An Interview:

Designing a LEED Gold office with NYSERDA Commercial Tenant Program

Last year, United Technologies Corporation (UTC) opened a new office in Brooklyn’s DUMBO neighborhood to house their Digital Accelerator. NYSERDA sat down with Korinti Recalde, Senior Director of Sustainability at UTC, and Lauren Brust Moss, Program Director at NORESCO, to hear about the LEED® Gold space and their experience participating in New York State Energy Research and Development Authority’s (NYSERDA) Commercial Tenant Program.

NORESCO, the commissioning agent and LEED consultant on the project, recommended the program to UTC to allow expanded energy modeling during the design phase. Together, UTC and NORESCO built out “an open, collaborative, and light-filled space that promotes and fosters creativity and teamwork for employees.”

Tell us about your company and why energy efficiency is important to you.

At United Technologies, we define sustainability as doing good for the planet while we do good for our customers, employees, communities, and shareowners. We believe that profitable, responsible operations should not compromise the environmental or economic health of future generations. Long-term sustainability for UTC means a healthy planet, an engaged workforce, vibrant communities, happy customers, and satisfied shareowners.

UTC’s investment in the United Technologies Digital Accelerator is the next step in the company’s digital transformation and underscores UTC’s commitment to leading in the digital era and unleashing the size and scale of UTC’s businesses on the digital world of big data and the Internet of Things. When developing this project, we kept sustainability in mind; that’s why we built this space to meet LEED® Gold specifications under the LEED® green building program.

What were your main drivers for participating in the program?

We aspired to create a work space where employees could achieve more and consume less. The NYSERDA Commercial Tenant Program allowed us to expand the scope of our energy modeling work to include more scenarios in our evaluation and analysis. The deeper evaluation and analysis led to improved findings that were then incorporated into a better design and construction of an even more efficient space.

What types of measures did you investigate and/or install?

The following energy efficiency measures were modeled, analyzed, recommended, and ultimately selected:

- Installation of heat pumps, in lieu of chillers with a scroll compressor and electric reheat
- Installation of demand control ventilation (DCV) in all ventilated spaces (rather than only required spaces)
- Reduction of outdoor air electric pre-heat temperature to 40°F from 50°F
- Installation of high efficiency light fixtures to reduce lighting power use
- Installation of low-flow fixtures to reduce domestic hot water use and associated energy consumption
What do you think are the most beneficial results of participating?

The most beneficial result of participation in the NYSERDA Commercial Tenant Program was a better design and the construction of an even more compelling and efficient work space than originally envisioned for the United Technologies Digital Accelerator.

Many participants have experienced an increase in workplace satisfaction or productivity due to more a healthy/comfortable work environment. Have you or your staff noticed any such changes?

The United Technologies Digital Accelerator is a group of data scientists, designers, engineers, product and project professionals that share an entrepreneurial spirit. A large part of the ability to tap into that spirit is providing an open, collaborative and light-filled space that promotes and fosters creativity and teamwork for employees. The space is a direct reflection of the company’s shift toward accelerating a digital mindset, which includes supporting an agile working environment. Employees have the freedom and flexibility to work how they feel most comfortable – enabling idea generation, collaboration, and the ability to deliver value with speed.

How was your property manager/building owner involved in the process? Were they onboard and interested in working with you for the project?

The property manager was involved throughout the design process to help the design team understand the building’s limitations and ensure that the team had support during the decision process in order to complete the project. There was limited interaction between the team participating in the NYSERDA Commercial Tenant Program and the owner/manager.

Does your company have any corporate sustainability goals? Has this project helped work toward achieving those goals?

Yes. Every five years, UTC sets aggressive new sustainability goals for our environment, health, and safety performance. Our goals and progress are reviewed by the UTC Board of Directors and CEO. We set our first goals in 1992, and they have been an invaluable tool for operational improvement. Our 2020 goals, shown in the infographic below, drive us every day to continue to build on our legacy of healthy and safe workplaces for our employees and environmental performance in our operations.

Would you recommend the program to other companies/commercial tenants? What were the benefits?

Yes. The NYSERDA Commercial Tenant Program encourages design and construction teams to think about opportunities for efficiency in the space and provides a path for supporting the implementation of better systems and building controls. The design and construction teams were able to think through atypical design options that would allow for better efficiency, healthier spaces, and increased control.

This article was written for NYSERDA’s Commercial Tenant Program (CTP), which offers financial assistance for energy studies in tenant spaces.

Learn more about NYSERDA’s Commercial Tenant Program.

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