

Sand Valley Landfill Gas to Electricity Project

A Real Community Success Project

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leaders in clean energy



Energy Developments – Leaders in Remote and Clean Energy

Energy Developments, Inc. established the US clean energy business in 1998

US Corporate headquarters located in Nashville, Tennessee

Currently operating 94MW of Landfill Gas to Electricity in 8 projects across 5 States

Added over 30MW to the US business in the last 4 years

Energy Developments is the US operating subsidiary of Energy Development LTD. a global leader in Remote and Clean Energy

Energy Developments, LTD. companies operate 84 projects generating over 900 MW of electricity in 4 countries across 3 continents

Sand Valley LFGTE Project Partners



Leaders in Remote and Clean Energy



The Project

Generation Capacity

- 4.8 MW

Location

- Collinsville, Alabama

Project Developer/Owner

- Energy Development, Inc.

Landfill Owner

- Republic Services

Interconnecting Utility

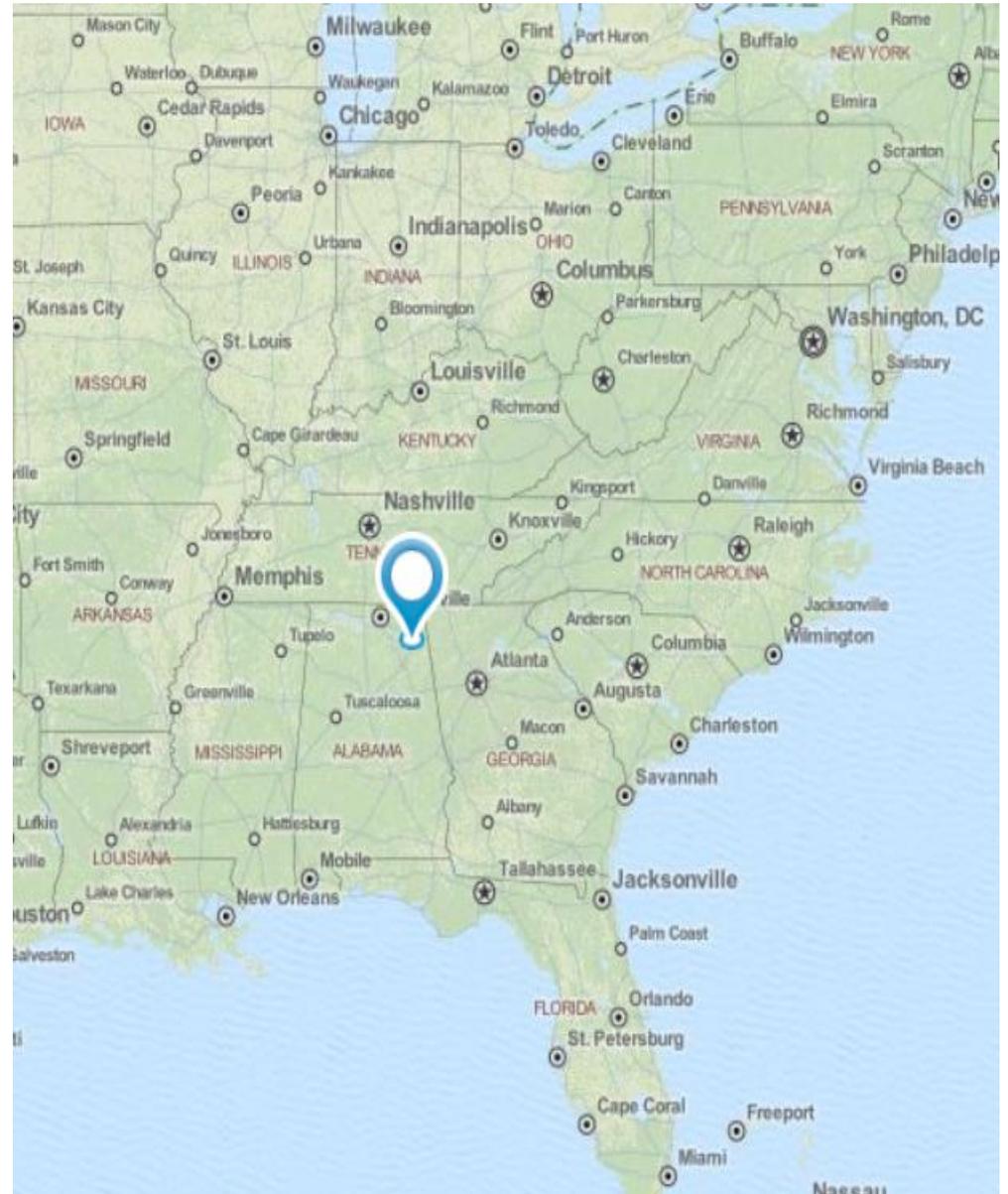
- Sand Mountain Electric Coop

Power Purchase Agreement

- Tennessee Valley Authority

General Contractor

- Industrial Power Systems





Project Support - The Landfill

- Landfill with limited gas collection system
 - Republic was in the process of expanding the gas collection system
 - Gas flows at the time were approximately 1200 SCFM
 - Gas flows at one point were projected to be 2200 SCFM after expansion of the gas system
 - Gas flows were ~ 1800 after the wellfield expansion
 - EDI installed 3 CAT 3520 engines
- Landfill Support Solutions
 - Low volume flare allowed for greater wellfield vacuum control
 - New blower skid provide additional coverage to collect maximum gas
 - Ongoing local site interaction to identify and correct wellfield and other issues



Project Support - Sand Mountain Electric Coop

- Sand Mountain Electric Coop
 - Serving 30,700 members in 4 counties in northeastern Alabama
 - Sand Mountain had no generation in their system
 - EDI's 4.8 MW generation exceeded the power demand of the local community
 - Sand Mountain Electric was skeptical
- Solution
 - Power generated from the project is sold to TVA under their;
“Renewable Standard Offer Contract”
 - Interconnection required a 9 mile dedicated feeder line
 - To make the final interconnection Sand Mountain Electric Coop had to cut off all power to the City of Collinsville, Alabama for approximately 3 hours

At this point the entire community became committed to the project



Project Support - DeKalb County Economic Development Authority

- Local Champion for the project
 - DeKalb Commissioners Approvals
 - DeKalb County Tax Abatement
 - Local building and siting permits
- State of Alabama Permitting
 - Air Permit
 - Annual Compliance Inspection
- Alabama Department of Revenue
 - Sales Tax Exemption
 - E Verify System
- Solution
 - DeKalb County Economic Development Authority
 - Provided introductions and guidance for all state and local agencies

Earth Day 2014 - Ribbon Cutting Day



Engine Room - Ready for the tour



6th graders from the local middle school



Our Partners and local officials





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www.EnergyDevelopments.com