



Project Highlight

Benson Valley Landfill Gas to RNG Plant, KY

AMERESCO 

Landfill Gas to RNG Plant to Reduce Over 27,000 Tons of CO₂ Emissions Per Year

Technology Type:

Landfill Gas to Energy (LFGTE) | Renewable Natural Gas | Design-Build | Own-Operate-Maintain

Annual Gross Nameplate Capacity

480,000+ Dekatherms

Capable of Processing Raw Landfill Gas

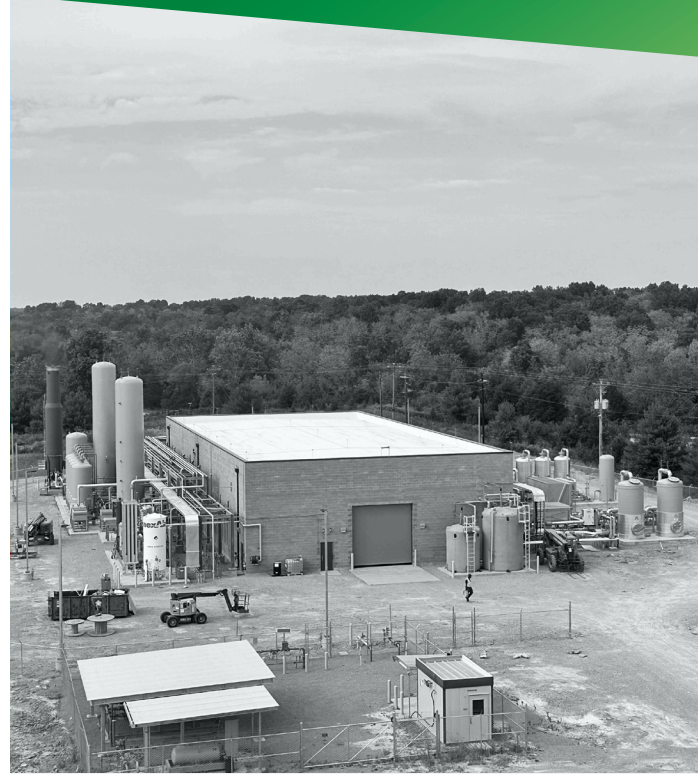
2,000 standard cubic feet per minute

Annual CO₂ Emissions Reduction

~27,000 metric tons

Carbon Sequestration Equivalency

~326,000 acres of forest planted



Summary

In partnership with Republic Services, Ameresco developed, operates and owns the Benson Valley Landfill Gas to Renewable Natural Gas (RNG) plant, a facility that serves the cities, counties and businesses of Central Kentucky. The Benson Valley RNG plant will provide clean energy resources to the regional economy, significantly reduce greenhouse gas emissions and will contribute to Republic Services' longstanding sustainability goal to beneficially reuse 50% more of their biogas by 2030.



Solution

As the eighth renewable energy project with Republic Services, Ameresco was the partner chosen to develop the landfill gas to RNG facility by converting biogas into a low-carbon fuel source. The facility achieved commercial operation in August 2023 – just over one year since the groundbreaking in June 2022 – and is capable of processing 2,000 scfm of raw landfill gas.



At Republic Services, our vision is to partner with customers to create a more sustainable world now and for future generations. Our long-standing partnership with Ameresco enables us to capture naturally occurring gas created by decomposing waste in our landfill and convert that gas into a low-carbon fuel source that reduces greenhouse gas emissions. The Benson Valley RNG facility is just another example of us living our values; we are Sustainability in Action.

Larson Richardson,
Area President, Republic Services



Benefits

In addition to ensuring that clean energy resources are available to the region it serves, the Benson Valley Landfill Gas to RNG plant is designed to provide the following benefits:

- Generate a dependable, dispatchable source of renewable energy
- Reduce an estimated 27,440 metric tons of CO₂ emissions per year
- Emissions equivalency of carbon sequestered by planting 325,899 acres of forests or 31 million gallons of gasoline not being combusted
- Advance Republic Services' sustainability goals

Ameresco's team of energy experts can assist you in identifying the solution that fits your needs.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please call **1-866-AMERESCO** or visit **ameresco.com**.

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