

Focus: Midyear Review

Morgan Stanley invests in energy-friendly chilling system



Morgan Stanley says using new technology in a novel way at their Purchase offices saves on the electric bill and is better for the environment.

The project grew out of a partnership between Morgan Stanley, Trane, Calmac and the New York State Energy Research and Development Authority (NYSERDA).

Partly funded by a \$300,000 incentive check from NYSERDA, the system takes advantage of lower energy rates during off-peak hours, freezing water by night and circulating it during the day. NYSERDA says the system's savings will equal the \$4.26 million investment in the new system in five years and hopes that other companies will follow the strategy, easing the overburdened grid system.

"Prior to the change, they had three chillers that were running all the time. The new, larger chiller runs all night long when electrical rates are lower and freezes all the tanks and during the day, we start to melt the ice, typically when there's a change of (electricity) rate," said David Pospisil, strategic sales manager for Trane's New York and New Jersey operations. Trane provided the chiller and maintains the system.

Pospisil said when Morgan Stanley moved into the Purchase facility four year ago, it was clear that the 30-year old building would have to be updated to support mission-critical data center.

"The goal was to make it very reliable and add some flexibility to the operation and to try to do it in an environmentally friendly way," Pospisil said.

A major challenge was to put in the new system without disrupting the activities of the 747,595-square-foot financial firm, which includes a trading floor.

Though the new system is substantially larger, what it lacks in space savings it more than makes up in actual dollar savings.

NYSERDA says the lowered energy usage translates to planting 1.5 million acres of trees to absorb the carbon monoxide caused by electrical usage from one year of usage or, as Pospisil says, taking 271 cars off the Tappan Zee Bridge.

NYSERDA hopes that Morgan Stanley paves the way for other firms to follow suit.

"They lend credibility to the project, if these (financial institutions) are the types of facilities that are doing this, those standing on the sidelines will (do the same)," said Lee Smith, senior project manager at NYSERDA who oversaw the project.

James McAleer, vice president of facilities for Morgan Stanley, says using the system in other properties depends on the success of this one.

"(Success of the project) is dependent on the environmental benefits, the bottom-line costs of operating and its resilience." McAleer said.

Smith says the barriers to adopting the new technology are the space required for the chiller and the higher first cost of installation.

"As we've become a more technological age, we need more reliable sources of electricity, especially during the summers when the demand on the grid system is higher than the capacity," Smith said.