

## **Biogas State Profile: Kansas**



Kansas ranks #32 out of 50 states for its biogas production potential of 30.0 billion ft<sup>3</sup>/yr.

## **Biogas Capture Systems in Kansas**



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

## **Energy Benefits**

Up to **16.9 billion ft**<sup>3</sup> of methane (renewable natural gas) could be produced each year for energy, heat, fuel, and more!

- or 2.1 billion kWh equivalent to the annual electricity usage of 193,368 households
- or 1,610 million kWh electricity and 627 million BTU/h heat (engine)
- or **2,693 million kWh** electricity and **4,488 million kWh** heat (fuel cell)
- or **0.2 GW** Nameplate Capacity equivalent to **5 U.S. power stations** (avg. size)
- or 17.5 million MMBtu/yr equivalent to energy consumption of 227,855 homes
- or 145.6 million gallons of GGE, enough to fuel 82,500 delivery trucks for one year

Economic Benefits	Climate Benefits	Recycling Benefits
\$5.4 billion in capital investment	Equivalent to the GHG emissions avoided by taking 21,577 cars off the road	<b>3,652,143 tons/yr</b> of dairy manure, which could produce <b>6.0 billion ft</b> <sup>3</sup> of biogas each year
11,190 construction jobs to build the systems	Equivalent to the carbon sequestered by 92,563 acres of forest	2,707,658 tons/yr of swine manure, which could produce 1.80 billion ft <sup>3</sup> of biogas each year
577 long-term jobs to operate the systems	Equivalent emission reductions to 653 U.S. football fields of solar panels  Equivalent to the GHG emissions avoided by running 28 U.S. wind turbines (avg. size) for a year	<ul> <li>523,000 tons/yr of food waste, which could produce 1.4 billion ft³ of biogas each year</li> <li>280 million gallons/day of wastewater, which could produce 1.1 billion ft³ of biogas each year</li> </ul>