

State of Georgia Energy Tracking System

Overview

In 2006, the Georgia Environmental Facilities Authority, Division of Energy Resources (GEFA) purchased a state-of-the-art energy tracking software program, entitled EnergyCAP, to allow the State to track the total energy usage and expenditure for all state facilities and support facility-specific or enterprise-wide energy and cost saving strategies. GEFA purchased EnergyCAP through a competitive bidding process after studying the cost-effectiveness of relying on outside consultants for data management and analysis.

GEFA undertook this project in response to Governor Sonny Perdue's Executive Order 02.28.06.01 that directed GEFA to develop a statewide energy database system to develop purchasing and efficiency strategies. The goals of the energy tracking project include:

- Tracking energy usage on a *facility* basis, permitting facility-specific analysis (such as energy usage per square foot) and benchmarking of like facilities;
- Publishing regular reports concerning "enterprise-wide" energy consumption, as well as agency and facility specific analysis;
- Ensuring billing accuracy and determining least cost rate structures for state facilities; and
- Budgeting for future energy costs.

Scope

The State of Georgia is a large, multifaceted enterprise with more than 15,000 facilities and thousands of utility accounts. Additionally, the State operates a broad range of buildings including office buildings, research labs, prisons and dormitories. The following table provides an estimate of the project scope:

• Facilities	More than 15,000
• Commodities	Electricity, natural gas, water/sewer (at a later date)
• Estimated annual utilities spending	
o Electricity	Approximately \$100 million
o Natural Gas	Approximately \$30 million
o Water	Unknown
• Approximate number of accounts	
o Electricity	Approximately 5,000
o Natural Gas	Approximately 600 – 1,000
o Water	Unknown

Features of EnergyCAP

Facility benchmarking with weather normalization

Energy Cap permits accurate benchmarking of energy usage in facilities and measurement and verification of energy management programs, including the ability to track energy usage patterns while accounting for annual variations in hot and cold weather.

Audit features

The tracking system contains powerful verification features to help identify billing errors. Forty audits allow users to look for abnormal bill values. Actual users report that this feature alone can help offset the purchase price.



Reports

Energy Cap offers 120 reports that can be with filtering options that can be previewed, printed and exported to Excel, PDF or HTML or other formats.

Rate engine

Energy Cap software features a “rate engine” that permits evaluation of the optimum rate / tariff for electricity accounts tracked in the database. In the past, GEFA paid an outside consultant for this service. GEFA expects that this feature could permit the State to conduct ongoing “rate optimization” without incurring consulting costs.

Data collection and maintenance: strategies and challenges

GEFA is populating the system with facility and utility account data. The Georgia State Properties Commission’s “Building Land Lease Inventory Project” (BLIP) provided the foundation for state agency property data. In addition to this facility data, GEFA has accumulated three years of billing data for more than 3,800 state electricity accounts and 2 years billing data for nearly 600 natural gas accounts. GEFA is working to acquire additional utility data and to match utility accounts with the known building inventory.

For more information, contact David Godfrey at 404-584-1091 or dgodfrey@gefa.ga.gov.



Georgia has purchased the EnergyCAP tracking system for managing utility use and costs. Features, such as this exclusive PowerViews display, are available for any building, meter or organizational level in a customer’s system. Cost, usage and unit cost charts are constantly updated.

