INVESTING IN GEORGIA'S ENERGY, LAND & WATER RESOURCES



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Energy Production Projects

- Solar Photovoltaic
- Wind Turbine
- Geothermal Heat Pump



- Methane gas collection
- Cogeneration projects
- \$7M city of Atlanta project





Project Eligibility Requirements

	Project Eligibility	
	On-site Project	Off-site Project
Energy production for <u>DIRECT USE</u> by the facility	Eligible	Eligible
Energy production <u>SOLD TO</u> the electrical grid or natural gas distribution system	Eligible	Ineligible



- Chatsworth Water Works
- 1 MW solar installation

- On-site location and direct use
- \$2.5M with \$300,000 in PF





2015 IUP lists – Huge demand for solar

CWSRF

- 12 solar projects
- \$15.4M in solar projects
- 5.3 MW of solar energy
- Projects located at sewer pump stations and sewer treatment plants

DWSRF

- 5 solar projects
- \$2.28M in solar projects
- 1.3 MW of solar energy
- Projects located at pump stations and water treatment plants



Solar sizing Limitations

 Water and wastewater treatment facilities cannot be sized in excess of peak demand of the water or wastewater treatment facility.





Energy Production Projects

Waste-to-Energy Projects - Landfills

- Waste is combusted at a high temperature creating steam that turns turbines and generates electricity
- Waste is combusted and converted to biogas for alternative fuels



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Waste-to-Energy Project Lamar County Regional Solid Water Authority

- Loan provided through state-funded loan program
- \$27.5M loan
- Super high heat oxygen starved environment
- From 50 tons per day to 200 tons per day of waste burned through process

PYROLYSIS UNIT

WASTE FEEDSTOCK





Waste-to-Energy Project Lamar County Regional Solid Water Authority



GAS SEPARATION



POWER GENERATION





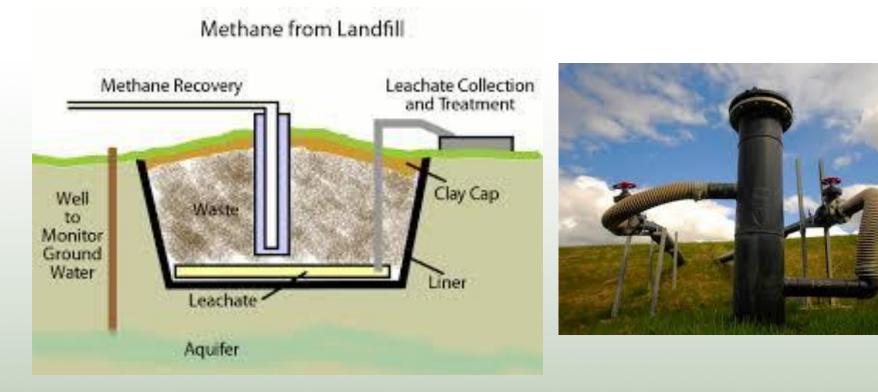
Project Benefits:

- Reduce waste volume to landfill
- Reclaim existing landfill area
- Reduce need for landfill expansion



Waste-to-Energy Projects -Landfill methane gas collection

- Methane gas collection projects
- Reduce potential of methane in ground water
- Create power to run operations of landfill



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