



ORGANICS RECYCLING

SUSTAINABLE ENERGY

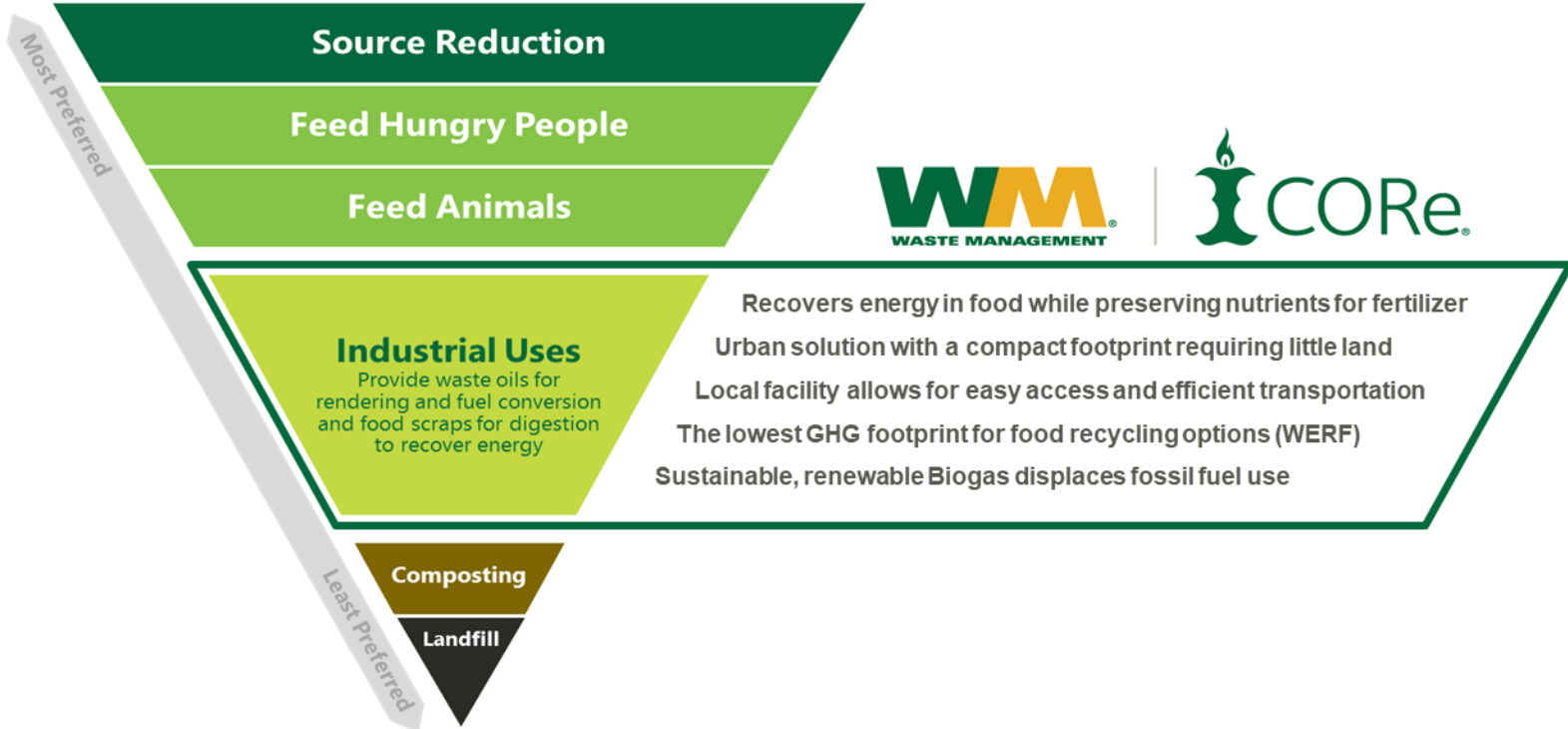
FROM FOOD WASTE



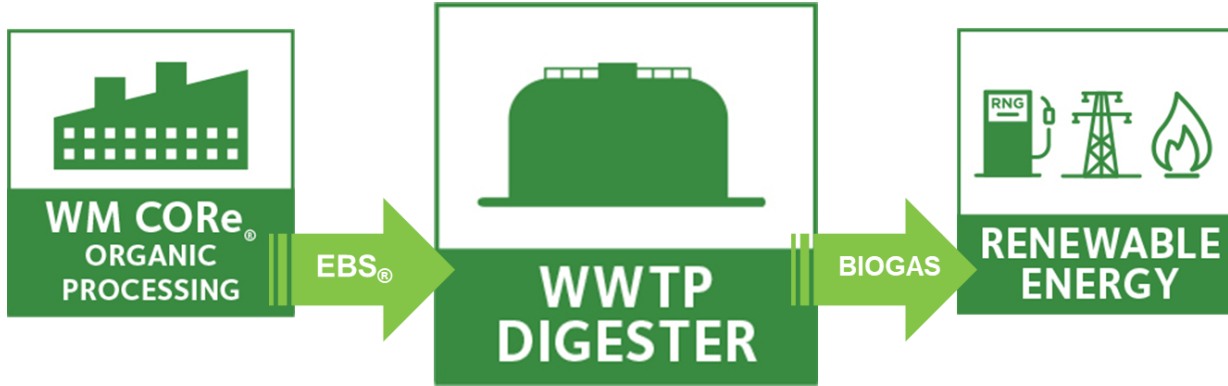
EPA - Food Waste Recovery



Food Recovery Hierarchy



WM Organics Approach



“**Co-digestion** is a process whereby **energy-rich** organic waste materials (food scraps) are added to dairy or **wastewater (WWTP) digesters** with excess capacity.

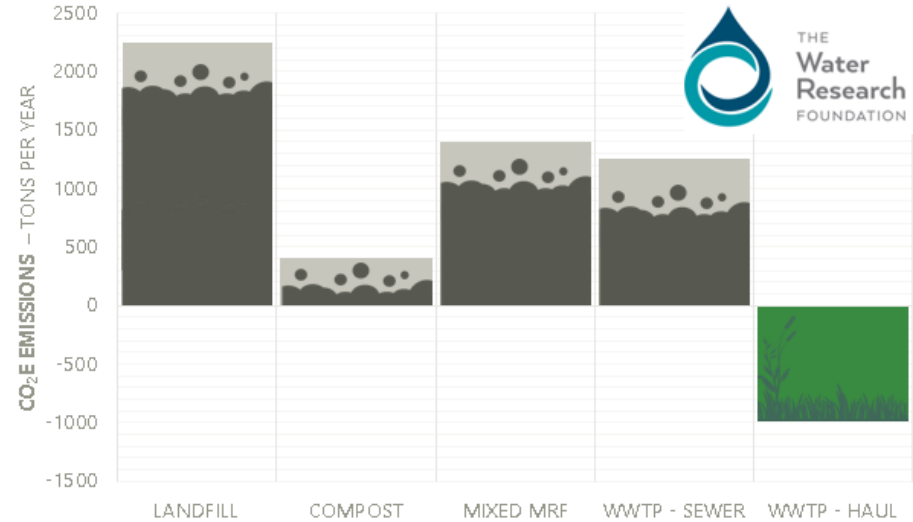
In addition to diverting food waste and FOG from landfills and the public sewer lines, these **high-energy** materials have at least **three times** the methane production potential (e.g. biogas) of biosolids and manure.”




United States
Environmental Protection
Agency

Reducing the carbon footprint through co-digestion at WWTP

The Water Research Foundation

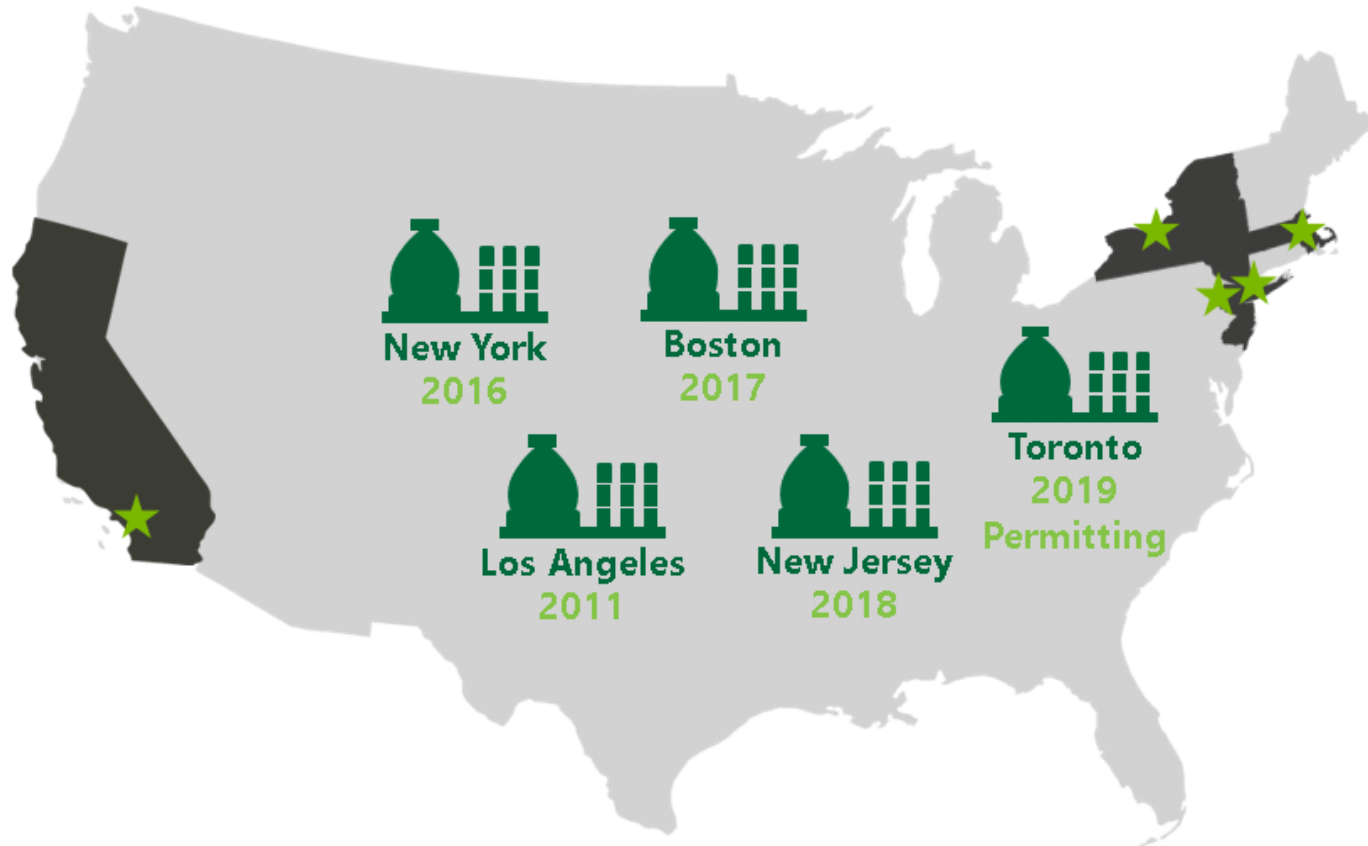


"From a carbon footprint comparison, the **WWTP/Hauler** alternative had the **lowest carbon dioxide** equivalent (CO₂E) **emissions** compared to the other alternatives"

A collage of organic waste items including a banana, eggshells, carrot peels, and a brown container. The items are arranged in a way that suggests a collection of food scraps. The background is dark and textured.

Centralized Organic
Recycling (CORe®) -
Our organics approach.

WM CORE[®] Facilities





ICORe NEW JERSEY



Location
847 Flora St
Elizabeth, NJ

500 tons per day
permitted capacity

Long-term
partnership with
Rahway Valley
Sewerage Authority
(RVSA)



CORe[®]
in operation.

WM CORE[®] Process



Waste Management's **CORE[®]** process is a **local, urban solution for New Jersey** that takes **food material** and through our proprietary process we convert that material into our **EBS[®] product**.

EBS[®] is a high quality, consistent product that removes **>95%** of the **physical contaminants** found in urban food waste.

The **EBS[®]** product is used to create **renewable, sustainable energy** in partnership with **long term** local partnerships, helping them approach **zero waste**.

CORe® Acceptable Streams

What can CORe® Accept?

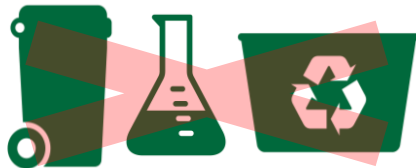


FOOD & ORGANICS

If you can eat it, we can take it.

This includes **meat, dairy, vegetables, bakery**, and other food goods.

We can also accept **packaged food material (PFM)** on a case-by-case basis.



Unfortunately, we cannot take a few things, such as food in **regular trash**, **glass** including **glass food containers**, and **cleaning products**.

CORe® Acceptable Streams

What can CORe® Accept?

Clean, source separated
food waste and organics

- Fruits
- Vegetables
- Pre-consumer organic waste



CORe[®] Acceptable Streams

What can CORe[®] Accept?

- Up to 20% contamination
- Liners (do not need to be compostable or biodegradable)



CORe® Acceptable Streams

What can CORe® Accept?

Packaged food material (PFM)

- Pallets of expired product
- Excess product
- Recalls
- Discards



CORe[®] Acceptable Streams

What can CORe[®] Accept?

- BulkBins
- Metal Cage Toters
- Gaylords
- Drums



3x 65-Gallon 2-Wheel Carts = 1x 200 Gallon WM BulkBin



CORe[®] Acceptable Streams

What can CORe[®] Accept?

Complimentary Liquids

- Fats, oils, & greases
- Alcohol
- Sodas & Juices
- Mouthwash
- Manufacturing liquids
- Rinse of product tanks and washing lines



CORe® Collection & Offload Capabilities

What can CORe® Accept?

Several modes of managing and receiving food waste

- Trailer trucks (2 loading docks)
- Tanker trucks
- Rolloff trucks
- Compactors
- Toter truck (temporarily suspended)



CORe[®] in Operation

From food waste organics to EBS[®]



CORe[®] SSO Receipt Hopper
& Bioseparator



EBS[®] Mixing and Storage
Tank




EBS[®] Product

CORe[®] Contamination Levels

Contaminant Separation

Up to 20% contamination levels are accepted and residuals are separated out during the process





Engineered Bioslurry (EBS[®]) – a quality product

EBS® Quality Control

Lab Room

Focused on developing a consistent product, removing contamination to produce a known energy content end product EBS®




EBS[®] Transported to WWTP


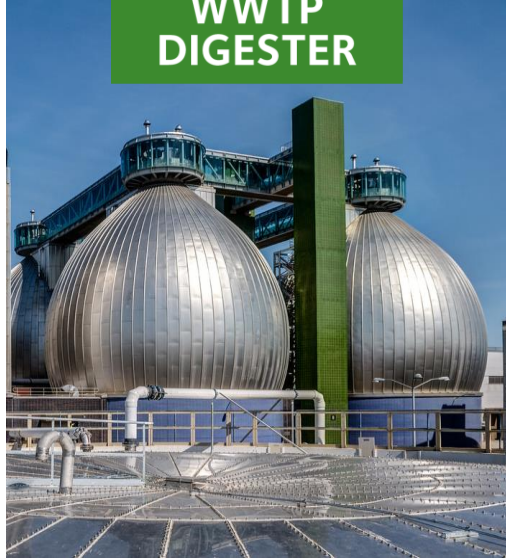
Brought to WWTP for co-digestion/energy production



**EBS[®]
TRANSPORT
TO WWTP**



**WWTP
DIGESTER**



**RENEWABLE
ENERGY**



Grind 2 Energy Technology

Onsite solution

Onsite food scrap processing solution,
Grind 2 Energy

- Pre & post-consumer organic waste



Grind2Energy Technology

Onsite solution

Food scraps processing solution

- Food scraps grinded on site and transferred to storage tank
- Streamlines multiple services into one solution
- Non sewer base
- Accepts FOGS
- No odor, hygienic benefits
- Reduces # of service days
- Slurry from storage tank delivered to CORE

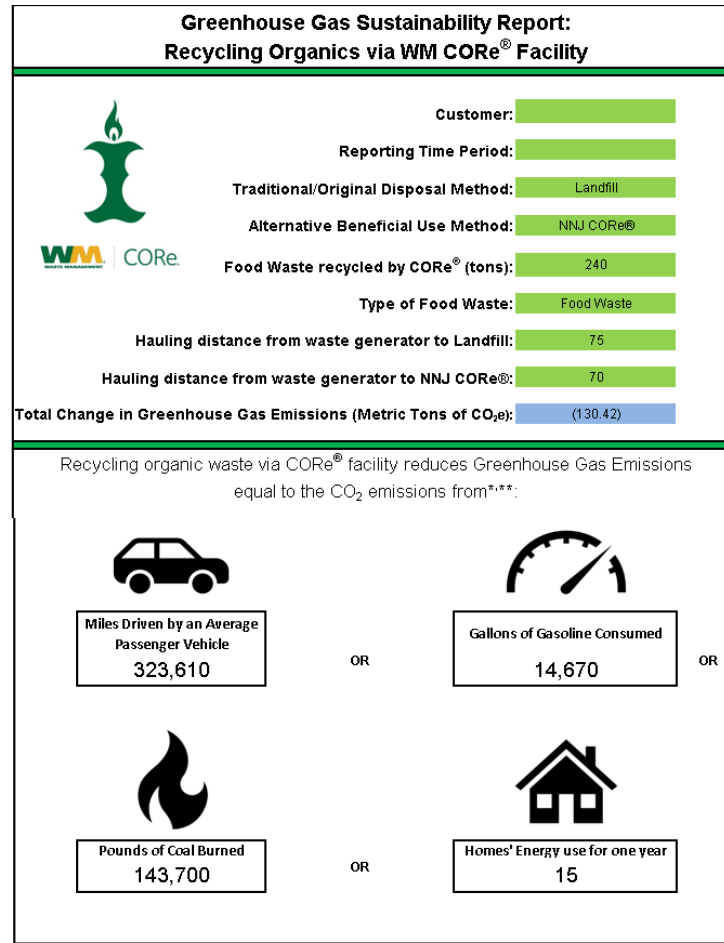


CORe® Recognition from NJDEP



Sustainability Report

Can easily provide customers with tonnage reports and sustainability reports to highlight the reduction in GHG emissions



CORe® Process Video

<https://www.youtube.com/watch?v=TP1B3f9FRGw>





FOOD IS ENERGY, LET'S NOT WASTE IT.

THANK YOU

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