Landfill gas (LFG) is produced naturally when organic material decomposes in landfills. LFG consists of 45 to 55 percent methane, with the balance being primarily carbon dioxide, nitrogen, oxygen and other trace

constituents. Methane, а potent greenhouse gas (GHG) that traps heat in the atmosphere, is also the primary component of fossil derived natural gas. Through LFG be treatment, can upgraded into а fuel substitute for fossil derived called natural gas renewable natural gas (RNG) with a methane content greater than 95 percent. Unlike fossil derived natural comes from RNG gas, renewable sources (e.g., waste in landfills, livestock manure, and organic waste) and does not contain heavy hydrocarbons. RNG has many end uses, including as vehicle



fuel, for heating or to generate electricity.

Renewable natural gas is an ultra-low carbon transportation fuel and renewable energy resource that is changing our nation's energy landscape.

RNG provides many local and environmental benefits:

Waste Transformed. Domestic. Abundant. Versatile. Affordable. Renewable. Clean. Ultra Low Carbon. Fuel. Heat. Power. • Waste Transformed. Recycling what was once wasted for beneficial use.

- **Domestic. Abundant**. Local resource from landfills, farms, and wastewater treatment plants.
- Versatile. Affordable. RNG can replace natural gas for use in homes, businesses, and vehicles.
- **Renewable. Clean. Jobs**. Leading edge technology adding local construction and operations jobs
- Ultra Low Carbon. As an alternative vehicle fuel, RNG can reduce gasoline and diesel greenhouse gas emissions by 90%
- **Fuel. Heat. Power**. RNG can fuel cars, busses and trucks or heat homes or supply power plants.

Energy Power Partners and Brevard County are partnering to construct up to a 4,000 cubic feet per minute landfill gas-to-energy system at the Brevard County Landfill, located in Cocoa, FL. The landfill will provide up to 2.9 million cubic feet of methane gas daily from the facility as renewable natural gas or RNG. RNG is a low carbon, alternative fuel that can be used in vehicles, homes, businesses, or power plants.

RNG will be sent to the gas utility by a short pipeline to a connection point near Route 95, for transportation to the ultimate users of the RNG. Brevard County operates the landfill and the gas collection system while EPP will operate the RNG processing facility.

If used as a substitute for truck diesel fuel, this RNG facility prevents the equivalent of 49,500 tons of carbon dioxide emissions each year. According to the EPA, the reduction of emissions is equivalent to any one of these annual environmental benefits:

- Removing 9,700 gasoline cars from the road.
- Planting 53,100 acres of forest.
- 90% reduction in NOx emissions
- Not consuming 4.4 million gallons of diesel fuel
- Charging 5.4 billion cell phones







Location	Cocoa, FL
Operational	2023
Equipment	Selexol and Cryogenic
Capacity	Up to 4000 cfm or 2600 mmbtu/day
Input	Landfill gas
Output	Renewable Natural Gas





Data Sources: EPA, EDL, Clean Energy

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RNG Facility









Renewable Investments With Sustainable Results

Process Flow Diagram – RNG Plant

ENERGY POWER PARTNERS BREVARD ENERGY LLC – BREVARD COUNTY FL PROPOSED RNG PLANT PROCESS FLOW DIAGRAM (PRELIMINARY)

