Biogas Project Profile

Village of Ridgewood Biogas – Renewable Energy Project
Ridgewood, NJ

Renewable Energy System

Renewable Energy System Owner: Ridgewood Green RME, LLC
Host Utility: Village of Ridgewood
Developer: Natural Systems Utilities and Middlesex Water Company
Contact: Don Rodgers, Natural Systems Utilities, 908-431-7009, drodgers@naturalsystemsutilities.com

Goal: Enhance anaerobic digesters at a municipal wastewater treatment plant to produce an amount of renewable energy that is equivalent to up to 100% of the power demand of the plant.

Impetus: Improve affordability, resiliency and sustainability of wastewater treatment operations for the Village of Ridgewood.

Parties: Financed through a public private partnership between the Village of Ridgewood and Ridgewood Green RME (RGRME) that provided the merchant waste receiving facilities, biogas conditioning and combined heat and power equipment at no capital cost to the Village of Ridgewood. RGRME recovers the investment by selling power to the Village of Ridgewood through a power-purchase agreement.

Ridgewood, NJ

Organizations involved: *Natural Systems Utilities*, Middlesex Water Company, American Refining and Biochemical, Inc., Village of Ridgewood, NJ, HDR Hydroqual Inc.*, Bio-Organic Catalyst, Inc.*

*ABC member

Revised 4/16/14
See more biogas project profiles: americanbiogascouncil.org

Inputs and Outputs

Biogas production:	3,876 CFH – 100% used for energy generation
Feedstock(s):	Municipal wastewater biosolids, brown grease (Fats-Oils-Grease) and septage. Treatment plant digesters retrofitted for codigestion
End use:	CHP – 240kW electric and 1.50 MMBtu/hr thermal energy
Additional byproduct(s):	none

Finances, Beneficiaries, and Expansion

Project financing:	100% of capital required was financed by Ridgewood Green RME
Customer:	Municipal utility (Village of Ridgewood Dept. of Public Works)
Environmental and economic beneficiary:	Municipality – Village of Ridgewood (reduced electric costs, reduced sludge hauling costs, share in tipping fee revenues).

Long term plans?   Potentially upgrade to receive additional feedstocks.