



CASE STUDY

SAN ANTONIO WATER SYSTEM, TX

TECHNOLOGY TYPE

**BIOGAS
DESIGN/BUILD
OWN, OPERATE AND MAINTAIN
POWER PURCHASE AGREEMENT
WASTEWATER**

NATURAL GAS DELIVERED DAILY

900,000
CUBIC FT

BIOGAS PROCESSED DAILY

1.5
MILLION STANDARD CUBIC FT

RECYCLED WATER
DAILY COMMUNITY USE

115
MILLION GALLONS

ESTIMATED ANNUAL ROYALTIES:

\$200,000

SUMMARY

Located in Bexar County, TX, San Antonio Water Systems (SAWS) partnered with Ameresco under a Power Purchase Agreement to create a biogas project that was the first sustainable project of its kind in the nation.

SERVICES PROVIDED

Ameresco restructured SAWS to utilize all of the elements from the processing of waste-water and support a positive environmental outcome. The new system takes biogas generated during the sewage treatment process, captures it and then sells it through a commercial gas pipeline.

- Provide wholesale water supplies to several smaller utility systems
- 115 million gallons of high quality recycled water used daily by community
- Estimated annual royalty of \$200,000 received on sale of gas
- Plant capacity 4.8 MW

“SAWS is constantly improving its operations to become more sustainable... By reusing biogas instead of burning it off, we are helping protect the city’s air quality and developing a renewable energy source.”

Robert R. Puente
President/CEO, San Antonio Water Supply

CUSTOMER BENEFITS

The improvements made to SAWS complete a “recycling trifecta,” where they recycle or reuse almost all of the waste coming into Dos Rios. Over the 20 year term, the project will provide significant improvement to the environment around the SAWS Wastewater Treatment Plant through the major reduction of flared emissions at the site.

- At least 900,000 cubic feet of natural gas transferred to commercial pipeline
- 80% of biosolids remaining generate compost used to improve soil quality
- Process over 1.5 million standard cubic feet of natural gas per day
- Methane gas captured and sold commercially
- Utilize biogas as a green energy source
- Annual reduction of 19,739 tons of CO₂ equivalent of heating 4,689⁺ homes

For the full story, visit: ameresco.com

