case study

New York Power Authority: Daylight Hour Strategies & Outcomes Turning the lights off in daylit spaces for just one hour allowed NYPA to reduce its lighting load by 30%, saving 380 kWh of energy



building energy exchange



Visit daylighthour.org to learn more about the initiative. Join the movement. #daylighthour

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be-exchange.org

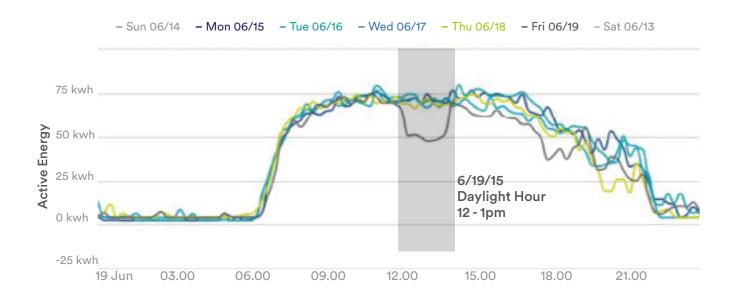
NYPA: Daylight Hour Strategies & Outcomes

primary energy figures

Daylight Hour lighting load reduction: 30%

kWh saved:

380 kWh



building strategies

- Utilization of NY Energy Manager
- Sound detection lighting controls
- LED lighting
- Occupancy sensors
- Clear and/or frosted glass windows

benefits

- Accurate, real-time building data
- Increases lighting efficiency
- Overall energy consumption reduction
- Monetary savings
- Occupant comfort

project quote

Our participation in the 'Daylight Hour' campaign at the NYPA White Plains office goes hand-in-hand with other measures we've undertaken to optimize the efficiency of the building. While new design features, energy efficient technologies, and energy management systems are essential elements, our success also depends on employee engagement, and certainly the Daylight Hour program demonstrates this.

- Jill Anderson, SVP of Commercial Operations, NYPA

summary

NYPA's participation in Daylight Hour successfully saved energy and started a larger, internal conversation about workplace sustainability.

The New York Power Authority (NYPA), the nation's largest state public power organization, is one of more than 300 entities to participate in the Building Energy Exchange's Daylight Hour campaign. Daylight Hour is an international social media campaign designed to raise awareness about the benefits of using natural light in indoor work spaces. By turning off lights during the 2015 Daylight Hour event, NYPA reduced lighting load by about 30 percent at its administrative offices in White Plains, N.Y., saving approximately 380 kWh of energy. NYPA has used the annual event as a springboard to launch its own daylighting campaign and to engage in higher level conversations with employees about sustainable workplace practices.

building features

NYPA continuously upgrades its White Plains administrative building by tracking energy use with the NY Energy Manager and implementing appropriate energy efficiency technologies.

The 17-story, 420,000 square-foot administrative office building was built in 1981 and purchased by the Authority in 1991. The facility includes office space for about 730 NYPA employees as well as rental space for tenants with nearly 200 employees. The energy efficiency of the building, which received LEED EB Gold certification in 2012, continues to improve as NYPA implements additional electricity-saving upgrades. These include an on-going project to replace T8 fluorescent lamps with LEDs throughout the building interior, installation of bi-level LED lights and sound-detection lighting controls in building stairways, and replacement of all metal halide and high-pressure sodium fixtures with bi-level LED fixtures and motion-detection controls in the building's 285,000 square-foot parking garage.

Design elements that optimize daylight illumination are being integrated into space planning, private offices and workstations as floors in the building are renovated. These features are significantly reducing lighting loads and improving the work environment for employees.

NYPA tracks the energy usage of the building through the NY Energy Manager, a real-time energy monitoring system that it launched in 2014. The web-based platform, which is available to all state agencies, helps facility managers quickly understand how buildings are using energy. With more accurate, real-time data, building systems can be adjusted to improve energy performance without compromising occupant comfort.

process & challenges

NYPA's Sustainability Office communicated with employees clearly and regularly to ensure Daylight Hour's success.

The primary challenge to executing a successful Daylight Hour campaign centers on messaging to employees. NYPA's Sustainability Office spearheads this effort and has identified a variety of strategies. In the months leading up to Daylight Hour, notices about the initiative are posted on an internal website and hard-copy posters are hung near all elevators and in common areas. The White Plains Office Green Team -- a cross-departmental volunteer group -- helps to build support for the event by recruiting participants. On the day of Daylight Hour, an intranet reminder is posted in the morning, a text message reminder is released 30-minutes before the event, and a loudspeaker announcement is made at the start of the hour alerting employees on all floors that Daylight Hour is about to begin. Another engagement strategy is competition, with employees encouraged to compete in saving energy floor-by-floor. Employees inspired to take up the challenge generally lead the effort. As not all floors have been renovated, and some have greater access to natural light than others, they have to be careful to turn off lights only in areas with sufficient daylight. Through the NY Energy Manager, the Sustainability Office tracks energy reductions realtime, and posts screen shots of the results at the end of the hour.

performance benefits & savings

NYPA carefully tracked the savings achieved during Daylight Hour.

During Daylight Hour 2015, the White Plains Office's total lighting load decreased by about 30 percent, or 380 kWh. Tangible energy and cost savings such as these give momentum to NYPA's employee engagement efforts. The success of the 2014 Daylight Hour event inspired the Sustainability Office to launch an annual daylighting campaign called "Efficiency Fridays." With this initiative, NYPA continues to promote daylighting throughout each summer.

conclusion

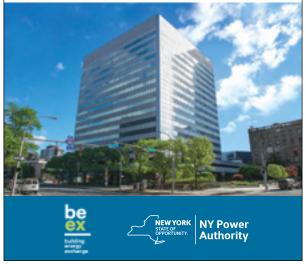
Daylight Hour's impact on NYPA was significant, reverberating well beyond a single hour.

By participating in Daylight Hour, NYPA is identifying new strategies to engage employees and successfully communicate the importance of sustainable workplace practices. Like most people, NYPA employees are willing and often excited to get involved in workplace sustainability initiatives, but it takes a well-thought out, coordinated approach to keep everyone on track. Daylight Hour has inspired NYPA to think of new ways to save energy and engage employees in sustainability.

With organizations and companies taking part globally, 2015 BEEx engaged over 300 offices spanning 58 million square feet of office space to reach nearly six million people on social media, and most importantly, to save enough energy in just one hour to power 15 New York households for an entire year.

Daylight Hour Friday, June 19 Noon to 1 p.m.

Turn off lights in day-lit areas to save energy



A poster hung in NYPA common areas to remind employees about Daylight Hour.

contributors

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The building energy exchange connects the New York real estate and design communities to energy and lighting efficiency solutions through exhibitions, education, technology demonstrations, and research. We identify opportunities, navigate barriers to adoption, broker relationships, and showcase best practices at our resource center in the Surrogate's Courthouse.



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