



United States Department of Agriculture

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Rural Utilities Service

# Funding Renewable Energy & Energy Efficiency Improvements at Wastewater Facilities

Water and Environmental Programs

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# USDA, Rural Development

- Three agencies providing financial assistance for rural America
  - Rural Utilities Service (RUS)
  - Rural Business-Cooperative Service (RBS)
  - Rural Housing Service (RHS)
- Water and Waste Disposal Program (RUS)
  - Loans, grants, & loan guarantees for water infrastructure improvements for eligible rural communities, tribes, and not-for-profits.
  - Population under 10,000

# Policies

- Application requirements include need for a Preliminary Engineering Report (PER)
  - Analysis of alternatives and life cycle costs
  - Interagency format for PER includes sustainability considerations (including energy efficiency)
- Energy efficiency and renewable energy improvements may be eligible if cost effective

# WWTP Improvements in Pennsylvania

- Regional WWTP Upgrade
  - Electric production from anaerobic sludge digestion
  - Heat captured to render sludge Class A
  - Approx. 95% construction complete



# Solar Power for a WWTP in Michigan



# WWTP Improvements (Montana)

- Solar powered pumps to lift effluent from storage to irrigation field



# WWTP Improvements (California)

- 1200 solar panels decreased energy cost by 75%





# Questions/Comments?

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