



Escondido, California USA

Conversion of a Wastewater Treatment Facility into
a Resource Recovery Center



Gas Conditioning System
Feeds the Combined Heat
and Power System Directly

Facility Enables
Cost Effective
Co-Digestion

Owned, Financed,
and Operated
by Anaergia



ABOUT

ESCONDIDO BIOENERGY FACILITY

The Escondido Bioenergy Facility is installed at the Hale Avenue Resource Recovery Facility (HARRF or Facility) in Escondido, California. HARRF is an activated sludge, secondary treatment wastewater treatment plant that consists of biological processes of which digester gas is a by-product. Digester gas is composed of about 40% carbon dioxide and 60% methane. The project consists of a pre-packaged Combined Heat and Power (CHP) system rated at 1200 kW, along with required gas conditioning and emissions control equipment. The CHP system is integrated into the infrastructure of the existing Facility and produces heat and power for HARRF's loads. The project utilizes HARRF's digester gas as fuel (biogas) and generates both electricity to offset the Facility's electrical power and heat to offset natural gas demand from the local utility, San Diego Gas and Electric (SDG&E) under a 20 year PPA to HARRF.

*Facility Improvements
Allow Escondido
Bioenergy Facility to
Satisfy its Energy
Demand Using
On-Site Bioenergy*



General Facts

Client: Hale Avenue Resource Recovery Facility (HARRF)

Startup: 2018

Scope: Own, Finance, Operate



Key Technologies

Gas Conditioning System

Power Generation (800KW and 400KW)



Inputs & Products

Municipal Wastewater Sludge

Biogas Production: 300 scfm

Electricity: 1.2 MW

Heat: 2.43 MMBTU/h



Impacts

Value: 20 Year Power Purchase Agreement (PPA) to supply renewable energy to HARRF at fixed price
Long term PPA insulates HARRF from high price volatility and future risks

GHG Reduction: 7,800 TPY CO₂

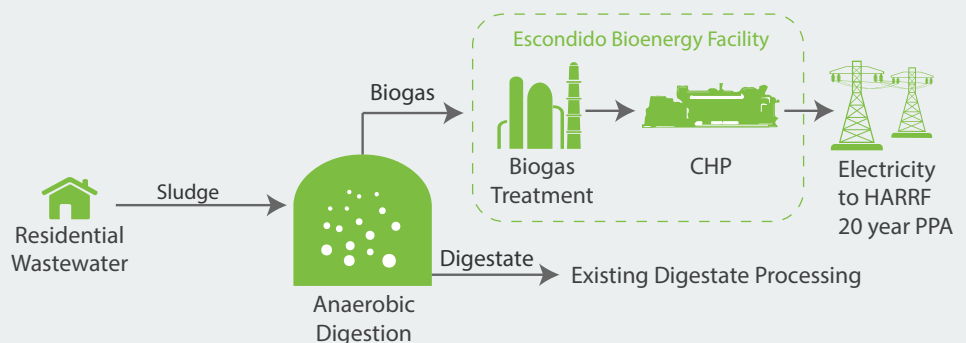
Equivalent to Emissions of 1,500 Cars

Electricity Equivalent: 846 Homes



Anaergia's Gas Conditioning System

combined with power production offer a model for wastewater treatment plants to become energy positive.



Anaergia

Breaking Barriers to Sustainability

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