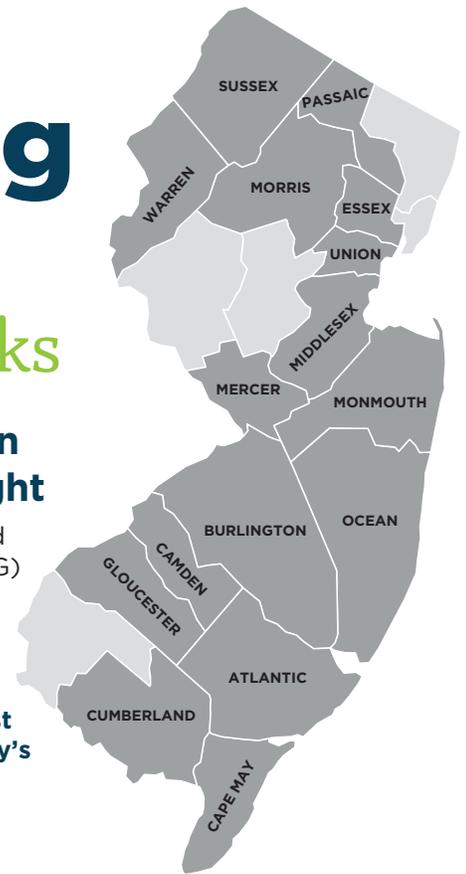




# Cleaning the Air and Decarbonizing New Jersey with CNG Refuse Trucks



## Investing in What's Right

**550** compressed natural gas (CNG) powered refuse trucks operate across the state, **currently servicing at least 16 of New Jersey's 21 counties**

New Jersey refuse haulers are voluntarily investing in alternative fuel vehicle technology, drastically reducing criteria pollutants and greenhouse gas emissions to clean the air and decarbonize their fleets.

Today's natural gas-fueled waste and recycling collection and disposal vehicles virtually eliminate NOx and particulate matter emissions and - when fueled with biomethane (RNG) collected above ground - can offer a net-zero carbon collection result.

## Waste to Wheels

CNG refuse trucks can be fueled by the very waste they collect for a carbon-free result.



Biomethane, or renewable natural gas (RNG), is created by capturing methane emissions from landfills, wastewater treatment plants, and other waste streams.



Because RNG removes natural emissions from the atmosphere and replaces dirty fuels, it is the only motor fuel capable of being carbon-negative.



RNG use can reduce transportation GHG emissions by more than 200%.



## Investments to Date in Clean Natural Gas Refuse Trucks

**76%** of New Jersey counties utilize natural gas refuse trucks

**\$200 million** in investment to support clean air refuse collection in the State of New Jersey

Note: Figure includes purchase of 550 natural gas refuse vehicles at an estimated cost of \$300,000/unit (\$165,000,000 total) plus construction of 18 refueling stations to support them at a total cost of \$35,000,000 (individual station costs between \$1,500,000 and \$3,000,000 depending on fleet need).



Clean the air and decarbonize the state's refuse collection affordably and immediately with natural gas vehicles fueled with RNG. Learn more at [NGVAmerica.org](http://NGVAmerica.org).

# NGVAMERICA

Natural Gas Vehicles for America

# Cleaning the Air and Decarbonizing New Jersey

## with CNG Refuse Trucks



### Achieve Carbon-Free Collection and Eliminate More Emissions Now with RNG

Refuse collection using ultra-low-NOx natural gas trucks fueled with renewable natural gas (RNG) reduces more criteria pollutant (NOx) and greenhouse gas (GHG) emissions than collection using a battery electric alternative:

#### CNG: The Most Cost-Effective and Immediate Solution



CNG Refuse Truck		Battery Electric Refuse Truck	
Total Cost	\$335,000	Total Cost	\$650,000*
Payload	10 tons, Comparable to Diesel	Payload	Up to 5 tons, 50% less than Diesel
Cost per ton of NOx reduced	\$24,842 LFG**	Cost per ton of NOx reduced	\$36,058
Cost per ton of GHGs reduced	\$33 LFG**	Cost per ton of GHGs reduced	\$381
<b>Sector Wide*** Transition Incremental Cost</b>	<b>\$350 million</b>	<b>Sector Wide*** Transition Incremental Cost</b>	<b>\$3.5-4.2 billion</b>

	Renewable Natural GAS	Battery Electric
Criteria Pollutants	14,000 tons of NOx reduced	9,700 tons of NOx reduced
Greenhouse Gases	10.6 million tons of GHG reduced	9.2 million tons of GHG reduced

Note: Figures above based on conversion of the entire state fleet of 10,000 refuse trucks; tabulated using U.S. DOE Argonne National Laboratory's AFLEET Tool. Figures based on vehicle lifetime emissions (12-year lifecycle) compared to diesel refuse truck fleet.

**Get More Clean Refuse Trucks on the Road Now with Natural Gas**

\*Note that costly battery electric refuse trucks are still in development. Those currently in service are for demonstration purposes only. Alternatively, CNG refuse trucks are deployable, scalable, and affordable now.  
 \*\*LFG = RNG produced from landfill gas  
 \*\*\* Incremental vehicle costs only (over diesel incumbent) to convert entire state fleet of 10,000 refuse trucks.



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