



Gensler walks the talk

Case Study

Tenant Name:
Gensler

Location:
1700 Broadway
New York, NY

Project Size:
120,000 ft² over 5 floors

“We were excited to see what opportunities we would uncover through this analysis...We are always looking for fast, replicable ways to present energy saving measures to our clients, alongside first cost, ROI, and operational energy savings.”

—David Briefel,
Gensler’s Sustainability Director

Overview

In 2016, Gensler—the world’s largest architectural firm—signed a new lease in the heart of New York City’s Theater District. With 120,000 ft² of space across five floors, Gensler sought to design an office that reflected the firm’s credo, namely excellence in sustainable design to improve the staff’s health, comfort, and wellness as well as reduce energy and operating costs. The new space plays off its Theater District locale, which helped it top Crain’s 5 coolest NYC offices in 2018.

Gensler has a public commitment to sustainability and climate action, which establishes it as a leader in the industry. In 2009, they signed the AIA 2030 Commitment, which calls for all new buildings to be carbon neutral by 2030; and in 2015, in the wake of COP21, they signed the Paris Pledge for Action. These actions help meet energy reduction goals and positions the new office as a showcase for energy efficiency for clients.

Actions

Decisions made during the initial design phase of a project can substantially impact energy costs and the environmental footprint of an office space throughout the lease term. In order to analyze the costs and benefits of implementing energy efficiency measures in their new space, Gensler worked with NYSERDA and Robert Derector Associates—the engineering consulting firm—to perform a detailed energy and financial analysis for various energy-efficient systems and technologies. The energy modeling results and a strong business case allowed Gensler to evaluate which projects to implement based on the lease term, costs and ROI requirements, and functionality.

The design process was built into the project timeline and budget without any unforeseen delays, another critical component of tenant fit-out projects. The energy efficiency measures included installing a state-of-the-art LED lighting system and sensors throughout the space that provide real-time daylighting, occupancy, thermal, and energy data. Through a centralized control system, lighting output in open workspaces was reduced by 25%. Automatic controls were installed to turn off non-essential, end-user devices when not in use, as were ENERGY STAR® appliances, including refrigerators, microwaves, coffee machines, and dishwashers.

Measures and Estimated Annual Savings



Measure Description

Electric Savings (kWh)

Electric Savings (\$)

Equipment

Equipment Power Management	49,474	\$10,885
ENERGY STAR® Equipment	185,313	\$40,770
Automatic Receptacle Control	179,632	\$39,519



Lighting

Lighting Control Settings	23,419	\$5,152
Reduced Lighting Power	59,448	\$13,078
High Efficiency LED Lighting	46,377	\$10,203

Total Savings

543,663 **\$119,607**



“With building codes prescribing higher levels of energy savings each year, it’s becoming increasingly critical that we model energy performance on all of our projects, including tenant fit-outs”

—David Briefel, Gensler’s Sustainability Director

Results

Since relocating, Gensler has seen significant energy savings compared to the previous office. Based on the implemented measures, projections for reduced electricity consumption were approximately 543,663 kWh per year. When base-building energy savings are factored in, combined electric savings climb to 642,000 kWh— equivalent to 173 tons of emissions annually—as a result of upgraded ductwork and tenant-side terminal units. Over the 15-year lease term, total emissions reduction equals 2,600 tons, enough CO₂ to fill 525 hot air balloons.

In terms of the overall impact of the design, Gensler’s post-occupancy survey showed a 25% increase in workplace satisfaction and found that 74% of staff feel the physical work environment has a positive impact on their overall job satisfaction.

Based on these significant results and armed with personal experience, Gensler continues to credibly initiate energy conversations with clients at the onset of the design process to explain the importance of executing energy models and simulations, as well as the gains involved with energy efficiency-based investments.

Energy Efficiency for Commercial Tenants

NYSERDA supports tenants, landlords, and industry consultants in improving energy efficiency of leased spaces through thoughtful design, proactive maintenance and operations, and actionable plans to reduce energy consumption over the life of a lease. NYSERDA helps cover the cost of identifying energy-saving opportunities and developing a plan to implement energy efficiency measures in leased spaces.

Discover what programs are available through NYSERDA to best suit your needs for reducing costs and energy use in your commercial space.

Visit nyserdera.ny.gov/commercial-mixed-use-buildings for more information.



NYSERDA