

Contract Details

Contract Type:

Biogas; Power Purchase Agreement;
Design/Build; Own, Operate and
Maintain

Capacity:

4.8 MW

Estimated Royalties:

\$200,000 annually



First in sustainability, the SAWS biogas to energy plant completes a "recycling trifecta," and nearly all waste is recycled or reused.

Summary

Located in Bexar County, TX, San Antonio Water System (SAWS) partnered with Ameresco to create a biogas project that is the first sustainable project of its kind in the nation, taking biogas generated during the sewage treatment process and capturing and selling it through a commercial gas pipeline.

Customer Benefits

SAWS wanted to utilize all the elements from the processing of waste-water and support a positive environmental outcome. SAWS partnered with Ameresco to build the first sustainable project of its kind in the nation, taking biogas generated during the sewage treatment process and capturing and selling it through a commercial gas pipeline. This facility completes a "recycling trifecta," where they recycle or reuse almost all of the waste coming into Dos Rios.

Services Provided

San Antonio Water System (SAWS) serves approximately 1 million people in San Antonio and its surrounding towns. This population includes approximately 356,000 water customers and 399,000 wastewater customers. SAWS is a public utility owned by the City of San Antonio. It was created in May 1992 through the consolidation of three predecessor agencies.

Accolades

"SAWS is constantly improving its operations to become more sustainable, and this project is a sound investment for our environment and our community. By reusing biogas instead of burning it off, we are helping protect the city's air quality and developing a renewable energy resource."

- Robert R. Puente

President/CEO, San Antonio Water Supply

Environmental Benefits

Through SAWS' partnership with Ameresco, the city will have the following annual carbon reduction equivalents:

- the removal of 31,261 cars from the road
- the planting of 38,736 acres of trees
- the reduction of 19,739 tons of CO₂
- the heating of more than 4,689 average-size homes

The project helps reduce the need for energy from traditional power plants fueled by fossil fuels.

The citizens of San Antonio produce about 140,000 tons of biosolids each year. Treating these biosolids generates an average of 1.5 million cubic feet of untreated gas a day – that's enough gas to fill seven commercial blimps or 1,250 tanker trucks each day.

SAWS' Board of Trustees approved a truly innovative project that will beneficially use biogas, a by-product of the anaerobic digestion process from biosolids (containing 60% methane) as a green energy source.

Previously, SAWS burned off the gas using flares. Under this 20-year partnership, Ameresco will treat and transfer at least 900,000 cubic feet of gas to a nearby commercial gas pipeline, where they will sell it



The digesters and new equipment location.

SAN ANTONIO WATER SYSTEM (SAWS)



About San Antonio Water System (SAWS)

Since 1992, San Antonio Water System has provided leadership in managing and developing water resources in the San Antonio region. Water and wastewater services are provided to more than 1 million consumers in the San Antonio area.

Learn more at www.saws.org.

About Ameresco

Ameresco, Inc. (NYSE:AMRC) is one of the leading energy efficiency and renewable energy services providers. Our energy experts deliver long-term customer value, environmental stewardship, and sustainability through energy efficiency services, alternative energy, supply management, and innovative facility renewal all with practical financial solutions. Ameresco and its predecessors have constructed billions in projects throughout North America.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please visit www.ameresco.com.



SAWS burned off the methane produced as a by-product of the anaerobic digestion process from biosolids. Now, Ameresco treats the gas and transfers it into a commercial gas pipeline as a green energy source.

Services Provided (cont.)

on the open market. In return, SAWS receives a royalty on the sale of the gas, estimated at about \$200,000 a year – which helps to reduce the cost of SAWS' operations and keep rates affordable. SAWS is the first large wastewater utility to partner with a private-sector company, Ameresco, to actively sell biogas in the United States.

With the addition of the biogas facility, SAWS is recycling and reusing almost all of the waste coming into Dos Rios through its “recycling trifecta.” Eighty percent of biosolids – the solids remaining after liquid waste is removed – is used to generate compost. Finally, the third part of the trifecta is recycled water. About 115 million gallons a day of high-quality recycled water are used at the Riverwalk, golf courses, parks, and by commercial and industrial customers as well as in the upper San Antonio River and Salado Creek.

With this project, sewage treated at the Dos Rios Water Recycling Center will now be used to generate environmentally friendly products, such as recycled water (improving river quality and used in place of potable water by industry and manufacturers) and compost (used to improve soil quality and now energy).

Ameresco designed, financed, constructed, permitted, owns, operates, manages and maintains the gas conditioning and distribution facility and the pipelines necessary to process, deliver, and sell the gas to commercial natural gas pipelines.

The Ameresco biogas treatment facility will process more than 1.5 million standard cubic feet of biogas a day and deliver a minimum of 900,000 cubic feet of natural gas. 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.

Methane gas from biosolids is captured and sold commercially through the partnership with Ameresco. The biosolids are used to generate compost, which is used in landscaping, gardening and agriculture to improve soil quality.



The Ameresco project site in San Antonio.

