# Biogas State Profile: Michigan

Michigan ranks #**4** out of 50 states for its biogas production potential of **189.1 billion ft$^3$/yr.**

## Biogas Capture Systems in Michigan


## A full build-out of Michigan's biogas industry offers these benefits:

### Energy Benefits

Up to **98.7 billion ft$^3$** of methane (renewable natural gas) could be produced each year for energy, heat, fuel, and more!

or **12.8 billion kWh** equivalent to the annual electricity usage of **1,189,561 households**

or **10,134 million kWh** electricity and **3,947 million BTU/h** heat (engine)

or **16,950 million kWh** electricity and **28,251 million kWh** heat (fuel cell)

or **1.5 GW** Nameplate Capacity equivalent to **29 U.S. power stations** (avg. size)

or **102.3 million MMBtu/yr** equivalent to energy consumption of **1,332,096 homes**

or **851.3 million gallons** of GGE, enough to fuel **482,318 delivery trucks** for one year

### Economic Benefits

**$14.7 billion**
in capital investment

**31,452**
**construction jobs**
to build the systems

**1,628**
**long-term jobs**
to operate the systems

### Climate Benefits

Equivalent to the GHG emissions avoided by taking **126,142 cars off the road**

Equivalent to the carbon sequestered by **541,149 acres of forest**

Equivalent emission reductions to **3,820 U.S. football fields of solar panels**

Equivalent to the GHG emissions avoided by running **162 U.S. wind turbines** (avg. size) for a year

### Recycling Benefits

**6,294,447 tons/yr** of dairy manure, which could produce **10.3 billion ft$^3$** of biogas each year

**2,042,428 tons/yr** of swine manure, which could produce **1.35 billion ft$^3$** of biogas each year

**16,401 tons/yr** of poultry manure, which could produce **0.8 billion ft$^3$** of biogas each year

**2,270,000 tons/yr** of food waste, which could produce **5.9 billion ft$^3$** of biogas each year

**499 million gallons/day** of wastewater, which could produce **2.8 billion ft$^3$** of biogas each year