

Corpus Christi Independent School District



CUSTOMER BENEFITS

- Unsurpassed performance guarantee
- Simple payback in 9 years
- Advanced, centralized energy management with no up-front expense
- Future-friendly equipment and design standards

PROJECT AT A GLANCE

Project Type:

Energy Performance Contract

Location:

Corpus Christi, Texas, USA

Number of Buildings:

60+ (4.2 million sq. ft.)

Guaranteed Annual Savings:

\$910,000

Energy Conservation Measures:

- Districtwide TAC I/NET™ energy management system
- Lighting system upgrades
- Mechanical system retrofits
- HVAC system redesign, including constant-to-variable air volume conversion variable flow pumping
- Variable frequency drives



With the school district's bond money diverted to other projects, a Schneider Electric performance contract made otherwise-unattainable maintenance and energy conservation goals a welcome reality.

The Challenge

In 1995, the Corpus Christi Independent School District (CCISD) faced a dilemma all too familiar to financially-strapped public school systems; it needed to reduce operating costs but couldn't afford to implement conservation measures on a budget consumed by high energy bills. Energy awareness programs had been implemented, but such efforts could only do so much.

When a large bond issue passed, the district hoped to finally make needed infrastructure changes. Unfortunately, the funds were committed to other projects before environmental system improvements could be executed. Despite funding challenges, the energy management, facilities and finance administrators remained determined to provide the best possible learning and teaching conditions for the district's 40,000 students and staff without asking for additional taxpayer support.

Performance contracting – an innovative financing strategy that allows customers to pay for energy-saving upgrades using the utility cost savings themselves – offered a practical means to achieve energy goals quickly without compromise.

In soliciting a performance contracting vendor, the district sought a trusted partner who would apply custom-tailored solutions to address the unique needs of the schools, while allowing the school district to maintain control of the projects.

The Solution

Unlike its competition, Schneider Electric offered a performance guarantee based almost entirely on measurable energy savings rather than including large buffers of operational and other “soft” costs.

Upon contract award in late 1995, Schneider Electric teamed with the school district to define the scope of the first phase. To prove its solutions under the toughest of conditions, Schneider Electric upgraded systems in the district’s three most challenging schools in Phase 1. Delighted with the success of Phase 1, the school district authorized Schneider Electric to proceed into Phase 2 with 20 more schools. In each phase the results exceeded expectation, and Schneider Electric was given the approval to move forward into the next.

Working closely with the architects and engineers involved in the many concurrent bond-related renovation projects, the Schneider Electric installation team effected a smooth, well-coordinated transition over all four phases, the last of which was completed in 2000.

The Bottom Line

What had once been a collection of more than 60 isolated, non-optimized buildings is, today, a centrally managed, holistic system operating at peak efficiency. Environmental conditions in all buildings can now be monitored remotely, allowing the district’s energy manager to anticipate and prevent many potential difficulties, troubleshoot problems and resolve issues quickly.

Improved lighting and more responsive temperature controls make classrooms and administrative offices throughout the CCISD more comfortable.

Operational parameters from initial audits provide baseline performance measurements while equipment configurations serve as models for new installations. Beyond providing immediate energy solutions, Schneider Electric and the CCISD jointly developed energy-related equipment and design standards and guidelines that will enable their systems to evolve effectively and consistently over time. The district continues to rely on the expertise of Schneider Electric for ongoing improvements.