Biogas State Profile: Kentucky

Kentucky ranks **#23** out of 50 states for its biogas production potential of **47.7 billion ft^3/yr.**

Biogas Capture Systems in Kentucky

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

Energy Benefits

Up to **26.5 billion ft^3** of methane (renewable natural gas) could be produced each year for energy, heat, fuel, and more!

or **3.5 billion kWh** equivalent to the annual electricity usage of **321,173 households**

or **2,554 million kWh** electricity and **995 million BTU/h** heat (engine)

or **4,271 million kWh** electricity and **7,119 million kWh** heat (fuel cell)

or **0.4 GW** Nameplate Capacity equivalent to **8 U.S. power stations** (avg. size)

or **27.4 million MMBtu/yr** equivalent to energy consumption of **357,070 homes**

or **228.2 million gallons** of GGE, enough to fuel **129,286 delivery trucks** for one year

Economic Benefits

$5.1 billion
in capital investment

8,919
construction jobs
to build the systems

557
long-term jobs
to operate the systems

Climate Benefits

Equivalent to the GHG emissions avoided by taking **33,813 cars off the road**

Equivalent to the carbon sequestered by **145,056 acres of forest**

Equivalent emission reductions to **1,024 U.S. football fields of solar panels**

Equivalent to the GHG emissions avoided by running **43 U.S. wind turbines** (avg. size) for a year

Recycling Benefits

230,333 tons/yr of dairy manure, which could produce **0.4 billion ft^3** of biogas each year

753,745 tons/yr of swine manure, which could produce **0.50 billion ft^3** of biogas each year

348,372 tons/yr of poultry manure, which could produce **16.2 billion ft^3** of biogas each year

766,000 tons/yr of food waste, which could produce **2.0 billion ft^3** of biogas each year

525 million gallons/day of wastewater, which could produce **2.1 billion ft^3** of biogas each year