



Landfill Methane

Landfills are sources of methane emissions, a powerful greenhouse gas. Methane is created from anaerobic digestion of municipal solid waste in landfills. The gas can be captured and used, including to generate electricity.

QUICK FACTS

- In 2019, Georgia had 92 landfills totaling more than 495 Mt of waste.
- Out of Georgia's 25 operational landfills: 18 generate electricity, 4 use landfill gas directly, and the other 3 upgrade landfill gas to renewable natural gas.
- There is 66 MW of electricity capacity at the operational landfills in Georgia.
- There is potential for additional landfill gas projects in the state. The EPA's Landfill Methane Outreach Program shows there are 25 landfills categorized as "Future Potential" or "Candidate" for landfill gas-to-energy retrofitting in Georgia.

BEYOND CARBON

- This solution is cost-effective and can create jobs associated with the design, construction, and operation of energy recovery systems.
- These systems improve overall air quality when they capture landfill gas instead of emitting methane and other gases. Improved air quality has environmental and public health benefits.
- Air quality benefits are even greater if the captured gas displaces the use of fossil fuels to generate electricity.
- Issues to watch include impacts on localized air pollution, so we need to look carefully at the system design and the primary energy source.

ELECTRICITY

GEORGIA'S 2030 MEGATON OPPORTUNITY

We could reduce 1 Mt of CO₂e in Georgia by opening 4 typical landfill facilities with 5 MW gas-to-energy systems.

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