

Biogas Powered Data Center Microgrids



United States / North America

PROJECT DESCRIPTION

Project Pleiades, a collaboration between Vespene Energy, Mainspring Energy, and Bridge to Renewables (BTR), supports deep decarbonization across the solid waste and transportation sectors by using energy created from landfill biogas to charge electric vehicles.

In February 2024, Vespene Energy announced that they have been invited by the U.S. Department of Energy to submit a Part II application for a loan guarantee through the Loan Programs Office's Title 17 Clean Energy Financing Program for \$420 million to support the development of distributed biogas to electricity plants at 50 municipal landfills in 21 states.



ANTICIPATED RESULTS

- Through the capture and utilization of methane, the main component of biogas, Project Pleiades will generate 80 MW of dispatchable baseload renewable electricity for use in EV charging.
- The project will be carbon-negative – achieving a net emissions reduction of over 1 million metric tons of carbon dioxide equivalent per year in aggregate across all 50 landfills.
- The biogas captured by Vespene will also generate revenue for participating landfills, monetizing what is otherwise a liability for landfill operators.

PARTNERS INVOLVED IN PROJECT

- Vespene Energy
- Mainspring Energy
- Bridge to Renewables (BTR)

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