



## Kahului Wastewater Reclamation Facility

October 2016

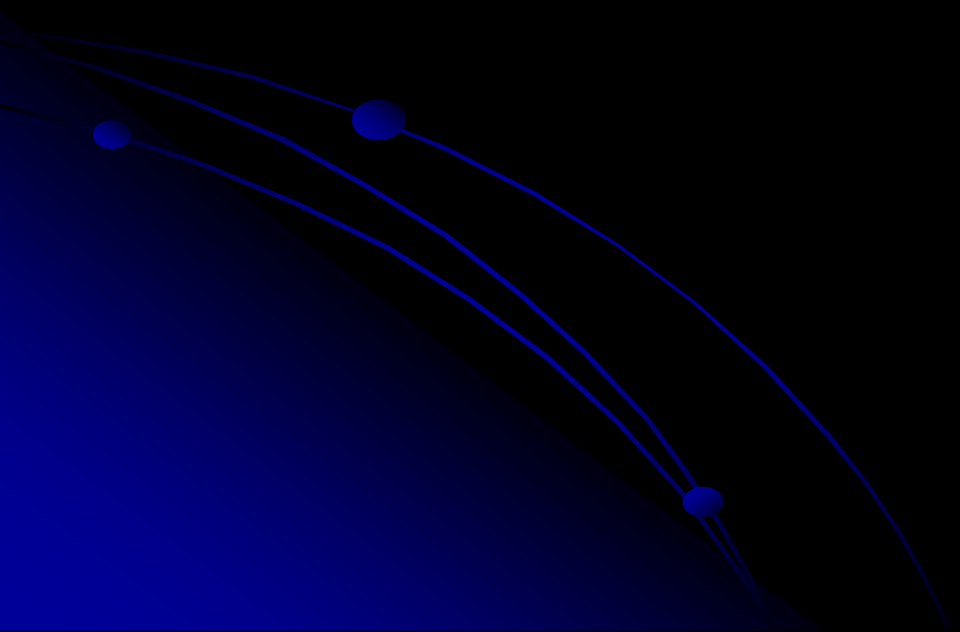
Department of Environmental Management

# 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

# MANA - Maui All Natural Alternative

- Overall Cost Reduction of Sludge Disposal, and Electric Power
- Predictability in Electric Power Prices







Sludge Drying



Energy Crops or  
Other Available  
Feedstocks



Biogas  
Treatment



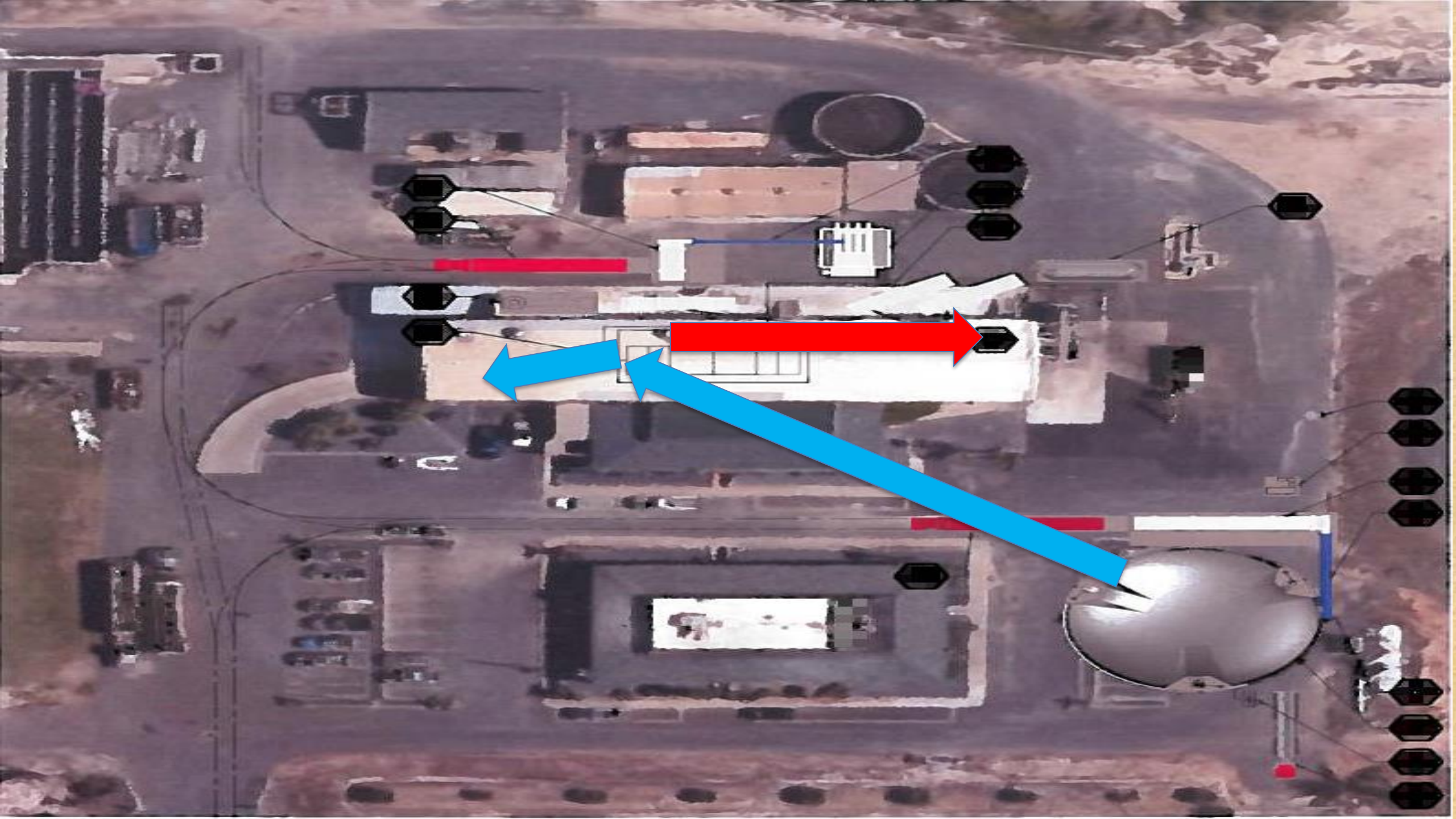
Combined  
Heat & Power











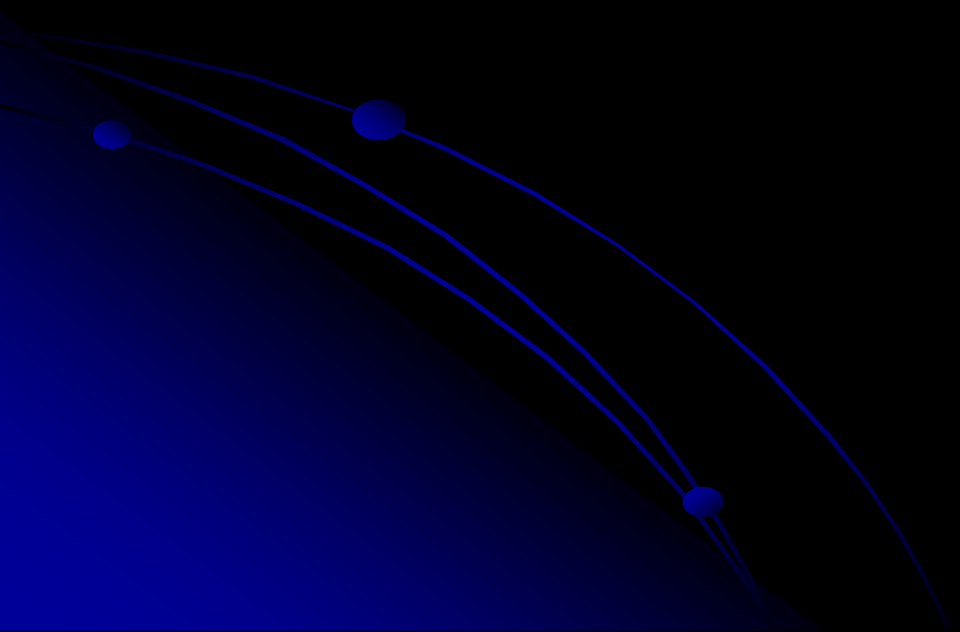
# MANA - Maui All Natural Alternative

## Sludge Disposal Cost

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

# 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 **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