American biogas Council

Biogas Project Profile

Michigan State University
South Campus Anaerobic Digester
East Lansing, MI

Owner: Michigan State University
Developer: Anaergia
Contact: Dana Kirk, 517-432-6530, kirkdana@msu.edu

This project was developed to address the Universities goals toward improved sustainability and increased use of renewable energy. The goals of the project are to generate approximately 3,000 MWh/yr, avoid landfilling or aerobically treating close to 10,000 ton/yr of organic waste and have a project that is financially viable.

In addition, the South Campus digester will also provide additional teaching, research and outreach opportunities.

Organizations involved: *Michigan State University, UTS Residual Processing*, Anaergia*, 2G Cenergy*, Wieland Davco Corporation*

**ABC member*

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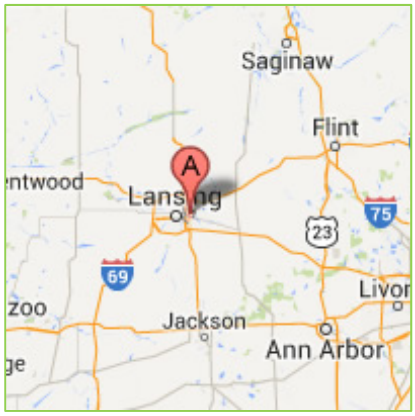
See more biogas project profiles: americanbiogascouncil.org



East Lansing, MI

Inputs and Outputs

Biogas production:	Currently producing about 90 SCFM, with a design goal of 120 SCFM.
Feedstock(s):	Manure 7,000 ton/ yr Food processing waste 4,000 ton/yr FOG 4,000 ton/yr Cafeteria food waste 500 ton/yr
End use:	Biogas is used to power a 400 kW combined heat and power unit. Upgrading biogas to CNG for the campus vehicle fleet is a future consideration.
Additional byproduct(s):	Compost & liquid fertilizer for campus and nearby agricultural land

Finances, Beneficiaries, and Expansion

Project financing:	Internal
Customer:	Electricity produced is used to power 8 to 10 campus facilities. Thermal energy is used to heat the digester, solid separation facility and a near by research building.
Environmental and economic beneficiary:	Michigan State University
Long term plans?	We are looking at expanding the digester capacity as well as fuel conversion to CNN for the campus vehicle fleet. In addition we are seeking additional feedstock and evaluating nutrient separation technologies to enhance fertilizer values.