## Florida Atlantic University Energy Efficiency Measures

## 1. <u>Implemented To Date</u>

- Indoor florescent lighting retrofits (Performance Contract). Savings are \$186,000 per year.
- Efficient electric motor replacements: pumps, etc.
- De-lamping hallways and common areas
- Chiller renewals to increase efficiencies
- Metasys (ADX) Monitoring for control & efficiency
- Reclaimed water for irrigation
- Digital controlled irrigation metering and zoning (Phase 1)
- High Efficiency expansion of central chilled water plants
- Energy Plant optimization through equipment modernization
- Infrared aerial building envelope inspections
- LEED Construction Program (Silver LEED requirements)
- Negotiated a gas contract that will generate a 10-13% savings over the going rate at the time of the agreement
- Included in the FAU Cost Containment Guidelines requirements that all public area lighting in new construction will be designed to allow scheduling so as to save energy.
- Installed one new higher efficiency chiller at Bldg. 5 (CEP). Chiller 5 is approximately 0.5KW per ton. We have begun to base load the campus with this chiller to provide an overall savings.
- Installed waterless urinals at College of Nursing.
- Reduced heating hot water temperatures at main boilers in CEP.
- Included in Cost Containment Guidelines requirements for variable flow air and water systems in new construction for HVAC systems.
- Updated the FAU Cost Containment Guidelines and Professional Services Guide to include sustainable requirements which will result in a LEED "type" Certified Building Program and save energy.
- Issued campus wide posting of Energy Conservation Best Practices recommended by FP&L.
- Completed the design of an Alternative Fuel Tank Facility and are participating in the Federal Program for purchase of alternatively fueled vehicles.
- Commissioned on energy audit and implemented HVAC and lighting recommendations for the Sea-Tech campus.

## 2. <u>In Progress</u>

- Metering Improvement Program. Automatic Meter Reading
- Cooling Tower retrofits to improve efficiency
- Putting Variable Frequency Drives on cooling tower fans
- Improving condenser water quality to increase heat transfer
- Systematic upgrade of existing temperature controls throughout campus as budget

allows to provide better energy management.

• Continue to meet or exceed the state requirements set forth in the Florida Energy Code in the design and construction of all our new facilities requirements which will result in a LEED "type" Certified Building Program and save energy.

## 3. <u>Future Consideration</u>

- Hardware (Performance Contract)
  - Accelerate building and chilled water plant optimization
  - Continue metering improvements
  - Improved lighting controls
  - Solar water heating
  - Photo voltaic