



Case Study

**Franklin County
Public Schools**
Apalachicola, FL



PROJECT HIGHLIGHTS

Environmental Benefits

Under measurement

Capital Costs

\$1,579,572

Annual Savings

\$64,848

Schedule Compliance

Completed on time

Budget Compliance

Completed within budget

PROJECT DESCRIPTION: Energy Savings Performance Contract

Challenge: Like many Florida school districts, Franklin County seeks to provide its students with the safest and most productive learning environment. It was challenged with a lean annual budget, inadequate classroom lighting, inefficient heating, cooling and ventilating equipment, and an aged fire protection system. ConEdison Solutions, through its subsidiary, BGA, Inc., was selected to work with Franklin County on an energy saving performance contract to help improve the district's ailing schools.

PROJECT SCOPE

Solution: BGA, Inc. was selected in 1998 to work with Franklin County under a comprehensive energy savings performance contract. The contract included site energy audits, energy modeling, financing arrangements, engineering design, construction management, commissioning and measurement and verification for the County's four schools and its district office building. As part of the program that is governed by a Florida statute, the performance contract is guaranteed to save Franklin County Public Schools \$1.5 million over the next 20 years. In the first three years of measurement, not only was the guarantee met, but it exceeded the anticipated savings every year. The extra savings, nearly \$24,000, goes right into the district's budget for use on other important school needs.

ENERGY CONSERVATION MEASURES

Lighting upgrade

- Replaced fluorescent lighting with T12 lamps and magnetic ballasts with energy-efficient T8 lamps and low-power solid-state electronic ballasts
- Replaced Fluorescent exit signs with LED lighting
- Replaced incandescent lighting with compact fluorescent lighting system

Retrofit of plant/solar building

- Installed new premium efficiency primary/secondary chilled and hot water pumping systems with variable frequency drives
- Installed high-efficiency air-cooled screw chiller
- Installed a new modular high efficiency propane fired boiler system with electronic ignition
- Installed new dedicated high-efficiency propane fired domestic hot water heater
- New DDC controls system

Energy management systems

- Programmable run time scheduling of the mechanical equipment based on calculated loads and ambient air conditions, equipment optimization, space temperature control and relative humidity override capability

Power manager

Installation of a TeCom InterLane Power Manager at each site allowing the schools to monitor and control their energy use