

## CUSTOMER PROFILE

- Established in the 1930s, located in Georgia
- Seven schools with more than 4,650 students and 700 employees
- All schools are accredited

## SITUATION

With hot weather a major issue in Georgia for most of the school year, maintaining a comfortable environment for students is critical for optimum learning. However, with a shrinking budget and outdated school buildings, keeping the environment cool was becoming a bigger problem every year. Students were less productive in the heat, and often had to be moved when the weather got very hot, wasting time and taxpayer money.

## SOLUTION

To cost-effectively solve its energy efficiency problems, the Madison County School Board turned to Linc's Bundled Energy Solutions. The integrated service provided comprehensive energy, HVAC, and lighting retrofits and upgrades, and a new controls system — with no upfront capital. And, Linc guaranteed ongoing energy and operational savings that off-set the costs.

## BENEFITS

- Reduces energy costs by more than 20%
- Reduces comfort-level complaints by 90%
- Meets Georgia Power's energy conservation requirements and qualifies for substantially reduced energy rates
- Upgrades are paid for through reduced energy and operating costs

# The Challenge

Since the 1930s, Madison County Schools have been “putting children first” by providing quality education and an environment that promotes growth and opportunity. Today, the school system includes five elementary schools, a middle school, and a high school — all of which are accredited by the Southern Association of Colleges and Schools (SACS).



With most of the schools built in the 1950s, facilities were becoming outdated. Improvements had been made, but most buildings needed total HVAC and electrical retrofits. Lighting and climate control were extremely challenging in buildings that didn't have permanent interior walls. Even the newer schools in the system were not constructed with energy efficiency in mind.

“It is our duty to the community to provide the children with a comfortable atmosphere that is conducive to learning,” said Mitch McGhee, assistant superintendent of Madison County Schools. “The condition of our sites was starting to compromise our ability to do so. The uncomfortable rooms made the children and staff unproductive and time spent moving to other rooms was time not spent on learning.”

A member of the newly-appointed administration headed by Superintendent Keith Cowne, McGhee was immediately charged with finding a way to improve the HVAC and electrical at the schools, make the teachers and students more comfortable and reduce energy costs. The solution also had to meet the county's tight budget requirements.

“Because Madison County is primarily residential, our ability to raise money through business and retail taxes — the main source of funding for school improvements — has been hindered,” said McGhee. “Add to that a growing population, and the result is a dwindling budget that is spent mostly on expansion, not upgrades. We didn't have much money and needed a cost-effective solution with creative payment options.”

## The Linc Solution

While at an educational-leaders conference, McGhee talked to several potential vendors, including Linc. After seeing their solutions, he knew he had found the answer in Linc's innovative Bundled Energy Solutions (BES).

"BES was the only completely integrated service that also offered flexible financing and ongoing guaranteed cost savings," said McGhee. "No other single vendor offered the breadth of services that Linc did."

BES is a comprehensive suite of construction and energy conservation services provided solely by Linc. It is unique because it uses an integrated approach to assessing, installing, managing, measuring, and maintaining infrastructure improvements that result in guaranteed energy and operating cost reduction and measurable return on investment. Customers are then able to leverage the significant savings to pay for the entire project, with no upfront costs required.

Through an in-depth, on-site energy and operations evaluation, Linc was able to assess the current equipment condition and energy usage, recommend enhancements, and provide a potential savings analysis.

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**"We chose Linc and have been extremely happy with the results."**

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Once authorized, Linc then provided turnkey installation and project management. Services included design engineering, new rooftop HVAC units, heating system replacement, lighting upgrades, additional outside air, comfort balancing, and energy resource management.

Also, Linc recommended an automated controls system. This new centralized system allows the HVAC department to manage temperature settings for the schools conveniently from a laptop computer, instead of manually at each school. This helps conserve energy and save money.

"Linc being the sole service provider for this project was a big plus for us," said McGhee. "We only had one contact and we knew how to get hold of him. He was always helpful and knowledgeable. This allowed us to develop a high level of trust with our project manager and establish an on-going, long-term relationship with Linc."

Upon project completion, Linc also provides ongoing monitoring of energy consumption and measures the performance of the enhancements against the projected energy savings.

## The Bottom Line

The construction portion of the Madison County Schools project was completed in less than five months and the organization was able to see results almost immediately.

"Because of our BES upgrades, we're spending less money on energy despite rising energy costs. And, although we are using more energy now because we've expanded operations, we've reduced our energy bills by more than 20 percent," said McGhee. "On top of this, we were able to meet Georgia Powers' strict conservation requirements and qualify for a cheaper energy rate that continues to save us money."

Equal to the energy cost savings, Madison County Schools was also able to dramatically improve the comfort level of its faculty and students.

"We've had a 90 percent decrease in the number of comfort level complaints since the improvements," said McGhee. "We feel there's much more learning taking place now that we've provided better lighting and more comfortable classrooms."

Community groups who use the schools for meetings have also noticed the changes and are pleased and appreciative of the enhancements. And, Linc was able to improve environmental conditions at the high school by solving the mold problem that had plagued the facility for years.

"No one had ever been able to figure out what caused mold in the media center," said McGhee. "Linc diagnosed the problem almost immediately. The unit we had was too big and the air wasn't cycling properly, causing humidity and mold. We were so pleased Linc was able to finally solve this for us."

Throughout the BES process, Linc provided ongoing support for the Madison County Schools team. Even today, Linc continues to work with the maintenance staff to solve issues, monitor, and continuously improve the systems, all as part of the original contract.

"Linc has become a trusted, long-term partner," relayed McGhee. "If we have a problem we can call and they provide advice or come on-site to make recommendations, or provide services as needed. It's like having a free consultant on hand at all times."