Biogas State Profile: Virginia

Virginia ranks #7 out of 50 states for its biogas production potential of **145.9 billion ft^3/yr.**

Biogas Capture Systems in Virginia

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

Energy Benefits

Up to **76.8 billion ft^3** of methane (renewable natural gas) could be produced each year for energy, heat, fuel, and more!

or **10.2 billion kWh** equivalent to the annual electricity usage of **943,602 households**

or **7,821 million kWh** electricity and **3,046 million BTU/h** heat (engine)

or **13,080 million kWh** electricity and **21,801 million kWh** heat (fuel cell)

or **1.2 GW** Nameplate Capacity equivalent to **23 U.S. power stations** (avg. size)

or **79.6 million MMBtu/yr** equivalent to energy consumption of **1,036,570 homes**

or **662.4 million gallons** of GGE, enough to fuel **375,316 delivery trucks** for one year

Economic Benefits

$7.3 billion
in capital investment

13,164
construction jobs
to build the systems

776
long-term jobs
to operate the systems

Climate Benefits

Equivalent to the GHG emissions avoided by taking **98,157 cars off the road**

Equivalent to the carbon sequestered by **421,095 acres of forest**

Equivalent emission reductions to **2,972 U.S. football fields of solar panels**

Equivalent to the GHG emissions avoided by running **126 U.S. wind turbines** (avg. size) for a year

Recycling Benefits

590,512 tons/yr of dairy manure, which could produce **1.0 billion ft^3** of biogas each year

321,590 tons/yr of swine manure, which could produce **0.21 billion ft^3** of biogas each year

399,605 tons/yr of poultry manure, which could produce **18.6 billion ft^3** of biogas each year

1,520,000 tons/yr of food waste, which could produce **3.9 billion ft^3** of biogas each year

1,224 million gallons/day of wastewater, which could produce **3.9 billion ft^3** of biogas each year