

The art of going green (while holding onto yours)

By Claude Solnik
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In architecture, green is so cool it's hot.

Companies are tapping various green (code for "environmentally friendly") measures when it comes to battling the summer heat. The idea is to condition indoor air and save energy while doing it. Todd Coulard, general manager of energy services for air conditioner maker Trane Commercial Systems in New York and New Jersey, said steep electric rates make energy-efficient units "more appealing."

To that end, architects are designing structures with energy-saving features meant to chill out big cooling bills. Neil MacDonald, a partner at Setauket-based William F. Collins AIA Architects, said KeySpan hired his firm to revamp a 112,000-square-foot former Arrow facility in Melville using energy-efficient and environmentally sound technology.

That sort of thinking "becomes more important" in larger structures, MacDonald noted, "when you're talking a project of this scale affecting hundreds of employees."

The new KeySpan facility includes high-efficiency ventilation units and natural ventilation – bringing in outside air to cool industrial spaces – as well as air conditioning units "designed specifically to provide cooling with a more efficient use of electricity," according to MacDonald. The system recaptures cool air from vents and uses it to chill outside air sent through the HVAC system.

"In older systems, this air would just be dumped to the exterior," said Paul Gartelmann, an associate at William F. Collins. "It would be wasted."

But the new feature lets KeySpan downsize the HVAC system and cut capital expenses – which is both good business and good architecture, MacDonald noted.

"Green design principles very often parallel good design principles," he said. "If you're designing in a thoughtful way, more often than not, you're doing it in a way that's going to benefit the environment."

Au natural

Thanks to this approach, companies selling products that reduce air-conditioning electric bills also are flying high. Carol Borow, president of Smithtown-based CHB Industries Inc., installs solar films designed to make windows reflect, rather than retain, heat, and she's not hurting for customers.

"They want to save money ... and they don't want to go to the expense of buying new windows," Borow said. "Window films are very reasonably priced."

Developers such as the Garden City-based Albanese Organization are taking their green efforts a step further. Tom McCambridge, Albanese's vice president and director of commercial leasing, said the firm uses natural water to give its HVAC at 1001 Franklin Ave. in Garden City the chills, with a large catch basin around the unit's cooling towers to collect raindrops.

According to Albanese, this not only makes buildings more efficient, but more healthful. What's good for the environment, they reason, is good for the tenant.

"We bring in more fresh air than your normal HVAC system," McCambridge said. "We bring in a higher percentage of fresh air as opposed to re-circulated air."

Back at KeySpan's Melville facility, green efforts beyond air conditioning are adding to the natural theme. William F. Collins added a skylight to the lobby that reduces the need for artificial light – and lets people bask in the sun.

"It creates a nicer environment for the personnel utilizing the space," MacDonald noted. "It looks really sharp."

Tenants not only appreciate the healthier environment, but the fact that landlords are helping the environment. Jane Myers, who leads the real estate practice group at L'Abbate Balkan & Colavita inside 1001 Franklin Ave., said the firm is proud to take space in an "environmentally sensitive building."

"This is the start of an important change in commercial real estate development," Myers said.

Chill in the air

While sunlit lobbies are nice, temperature control – specifically, cooling – is perhaps the most challenging and fertile area for potential energy efficiencies. And in many cases, the larger the building, the more innovative its green cooling solution.

Trane Commercial Systems has installed energy-efficient "chiller" units in schools and office buildings across Long Island. The units consume electricity at night, when it's cheaper thanks to lower demand, and use it to make ice that cools buildings during the day.

Coulard said the chillers cool water to about 39 degrees, more frigid than conventional air-conditioning units. "The colder the water is, the less you need to move around the building," he said. "It makes the system more efficient. In the daytime, when the (power) grid is at its worst stress level, we use that ice to supplement cooling."

Trane's 800-ton chillers and ice storage tanks used by Credit Suisse in New York City also battle global warming by reducing carbon dioxide output by the equivalent amount of CO₂ produced by 223 cars, according to Coulard.

New York State Energy Research and Development Authority President Peter R. Smith considers thermal ice storage systems an "innovative solution that saves energy, money and the environment." Trane's chiller system also qualifies for rebates through incentives from utilities and state agencies; Credit Suisse, for instance, obtained about \$820,000 in energy incentives from the New York State Energy Research and Development Agency since installing its chiller, according to Trane.

Environment of change

There are many other ways commercial landlords and tenants can go green.

Practicing what it preaches, Sustainable Long Island moved into a Bethpage office designed with green elements. Spokeswoman Jenna Rugile said walls, ceiling and floors in the office – which is located near a Long Island Rail Road station, which is big, because public transportation is green – are covered with recycled and eco-friendly products.

The goal, Rugile noted, was not only to provide a healthy working environment for the Sustainable Long Island staff, but to “offer a model to inspire other businesses to make their offices sustainable space as well.”

KeySpan, meanwhile, has filled its offices with an ergonomic Herman Miller modular office furniture system made from recycled materials.

Even adversity can be a good reason to go green. When the Seaford Post Office sprung a leak, William F. Collins used terra cotta tiles to seal the roof. The building stopped dripping and got a nice, new look, and it was eco-friendly all the way.

“Primarily, it’s about being good corporate citizens,” MacDonald said. “The benefits are in the quality of the environment you create for your employees and your building occupants.”