



Kahului Wastewater Reclamation Facility

October 2016

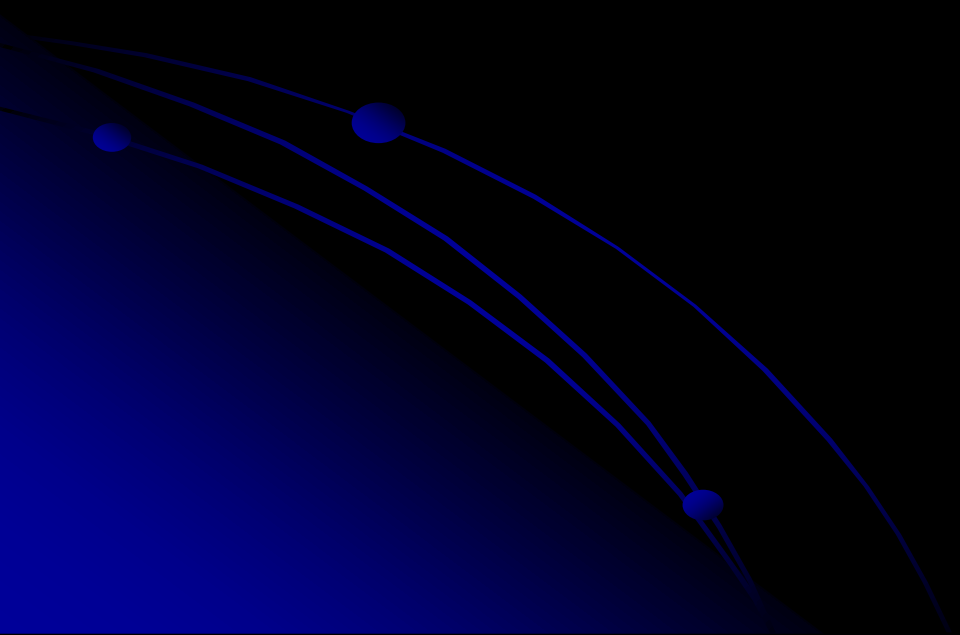
Department of Environmental Management

MANA - Maui All Natural Alternative

- Overall Cost Reduction of Sludge Disposal, and Electric Power
- Predictability in Electric Power Prices
- Path to Renewable Energy at the Kahului Wastewater Reclamation Facility
- Small Path Towards Keeping Maui Green
- Potential for Jobs on Maui

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- Predictability in Electric Power Prices





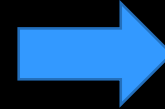
Sludge Drying



Energy Crops or
Other Available
Feedstocks



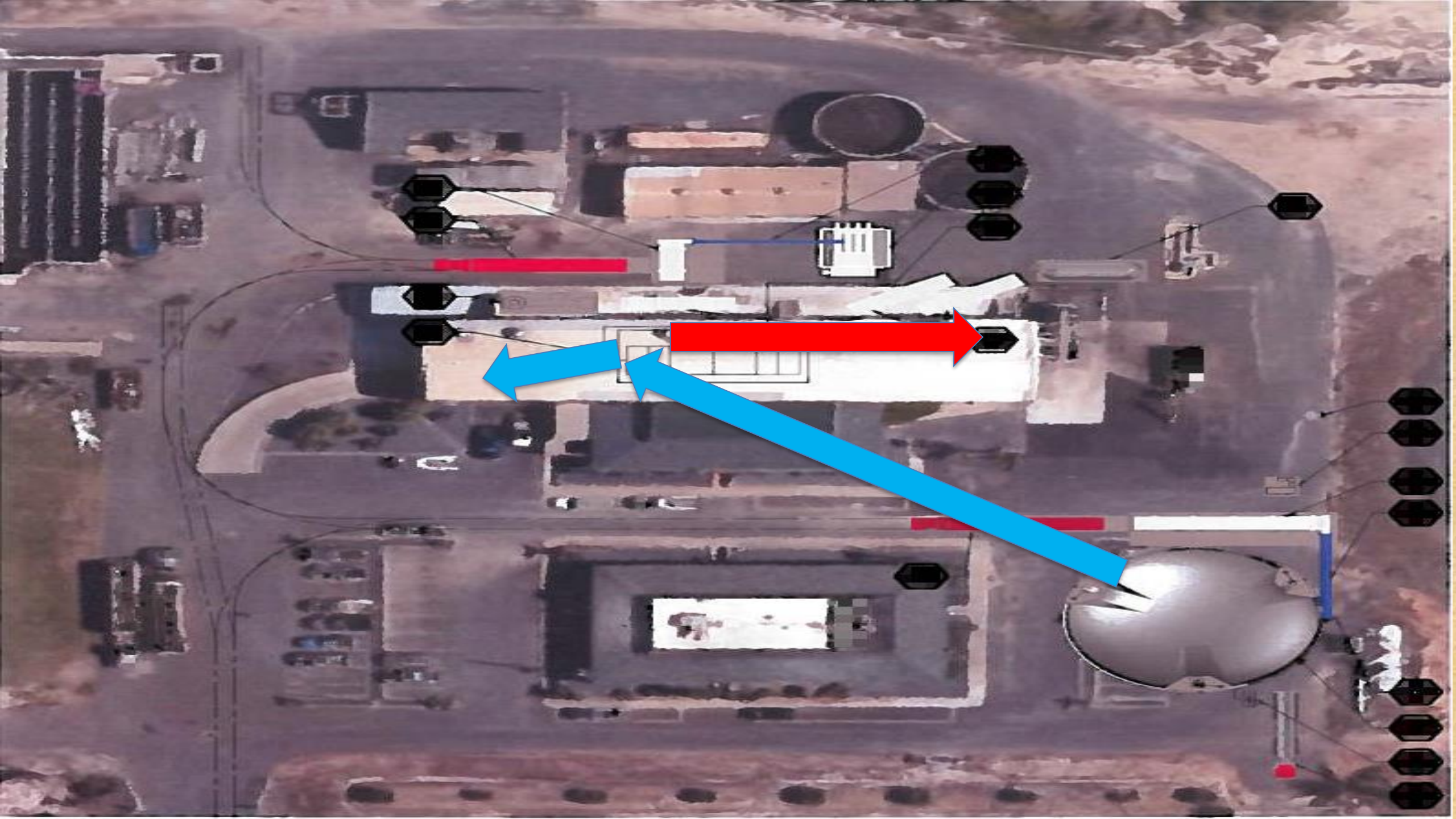
Biogas
Treatment



Combined
Heat & Power







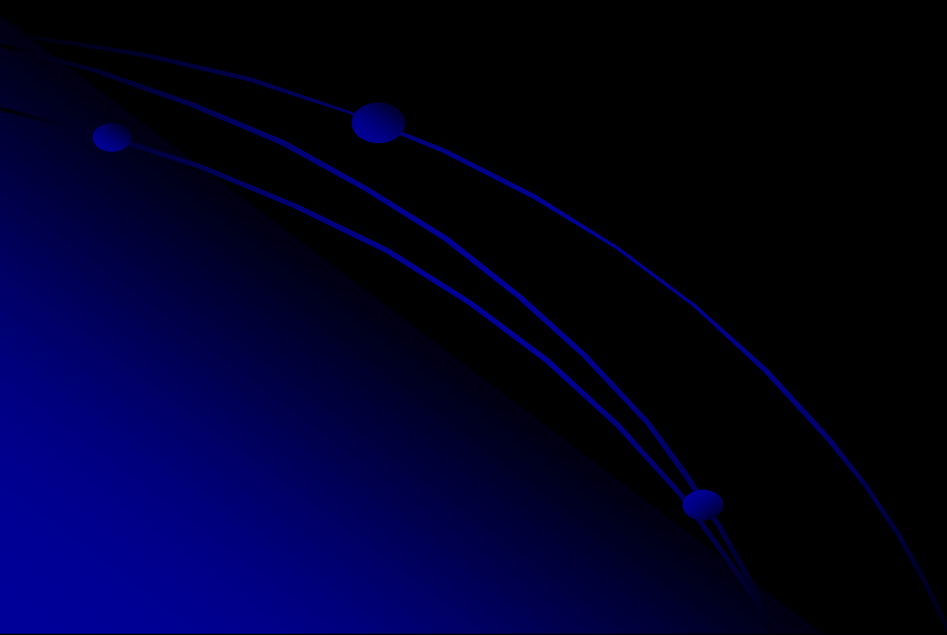
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Sludge Disposal Cost

- FY16 \$1.99M (\$83/Ton)
- FY17 \$2.47M (\$103/Ton)
- MANA - \$1.92M (\$80/Ton)

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Path to Renewable Energy at the Kahului Wastewater Reclamation Facility **Bio-Energy Crops**



■ State of Hawaii

- House Bill 623 (Amending Act-097) signed into law by Governor Ige this year making Hawaii energy self-sustaining, using 100 percent renewable sources, by 2045.
- The first U.S. State in the union to set a date for the total de-carbonization of its power supply