



# 2024 NYSASWM Winter Conference

**High Acres Landfill & Recycling Center**

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# Agenda

- 1. Overview of WM**  
Corporate Sustainability
- 2. WMNY**  
WM facilities  
WM Landfills
- 3. WM in Monroe County**  
WM facilities  
High Acres Overview
- 4. Rail at High Acres**  
Operations- 10 years later (2025)  
Logistics  
Benefits
- 5. Renewable Energy**  
**RNG**  
**Benefits**
- 6. Closing**  
**Questions**  
**Tour**

# WM At-A-Glance

## North America's Leading Provider of Environmental and Sustainability Solutions

Provides collection, recycling, disposal, and sustainability services to 20M+ municipal, residential, and corporate customers throughout US/Canada

Headquartered in Houston, TX

50,000 employees & \$20 billion in annual Revenue

Largest Disposal Network, Fleet Collection, and Recycler in North America

Most Landfill gas-to-energy plants in North America



### CAPABILITIES AT-A-GLANCE

Recycling



**135+**

processing and recovery facilities

Solid, Hazardous & Special Waste



**1K+**

collection and disposal facilities

Renewable Energy



**130+**

landfill gas-to-energy facilities



# Sustainability Ambitions

Material is **REPURPOSED**

We're reimagining a circular economy.



Energy is **RENEWABLE**

We're innovating for climate progress.



Communities are **THRIVING**

We're empowering people to live sustainably.



## Looking Ahead:

In the years ahead, we plan to:

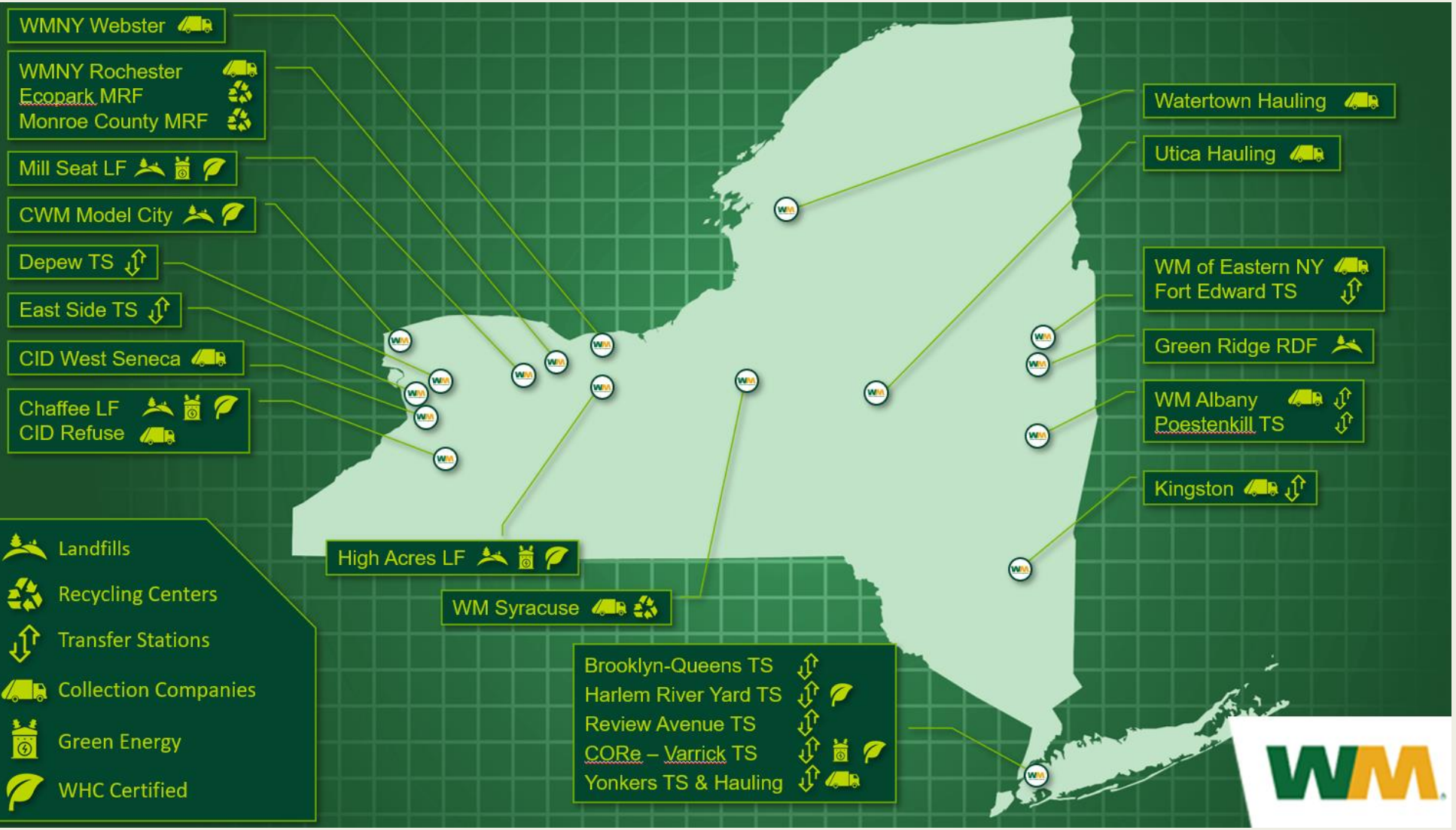
Make continued investments in Renewable Energy and Recycling (\$2 billion through 2026)

Increase recovery of materials by 60% by 2030

Increase the beneficial use of landfill gas to 65% by 2026 (ultimately reach around 90% beneficial use)

Increase allocation of renewable natural gas (RNG) to our compressed natural gas fleet, Nationally, 55% of WM's fleet is fueled by RNG, (100% by 2026)

Continue implementing emissions reduction plans to **reduce GHG emissions by 42% by 2032**



- 11- Collection companies
- 11- Transfer Stations
- 4- Renewable Energy Plants
- 5- Landfills
- 3- Recycling Centers

**WMNY- 2,000 employees**



## Landfills



- 4 MSW landfills
- Approx. 30 years of site-life remaining
- 25 MSW, Double Composite lined Landfills in NYS

- HA- 70's, 3<sup>rd</sup> Largest in NYS, 3,500 tons/day, 1.4M tons/yr with AOC
- MS- 90's, Public/Private MC, 1,945 tons/day, 835k tons/yr, City of Roc
- Greenridge, Approx. 275,000 tons/yr
- Chaffee- Approx. 575,000 tons/yr, City of Buffalo, 12 years

CONFIDENTIAL AND PROPRIETARY INFORMATION OF WWM



# WMNY Monroe County

1 Recycling Center

2 Collection Companies

1 Ecopark Facility

2 LFG to Electric Renewable Energy Facilities

2 Landfills

1 Organics and Yard Waste Compositing Operation

350+ employees

Monroe County Recycling Center

Rochester Hauling Company

Mill Seat Landfill and Power Plant



Webster Collection Satellite

High Acres Landfill and Recycling Center and Power Plant

Ecopark

 RECYCLING, INCLUDING SINGLE-STREAM	 RENEWABLE/ALTERNATIVE ENERGY	 ORGANICS COMPOSTING/RECYCLING SOLUTIONS	 HAZARDOUS WASTE/REMEDIAION SERVICES	 ELECTRONICS RECYCLING	 RESIDENTIAL AND COMMERCIAL WASTE/RECYCLING COLLECTION
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# High Acres Landfill & Recycling Center Background

- ▶ High Acres Landfill is a privately-owned landfill, a division of Waste Management
- ▶ Established in 1972, it is located on approximately 1,200 acres on the eastern edge of Monroe County in the town of Perinton and crosses over the western border of Wayne County in the town of Macedon
- ▶ Part of the Perinton/Macedon community since 1972
- ▶ Highly engineered, permitted, regulated non-hazardous facility
- ▶ Landfill permit 320 acres
- ▶ 3,500 tons per day- Permitted Capacity 1.4M tons/yr
- ▶ 1 of 25 NYSDEC permitted facilities
- ▶ Remaining Projected Site Life 30+years (2054)



# High Acres Landfill & Recycling Campus Overview

- ▶ Provides numerous community and financial benefits
- ▶ Organics Composting -500 tons/yr
  - ▶ St. John Fisher, U of R, Nazareth
- ▶ Yard Waste Composting - 15,000 tons/yr
- ▶ 9.6-MW Onsite Renewable Energy Facility
  - ▶ 10,000 homes powered by facility
- ▶ 250 Acres Award Winning Nature Area includes 4 miles of hiking trails
  - ▶ RIT/U of R Outdoor Classroom
  - ▶ Wildlife Habitat Council Certifications
- ▶ First Responders and Law Enforcement Training Facilities (Fairport and Egypt FD, Macedon and Fairport PD)
- ▶ Residential Drop-off Facility
- ▶ High Acres Sports Complex for local youth sports
- ▶ Falcons- gull control



# High Acres Facility

# Rail at High Acres

- **WM operates a rail-based system at several transfer facilities that safely, efficiently, and reliably transport waste to High Acres for disposal**
- **2015 - High Acres begins accepting Municipal Solid Waste (MSW) by Rail from 5 boroughs of NYC**
- **2024 - High Acres continues to accept MSW via Rail (approx.: 535,000 tons /year) (Avg. 1,700 tons/day)**
- **8 WM landfills nationwide served by rail – future of waste transportation**





# Rail Logistics

## Off-site Transfer Station

- Source of materials being managed
- Screening of materials
- Loading and sealing of containers
- Weighing and staging of containers for transport

## CSX

- Loaded sealed containers are transported from transfer station to High Acres by Rail

## On-Site High Acres

- Staging Cars/Containers
- Offloading containers
- Tipping Containers/Screening of materials
- Staging of empty containers/cars for return transport
- Seasonal Rail Can heating stations

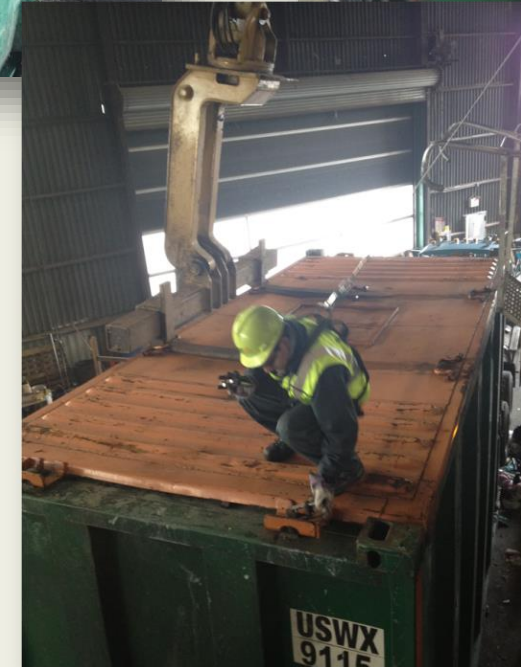
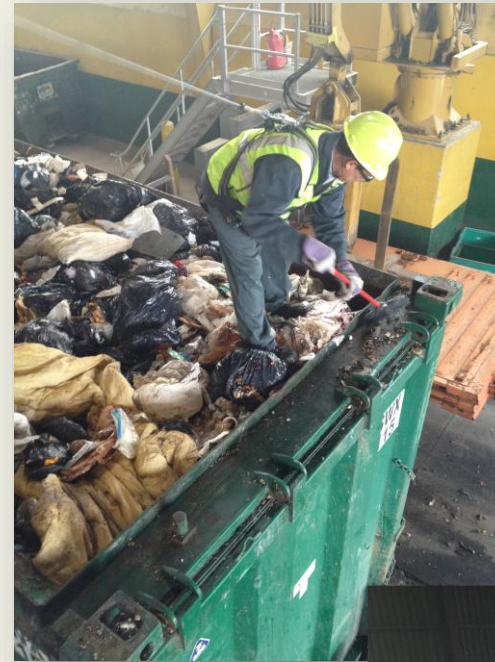
## CSX

- Empty containers are transported from High Acres to off-site transfer Station by Rail



# Preparation of Containers at Transfer Station

- Specially designed containers:
  - Seals on base and joints of doors to prevent any leakage of liquids or odors
  - Fixed covers used to prevent infiltration of water or release of odors
- Preparation of containers includes:
  - Inspection/cleaning of excess waste
  - Covers are placed and sealed on containers
  - Exterior of containers and rail cars completely cleaned of any debris



# Placement of Containers on Train for Delivery

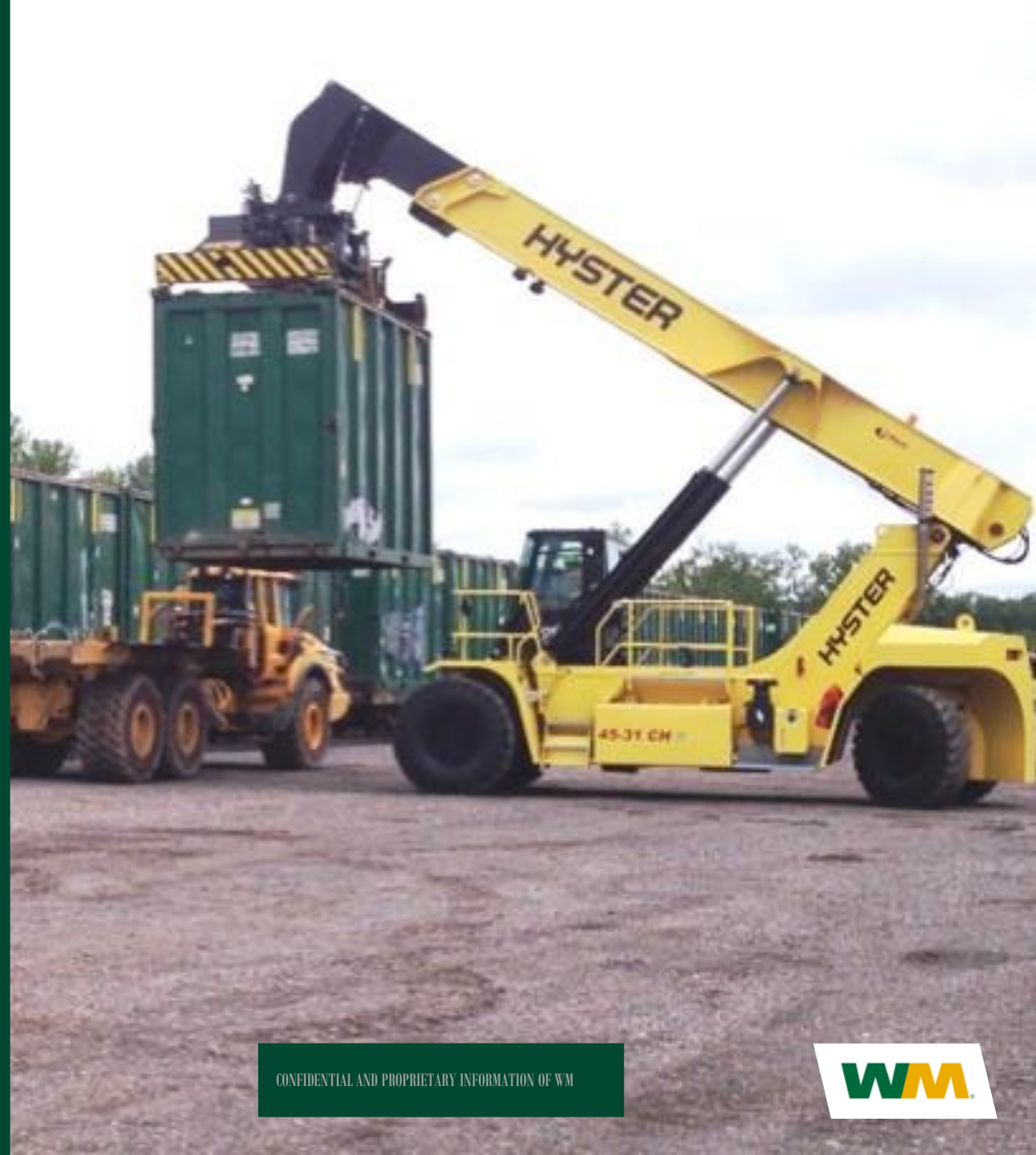
- Clean, sealed containers are placed on rail cars at off-site transfer station
  - Cleaned rail cars with sealed containers are moved to rail yard for train assembly
  - Fully containerized system – No litter, controlled odors, & no contact with surface water
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- Assembled train departs from the transfer station to High Acres
  - Containers are unloaded from rail cars using a Reach Stacker and placed on off-road trucks for transport to working face.



# Rail Benefits

- Moving freight by train instead of truck reduces greenhouse gas emissions by up to 75%
- Each 40-car train removes about 150 long-haul trucks from the road
- Freight Trains are 4x more fuel-efficient than long-haul trucks
- Rail transportation reduces congestion on streets/highways making the roads a safer place
- Consistent and reliable deliveries allow for operational efficiency
- Permitted waste capacity, types of materials accepted, and hours of operation all remain the same with the implementation of the rail facility

**Rail operations are a cleaner, greener method of waste transportation.**

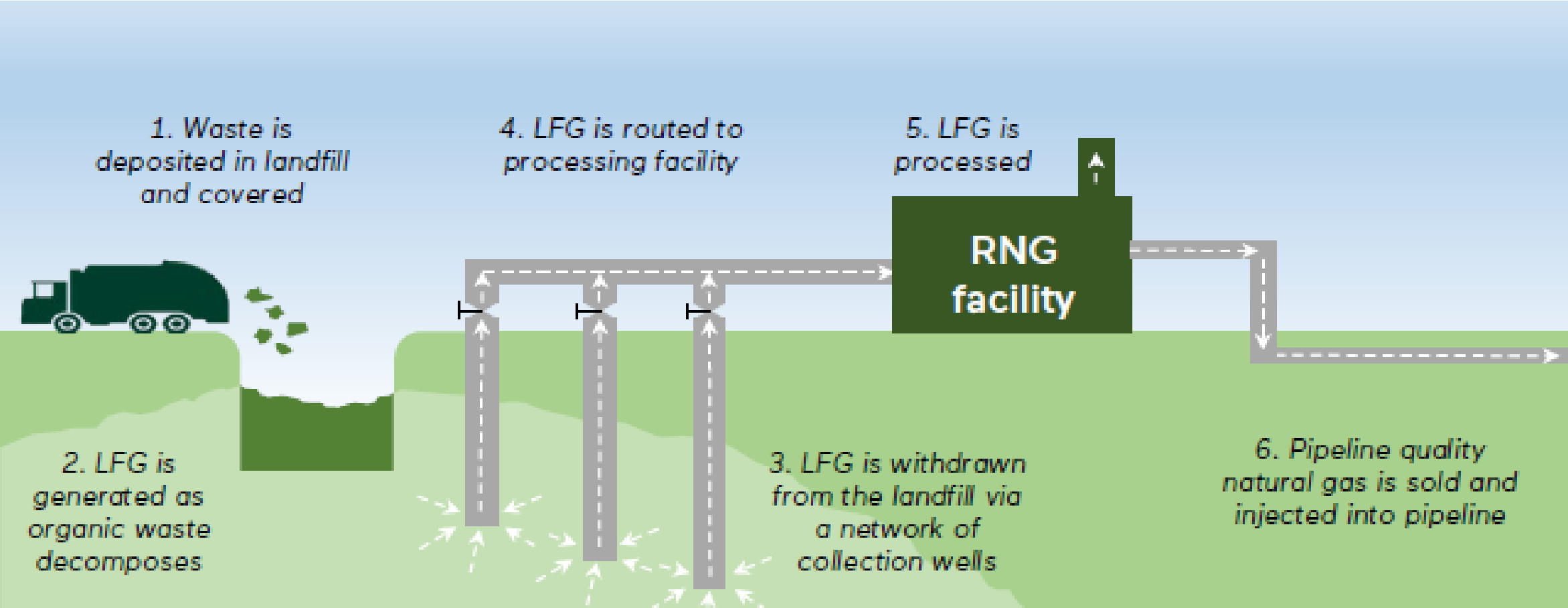


# Renewable Energy

- **Current- 9.6MW LFG to Electric Powerplant**
- **Future- to construct a state-of-the-art RNG (Renewable Natural Gas) facility, in the Town of Macedon, on HALF property. Reduce the current combustion of landfill gases on-site by converting LFG to RNG which is pipeline-quality gas**
- **Process up to 8,000 SCFM of LFG, equivalent to 2 million MMBtu output of Renewable Natural Gas (RNG) delivered to the pipeline, serve heating needs of over 30,000 NYS households**
- ***Greenhouse gas emissions avoidance and reduction of more than 100,000 tons/year***
- ***Avoids approx. 2 million tons of greenhouse gas emissions over 20 years***



# Renewable Energy (cont.)



- Projected to handle landfill gas for the remaining lifespan of the High Acres Facility
- Nationally, 55% of WM's fleet is fueled by RNG, 100% by 2026



# SKYLINE RENEWABLE NATURAL GAS FACILITY

WMA

# Thank you

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