

Energy Efficiency:

Small New York hospital cuts greenhouse gas emissions by 18%

Nathanial Gronewold, E&E reporter

NEW YORK -- Two years ago, Mayor Michael Bloomberg (I) extended a challenge to this city's network of hospitals, as he did earlier with colleges and universities. Having already committed to reducing city government buildings' greenhouse gas emissions by 30 percent in 10 years, Bloomberg simply asked the private-sector institutions to match that.

Since that time, health workers say, energy efficiency and recycling drives have become a fact of life for New York's medical community.

Yesterday, New York Hospital Queens, a smaller private hospital in the Flushing neighborhood, held its first "green fair" to showcase the efforts it has been undertaking to staff, media and other interested parties, including competing hospitals. The event included presentations on how different units took on the challenge to curb energy waste, and was capped off with a raffle for home energy efficiency equipment.

Kevin Mannle, director of engineering at New York Hospital Queens (NYHQ), says that in two short years, the mayor's challenge has changed the culture of his hospital from top to bottom. The green fair was about generating new ideas to enhance environmental performance as much as it was a means of educating workers on further steps, he said.

Mayor Bloomberg's green challenge "really kind of spurred us on to doing more and more green and sustainable-type efforts, with a huge focus on the building, on the energy side, electricity, fuel," said Mannle. "Our next steps are to kind of turn this into a green program where we have feedback from all the different departments and other people in the hospital to keep putting forth these kind of initiatives and keep developing sustainable practices here."

SWITCHING OFF LIGHTS AND CHANGING FUELS

Among the milestones Mannle ticked off was that the small but growing hospital has managed to cut its greenhouse gas emissions by 18 percent below a 2005 baseline since it first signed onto the target. The hospital and a private consulting firm it works with believe that it will achieve the 30 percent reduction years ahead of schedule.

Most of those gains were made by switching from fuel oil heat to a natural gas-based system, work that was completed by the end of 2009. But since then, the hospital has also been taking numerous incremental steps designed to lower the electricity bill, a challenge for a facility that operates 24 hours a day, seven days a week.

Some of the measures implemented, Mannle said, include installing daylight and occupancy sensors on lighting, so the lights automatically turn off when they're not needed. The hospital had earlier tried to get staff members to switch off lights as they left a room, but such awareness building efforts didn't work nearly as well.

Heating, ventilation and air conditioning systems have also been upgraded with newer, more efficient and reliable equipment. And the hospital's information technology department was charged with trimming the power consumption of servers and desktop computers, a feat that also saves space, as the new equipment is often much smaller, the hospital says.

Mannle admits that the gains NYHQ has made on the eco-friendly front aren't enormous when compared with the efforts of larger institutions, but says they compare favorably with efforts of similar-sized hospitals that aren't necessarily located in the wealthier parts of the city.

"Some of the hospitals in the challenge are blowing everyone else away. They are bigger, they've got more philanthropy, they've got more resources," he said. "We're learning from that, and we're looking to see if we can replicate that here."

Jennifer Kearney, a partner at the environmental and energy consultancy Gotham 360, agrees. She has been advising the massive New York Presbyterian Hospital and the New York University Langone Medical Center on their carbon-cutting efforts, and NYHQ is the smallest member of her hospital client list. But she says that NYHQ's example demonstrates how institutions that aren't necessarily endowed with enormous financial resources can still make tremendous gains in a relatively short time frame.

Energy Efficiency (continued)

'GREEN HOSPITAL' MOVEMENT COULD CUT HEALTH CARE COSTS

“On the hospital side, a lot of the energy programs are driven by reducing waste and driven by cost savings opportunities,” Kearney said. “NYHQ is one of the smaller organizations but has an incredibly strong program and is really grass-roots in terms of the lowest-level staffer to the top executives all really being involved and very committed.”

All told, 13 private hospitals in the city have joined NYHQ and the larger Manhattan medical centers to sign onto the mayor's climate change combating efforts. The efforts have been big and small, from replacing fixtures with newer compact fluorescent lighting to installing solar panels on rooftops, a move that NYHQ will also likely make once it has completed a cost-benefit analysis of four proposed projects. Mandle says this “green hospital” movement now sweeping the nation could even possibly help to control the rising cost of health care.

He cited a U.S. EPA and Department of Energy study that estimates that hospitals eventually see \$20 in additional revenues for every \$1 dollar they save on energy. It's a figure that has been getting a lot of attention among the nation's hospitals and medical offices, he said.

“With peers and colleagues and trade associations that I belong to and any conferences I go to and anything I participate in, yeah, this is throughout the industry,” Mandle said.