



CASE STUDY

CITY OF PHOENIX'S 91ST AVENUE WASTEWATER TREATMENT PLANT, AZ

TECHNOLOGY TYPE

**DESIGN/BUILD
OWN, OPERATE, AND MAINTAIN
WASTEWATER BIOGAS-TO-
RENEWABLE NATURAL GAS**

CONTRACT

**20-YEAR BIOGAS PURCHASE
SITE LEASE AGREEMENTS**

FACILITY SIZE

~1
ACRE OF LAND
CONNECTED TO AN INTERSTATE PIPELINE
VIA 3-MILE RNG PIPELINE

CAPABLE OF PROCESSING RAW BIOGAS

3,250
STANDARD CUBIC FEET PER MINUTE

ANNUAL RNG INJECTION
INTO COMMERCIAL PIPELINE:

693,500 DTH

SUMMARY

Ameresco designed, built, owns, operates, and maintains (DBOOM) the largest wastewater treatment biogas-to-renewable natural gas (RNG) facility of its kind in the United States. The wastewater treatment plant (WWTP) is owned by the sub-regional operating group (SROG) member cities: Phoenix, Glendale, Mesa, Scottsdale, and Tempe and is operated by the City of Phoenix.



SERVICES PROVIDED

Using innovative energy solution technology, Ameresco processes raw biogas generated at the WWTP into RNG suitable for injection into the nation's high-pressure natural gas pipeline. The RNG is sold on the open market as vehicle fuel under the EPA's Renewable Fuel Standard Program.

- Biogas purchase and site lease agreement
- Design, build, own, operate, maintain wastewater treatment plant
- 3-mile renewable natural gas pipeline
- Interstate pipeline connection

“ This innovative partnership allows us to turn waste into resource by converting biogas, a byproduct of wastewater treatment, into renewable energy. This not only benefits our regional economy, but also reduces greenhouse gas emissions. Phoenix has set ambitious sustainability and renewable energy goals, and this kind of public-private partnership will help us get there. ”

Kate Gallego
Mayor, City of Phoenix

CUSTOMER BENEFITS

Through a public-private partnership, Ameresco's processing plant utilizes a previously untapped energy resource by "cleaning" raw biogas generated at the WWTP into RNG, a carbon-neutral renewable energy commodity.

- Royalty payments from raw biogas sale
- WWTP operational and maintenance savings
- Achievements towards sustainable and renewable energy goals
- SROG is expected to reduce the equivalent of 44,671 metric tons of CO₂ per year. The green benefit from this carbon reduction is roughly equal to 70,452 cars taken off the road annually.

For the full story, visit: ameresco.com