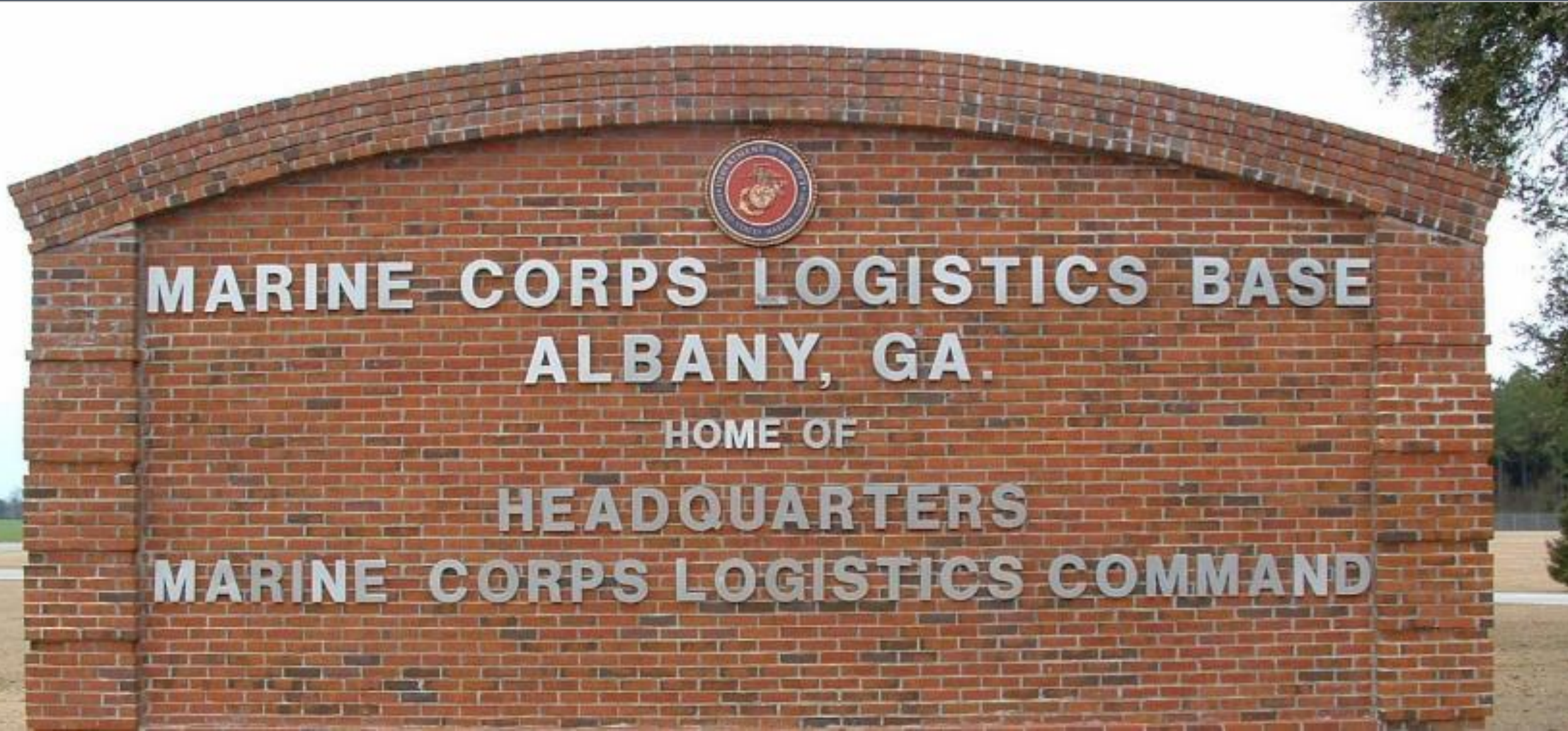


# ESPC PROJECTS AT MCLB ALBANY







# MARINE CORPS LOGISTICS BASE ALBANY IS:

- Small but essential
- CRITICAL to supplying the Marine Corps mission
- The model installation for ENERGY RESILIENCY
- Soon to be energy NET ZERO

*What YOU do is IMPORTANT  
Everyday a MARINE'S LIFE  
will depend on it!*

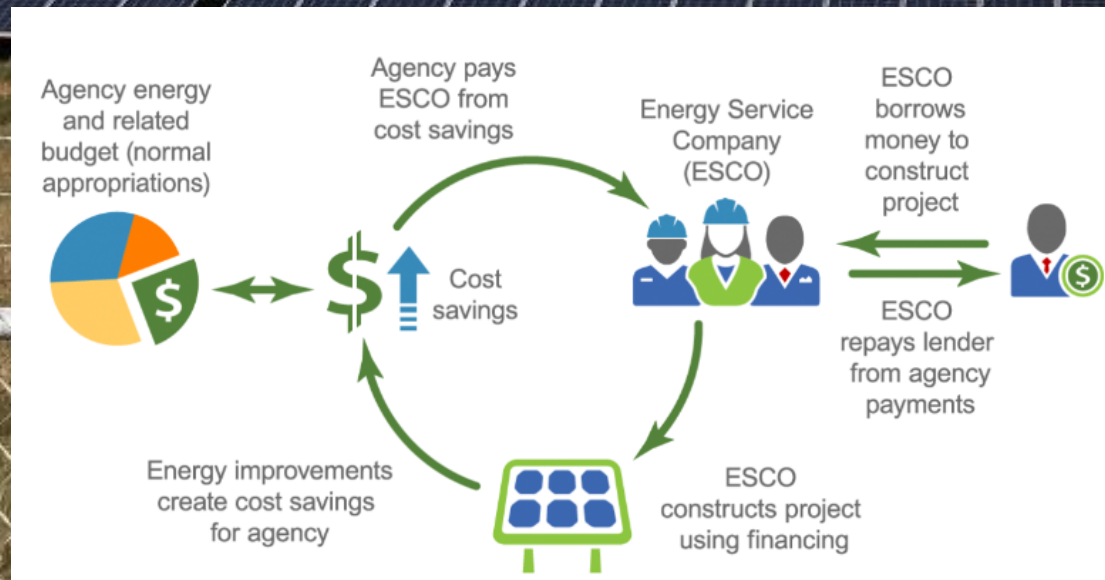
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T. MASON  
WARD





# Energy Savings Performance Contracts (ESPCs)

- Energy Savings Performance Contracts (ESPCs) allow federal agencies to procure energy savings and facility improvements with no up-front capital costs or special appropriations from Congress. An ESPC is a partnership between an agency and an Energy Service Company (ESCO).
- Since the inception of U.S. Department of Energy (DOE) indefinite-delivery, indefinite-quantity (IDIQ) ESPCs in 1998, agencies have used the ESPC contracting vehicle to significantly reduce energy and operating costs and make progress toward meeting federal sustainability goals
- The Federal Energy Management Program (FEMP) provides agencies with expert assistance, guidance, and training to help them implement ESPC projects that are technically excellent, legally sound, and a good deal for the government. FEMP is authorized by statute to establish appropriate procedures and methods for use by federal agencies with regard to the ESPC program.
- <https://www.energy.gov/eere/femp/energy-savings-performance-contracts-federal-agencies>





## **Energy Savings Performance Contract Delivery Order #1:**

- **Awarded to Chevron Energy Solutions in 2003 – Completed 2005**
- **Consisted of 8 Energy Conservation Measures: Steam Distribution upgrades, Compressed Air and Heat Recovery, Lighting Upgrades, Geothermal Heat Pumps (Housing), Infrared Heat, Web-based Energy Management System, HVAC Equipment Replacement and Building 3500 HVAC Renovation**
- **Implementation Cost \$14M with Guaranteed Savings of \$1.4M annually**

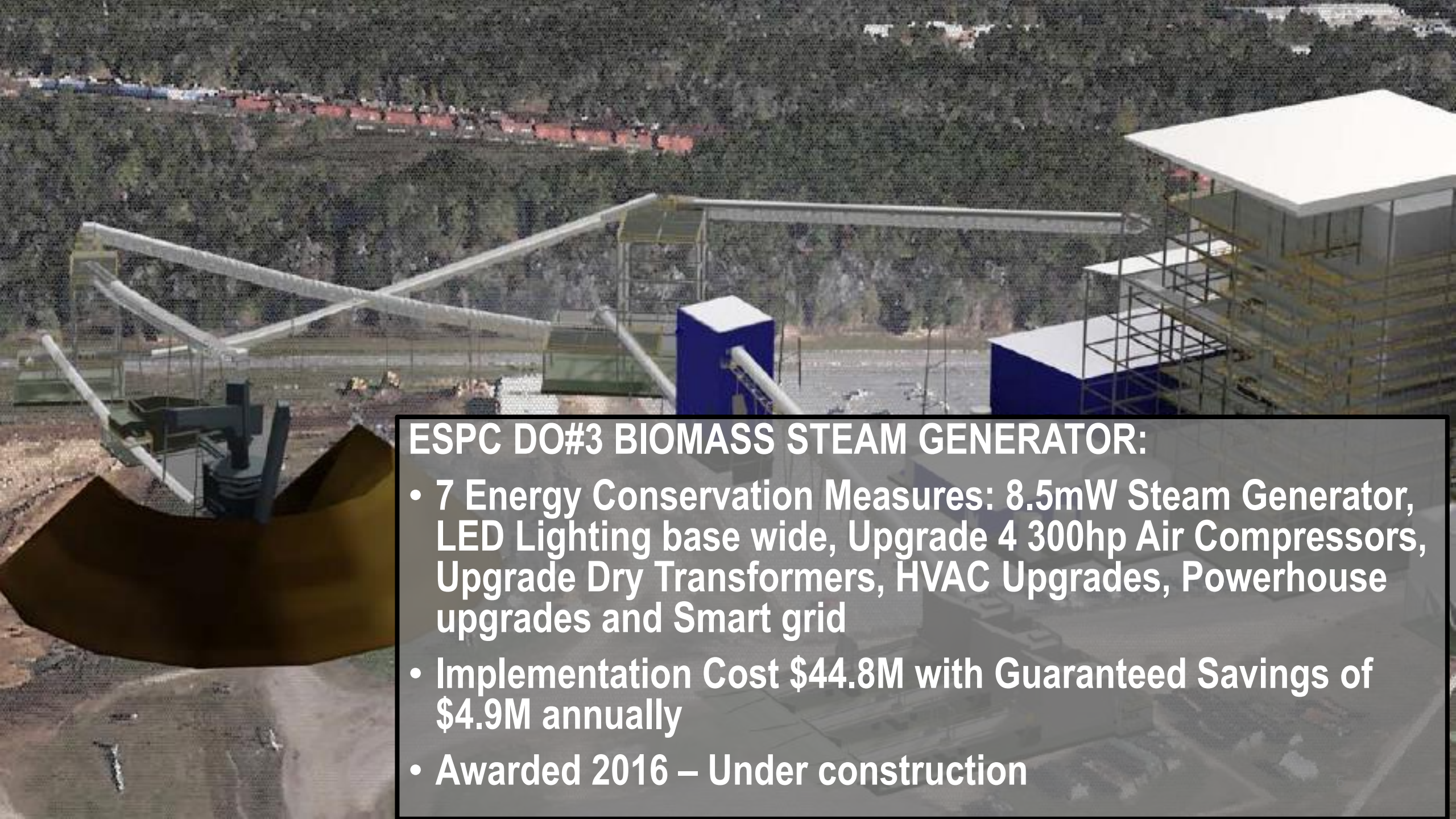


The background image shows a large industrial facility, likely a power plant or refinery. In the foreground, there are large green industrial engines or generators. Above them, a complex network of yellow pipes and valves is visible, some of which are wrapped in grey insulation. The facility has a high ceiling with industrial lighting and structural beams. The overall scene is a detailed view of industrial machinery and infrastructure.

## Energy Savings Performance Contract Delivery Order #2:

- Three Energy Conservation Measures: Landfill Gas to Energy Combined Heat and Power (CHP), Lighting Upgrades, Additional Buildings to Energy Management System
- Implementation Cost \$20M with Guaranteed Savings of \$2.5M annually
- Awarded 2009 and completed 2011





## **ESPC DO#3 BIOMASS STEAM GENERATOR:**

- 7 Energy Conservation Measures: 8.5mW Steam Generator, LED Lighting base wide, Upgrade 4 300hp Air Compressors, Upgrade Dry Transformers, HVAC Upgrades, Powerhouse upgrades and Smart grid
- Implementation Cost \$44.8M with Guaranteed Savings of \$4.9M annually
- Awarded 2016 – Under construction



## Other Energy Initiatives at MCLB:

- In 2016 MCLB and Georgia Power partnered to install a 31 mW Solar Farm
- Received a DOE AFFECT Grant to put toward the implementation of the ESPC DO#3 Net-Zero
- Exploring adding 15mW to Solar Farm (Base owned) that will supplement the Net-Zero initiative
- Researching the possibility of buying Renewable Natural Gas (RNG) to supplement renewable fuel for Landfill gas generator #2
- Investigating the implementation of Battery Storage to increase energy resiliency at MCLBA
- Borehole Thermal Energy Storage (BTES) constructed in 2016 success of this project led to BTES- 2/3/4 being under construction now





## Steps to implement an ESPC:

- There are 16 ESCO's that are certified to perform ESPC's
- Put out a notification that you are interested in doing an ESPC at your base or facility
- The ESCO's will ask to come and do an initial energy survey (This survey is free) to determine what energy conservation measures would work
- You would then go through all the initial survey results to see which ESCO's you would want to come to your base/facility to give a presentation of their proposal (2 or 3 proposals)
- Pick the ESCO with the best proposal to come to the base/facility and do a detail energy survey to determine if the proposed ECM's will work
- The ESCO will present the detail survey proposal and you pick which ECM's you would like from them to implement
- ESPC's have Guaranteed Savings and the ESCO buys the equipment to be installed and performs the annual Measurement and Verification to be sure the ECMs are saving the amount of energy that was promised – The ESCO is paid from the savings from the ECMs





# QUESTIONS?

Presented by Eddie Hunt  
Installation Energy Manager  
(229) 639-5979