up to 2.5 million homes a year, according to the EPA.

Waste Management of New Jersey (WMNJ), in a public/private partnership with the Rahway Valley Sewerage Authority (RVSA), is proud to operate the state's first full-scale food waste recycling and co-digestion project, a cost-effective alternative for turning food waste into renewable energy.

The CORe® Process

WM currently operates the largest food waste to municipal co-digestion projects in North America. The CORe® process is a purpose-built, centralized, source-separated food waste processing and blending facility that takes a combination of pre- and post-consumer food wastes and produces a high-quality product designed for co-digestion in municipal anaerobic digesters. Through this, WM provides an unparalleled experience in food waste preprocessing and municipal co-digestion. The company's extensive full-scale operating experience has resulted in solutions like the RVSA renewable energy project, which addresses the critical success factors for a public/private partnership as it relates to operating a food waste co-digestion program.

How CORe® Empowers New Jersey To Reduce Food Waste

The WM CORe® system for the RVSA project is located in northern New Jersey at its Flora St. Transfer Station. The system is permitted to receive and process 500 tons of food waste per day and 60,000 gallons of liquid organic material per day. WM's CORe® process can remove nondegradable contaminants from source-separated food waste streams at an exceptionally high efficiency. This material is then blended into a consistent, high-quality EBS® bioslurry product, a high-energy fuel source. This separation process is critical to safeguarding that inert and floatable materials are substantially free.

The ability to create and manage a consistent EBS® is critical to the successful introduction into and processing by a waste water treatment plant's anaerobic digesters. Typically, the performance of anaerobic digesters is negatively impacted by inconsistencies in the organic strength of the material being digested. The WM CORe® processing system overcomes this issue. Since EBS® must have solids content that allows the slurry to be pumped, makeup liquids can be added to manage the solids content of the slurry. This allows WM to accept high organic strength liquids and use them as part of the blending process. The EBS® product from the New Jersey CORe® is delivered to the RVSA waste water treatment plant where its co-digestion increases the production of biogas, most importantly methane, which is collected and used as a fuel in RVSA's co-generators.

LOCATION

WM Northern New Jersey CORe®
847 Flora St.
Elizabeth, NJ 07201
800 633 9096

CONTACT

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HOURS OF OPERATION

Monday – Saturday: 24 hours
Trucks entering/exiting:
7 AM to 10 PM

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WASTE MANAGEMENT CORe® PROCESS

HOW IT WORKS

"WASTE-GAS-TO-GRID" PROJECT



1 Organics are separated from other materials at the source

2 Collection vehicles gather organics from households and businesses

3 Incoming food waste is tipped from collection vehicles within the enclosed transfer station

4 Food waste is loaded into the CORe® system's hopper/conveyor

5 Food waste is conveyed into a bioseparator, which separates organic and inorganic waste

6 Food waste is liquefied within the bioseparator to produce a fluidized feedstock

7 The feedstock is pumped into the WM proprietary process to produce EBS®





8 The EBS® is transported via tanker truck to the RVSA waste water treatment plant

9 EBS® is added to anaerobic digesters to increase biogas production

10 Biogas is collected and used in RVSA's boilers for building and process needs





RVSA will transfer renewable digester biogas for the production of renewable energy

Acceptable Materials

Produce
Fruits and vegetables

Meats & Seafood
All cooked and raw meat products, including fish, beef and chicken

Dairy & Eggs
Milk, yogurt, ice cream and cheese

Bakery & Dry Goods
Pasta, rice, bread and cereal

Food & Beverage Processing Liquid
Expired beverages and organic manufacturing liquids

Fats, Oil & Greases

Incidentally Acceptable Materials

Food-Soiled Paper
Napkins and paper food containers

Canned Foods
Soda and soup cans

Plastic
Bottled liquids , sodas and juices

Bones & Shells
Incidental items with food waste, not rendering and commericial shelling

Unacceptable Materials

Glass

Yard Waste

Chemicals, Paint & Hazardous Waste

Product Destruction & Depackaging

Packaged Food Products & Palletized Materials
Accepted on a case-by-case basis, approval required