Biogas State Profile: North Dakota

North Dakota ranks **#48** out of 50 states for its biogas production potential of **3.5 billion ft^3/yr.**

Biogas Capture Systems in North Dakota

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

Energy Benefits

Up to **2.1 billion ft^3** of methane (renewable natural gas) could be produced each year for energy, heat, fuel, and more!

or **0.3 billion kWh** equivalent to the annual electricity usage of **24,700 households**

or **189 million kWh** electricity and **74 million BTU/h** heat (engine)

or **316 million kWh** electricity and **527 million kWh** heat (fuel cell)

or **0.03 GW** Nameplate Capacity equivalent to **<1 U.S. power stations** (avg. size)

or **2.1 million MMBtu/yr** equivalent to energy consumption of **27,876 homes**

or **17.8 million gallons** of GGE, enough to fuel **10,093 delivery trucks** for one year

Economic Benefits

$1.8 billion
in capital investment

3,499
construction jobs
to build the systems

193
long-term jobs
to operate the systems

Climate Benefits

Equivalent to the GHG emissions avoided by taking **2,640 cars off the road**

Equivalent to the carbon sequestered by **11,324 acres of forest**

Equivalent emission reductions to **80 U.S. football fields of solar panels**

Equivalent to the GHG emissions avoided by running **3 U.S. wind turbines** (avg. size) for a year

Recycling Benefits

237,794 tons/yr of dairy manure, which could produce **0.4 billion ft^3** of biogas each year

271,876 tons/yr of swine manure, which could produce **0.18 billion ft^3** of biogas each year

405,000 tons/yr of food waste, which could produce **1.0 billion ft^3** of biogas each year

114 million gallons/day of wastewater, which could produce **0.5 billion ft^3** of biogas each year