

Biogas State Profile: Minnesota



Minnesota ranks #25 out of 50 states for its biogas production potential of 43.0 billion ft³/yr.



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

Energy Benefits

Up to **25.6 billion ft**³ of methane (renewable natural gas) could be produced each year for energy, heat, fuel, and more!

- or 3.1 billion kWh equivalent to the annual electricity usage of 290,144 households
- or **2,303 million kWh** electricity and **897 million BTU/h** heat (engine)
- or 3,851 million kWh electricity and 6,418 million kWh heat (fuel cell)
- or **0.4 GW** Nameplate Capacity equivalent to **7 U.S. power stations** (avg. size)
- or 26.5 million MMBtu/yr equivalent to energy consumption of 344,758 homes
- or 220.3 million gallons of GGE, enough to fuel 124,828 delivery trucks for one year

Economic Benefits	Climate Benefits	Recycling Benefits
\$29.8 billion in capital investment	Equivalent to the GHG emissions avoided by taking 32,647 cars off the road	5,233,636 tons/yr of dairy manure, which could produce 8.5 billion ft ³ of biogas each year
79,848 construction jobs to build the systems	Equivalent to the carbon sequestered by 140,054 acres of forest	15,070,511 tons/yr of swine manure, which could produce 9.99 billion ft ³ of biogas each year
3,395 long-term jobs to operate the systems	Equivalent emission reductions to 989 U.S. football fields of solar panels Equivalent to the GHG emissions avoided by running 42 U.S. wind turbines (avg. size) for a year	 55,927 tons/yr of poultry manure, which could produce 2.6 billion ft³ of biogas each year 1,540,000 tons/yr of food waste, which could produce 4.0 billion ft³ of biogas each year 273 million gallons/day of wastewater, which could produce 1.5 billion ft³ of biogas each year