

CUSTOMER SUCCESS STORY



Houston Christian University is located just minutes from downtown Houston, offering an intimate college environment in the heart of one of the nation's most vibrant cities.



SOLUTIONS

- Air handling unit upgrades
- Chiller plant optimization
- Major heating/cooling upgrades
- Campuswide lighting retrofit, installing 28-watt lamps and reflectors, compact fluorescent lamps, and LED exit signs
- New energy management system
- Refurbished cooling towers and new exhaust fans
- Water conservation measures, including low-flow toilets, sinks, and showers
- Asbestos abatement and targeted building improvements



BENEFITS

\$4.6 million

in total energy savings

3 million kWh

of electricity saved each year

20% reduction

in the university's annual carbon footprint

2,000 Kgal

drop in water usage campuswide

Good stewardship of resources is important to all of us at Houston Christian University. Creating a more sustainable campus is just one of the latest ways we are working to make the learning environment even better for our students." - Sandy Mooney, CFO/COO

Comprehensive Needs Assessment

Houston Christian University (HCU) wanted to modernize its facilities. A civil engineering study had identified components of the university's infrastructure that needed to be upgraded. OPTERRA subsequently conducted its own audit of HCU's facilities and recommended solutions to address the results of both studies.



Single Point of Contact for a Wide Range of Upgrades

The university partnered with OPTERRA to undertake a multiyear program that modernized facilities and improved efficiency across 17 campus buildings. Operating as a single point of contact for the initiative, OPTERRA retrofitted lighting, updated a range of heating- and cooling-related systems, and implemented water conservation measures, among other improvements.



Modernized Energy Management

A new energy management system centralizes HVAC controls and enables automation, managing climate by building or across specified zones. This not only improves efficiency, but also minimizes equipment operation, which leads to long-term savings on maintenance costs through reduced wear and tear on motors, bearings, and other parts.



Putting Cost Savings to Work

The program's cost savings more than paid for the improvements – and the performance contract guaranteed that if savings had failed to meet targets, OPTERRA would have financially compensated HCU. Over time, the program's lower maintenance needs and more stable infrastructure costs freed up funds for student-centered priorities.

