



Hydrogen



Biogas



Flare Gas



Syngas



Nat Gas

Industry
Spotlight: **Biogas**

Turning Waste Streams
Into Reliable Power



From municipal wastewater to landfills, farms & food processing, biogas projects convert unavoidable waste streams into usable energy. Across the market, operators face the same challenge: maximizing value from variable fuel while keeping operations simple and reliable.

Aurelia's high-efficiency gas turbine technology helps biogas sites generate more electricity from the same fuel, reducing maintenance and improving lifecycle economics.



Industry Overview

Biogas is already a major source of dependable energy with significant room to grow. The American Biogas Council reports nearly 2,600 operational U.S. biogas capture systems with continued investment and expansion across sectors.

Variable Fuel

Staffing Shortages

Underutilized Gas

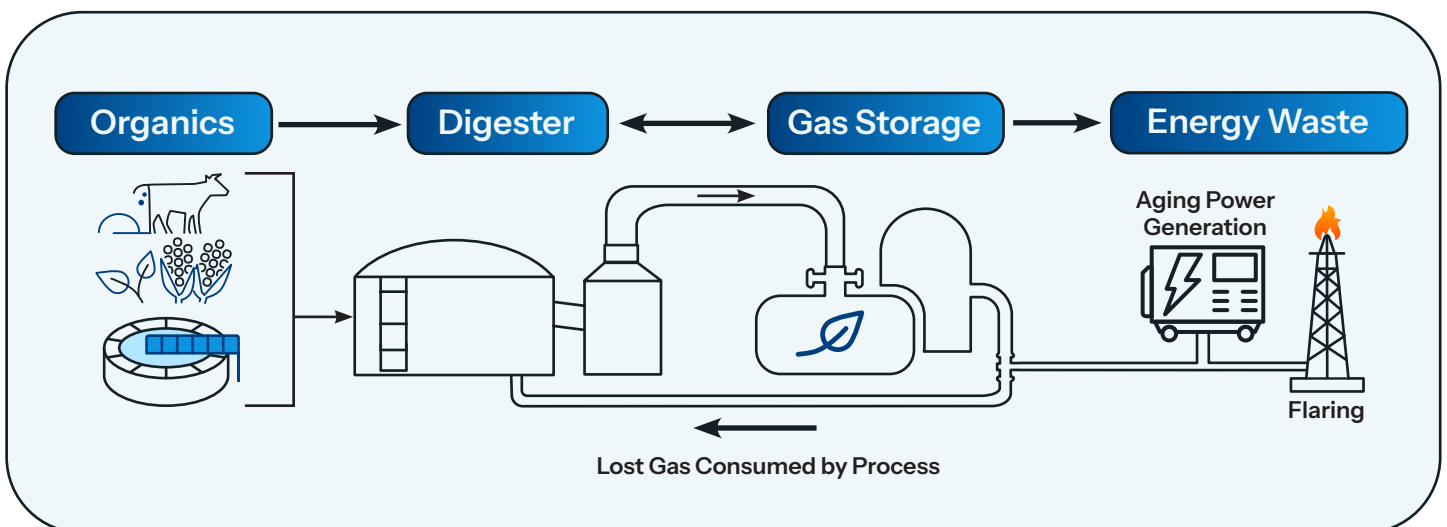
Variable Operating Conditions

Environmental Pressure

Economic Pressure

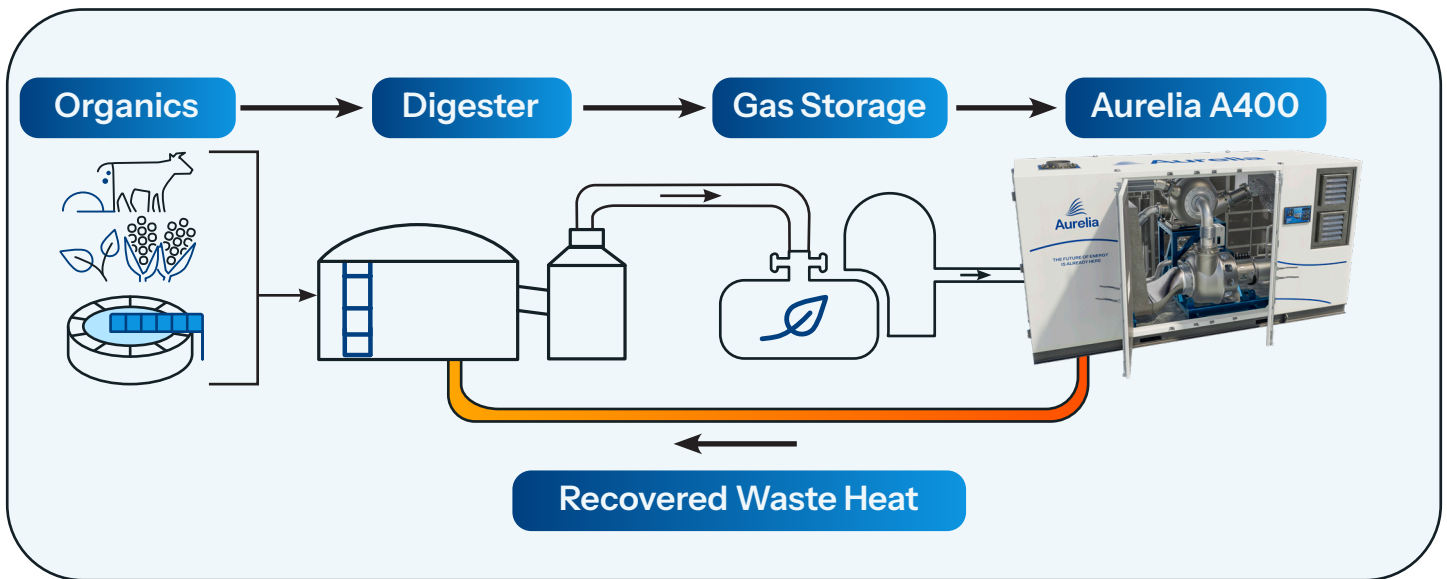
Power generation remains central to biogas value creation: American Biogas Council notes that in 2025, 52% of captured biogas was used to generate electricity and 44% was upgraded to RNG.

Current Biogas Production Methods





Aurelia Solution



The Aurelia Advantage: Flexible, Modular, and Efficient

40% Electrical Efficiency

Fuel Flexible

Low Emissions

Waste Heat Recovery

Maximizing the efficiency of biogas utilization is the key to long-term sustainability, both economically and environmentally. Utilizing waste heat and minimizing flaring keep our customers ahead of the curve and the competition.

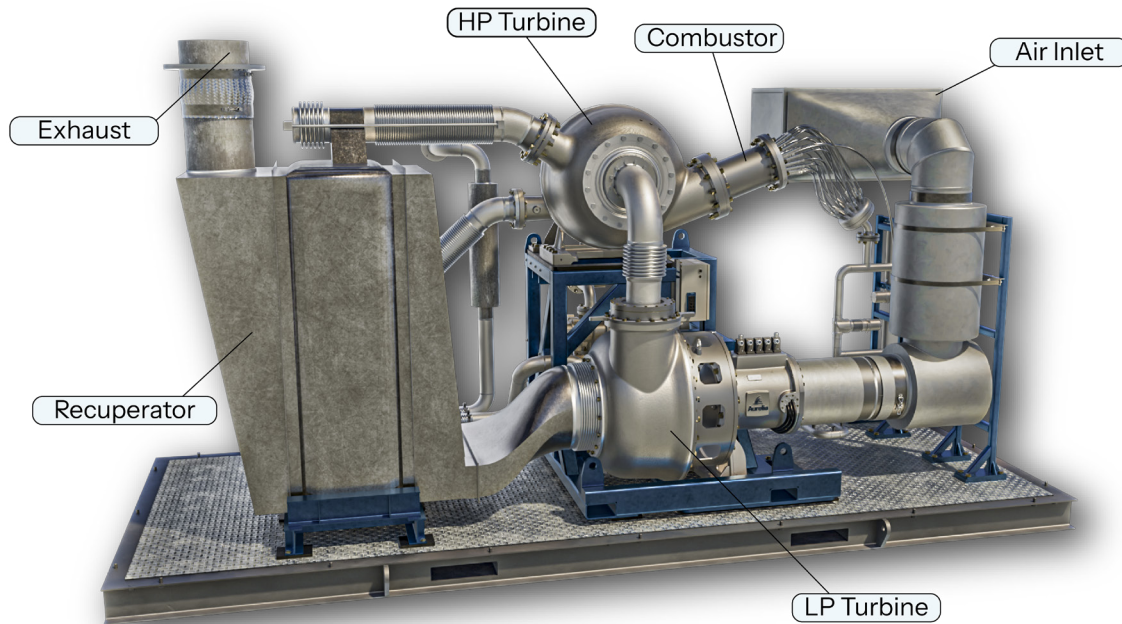
The Aurelia A400 and A800 power generation packages are built to handle current and future energy challenges through fuel flexibility, modular design, and ultra-high electrical efficiency.

Energy Independence

Reliable Power

Maximum Gas Utilization

Modular & Scalable



Electrical Performance

Electrical Efficiency	40.2%
Rated Power Output	400 kWe
Output Voltage	400/480 VAC
Output Frequency	50/60 Hz
Max Output Current (cos phi = 1)	577/481 A
Power Factor	Adjustable: 1 - 0.75
Electrical Connection	3 ph + N + PE
Grid Code	On request
Harmonic Distortion	<5%

Exhaust Characteristics

NOx Emissions at 15% O2 (ISO Conditions)	Nat Gas: <15 ppm-v Biogas, Flare & syngas: <30 ppm-v
CO emissions @ 15% O2 (ISO Conditions)	<65 ppm-v
Intercooler power / heat recovery	248 kW
EGT (Full Load)	302°F (150° C)
O2 Content	17.5 %
Exhaust Heat Recovery	160 kW

Environmental Limits

Operating Temperature	-4°- +104° F (-20°- +40° C)
Storage Temperature	-4°- +122° F (-20°- +50° C)
Operating Humidity	0 to 95% RH
Storage Humidity	0-95%, Non-corrosive, Non-condensing
Installation Environment	Indoor & Outdoor

Fuels

Due to the modular design, the combustion chamber is easily adjustable to meet the requirements of **natural gas, biogas, flare gas, syngas and hydrogen.**

LHV Range	2150 - 20,600 BTU/LB (5 - 48 MJ/kg)
Fuel Mass Flow	170 - 1,600 LB/HR (21 - 200 g/s)
Fuel Inlet Pressure	87 - 102 PSI (g) 600 - 700 kPa (g)
H2 Content	up to 50%
H2S Capability (with additional equip.)	up to 7%