

# Energy Efficiency in Leased Office Space for Law Firms

## Case Studies

annual cost savings:

**\$390,000**

energy reduction:

**39%**

annual cost savings:

**\$270,000**

Energy reduction:

**46%**

annual cost savings:

**\$70,406**

Energy reduction:

**45%**

## Overview

Law firms are realizing cost savings by making energy improvements in their leased office space. Implementing energy efficiency measures such as lighting controls, energy management systems, and daylighting can have a positive impact on your bottom line.

## Law Firm Tenants

The law firm of **White & Case LLP** partnered with NYSERDA to enhance the law firm's design and build-out of nine floors of leased space in New York City. Working with consultant Robert Director Associates (RDA), the firm was presented with three energy efficiency design options to choose from. RDA's modeling provided cost of installation, potential electricity savings, and potential NYSERDA incentives for each design package as compared to the modeled baseline scenario. With costs and potential savings modeled, the firm was able to make informed, energy efficiency decisions that will result in significant savings.

The law firm of **Paul Hastings LLP** participated in NYSERDA's Commercial Tenant program for energy efficient office spaces to help with the build-out of the firm's new office space in New York City. By participating in the program, the firm was able to take advantage of NYSERDA funding to engage the services of energy efficiency consultant Robert Director Associates. The resulting energy modeling analysis informed the firm's decision-making process in incorporating energy efficient components in the design and build-out of the new space.

The law firm of **Reed Smith LLP** participated in the Urban Land Institute's (ULI) Tenant Energy Optimization program to assist with the energy efficient design and build-out of the firm's Philadelphia office space. The ULI program provides tenants with a 10-step framework and support resources in undertaking the design and build out of energy efficient, class-A office space.

Tenant Name:

**White & Case LLP**

Location:

**1221 Avenue of the Americas, NYC**

Number of Floors:

**9**

Lease Term:

**20 years**

Project Size:

**440,000 ft<sup>2</sup>**

Tenant Name:

**Paul Hastings LLP**

Location:

**200 Park Avenue, NYC**

Number of Floors:

**4**

Lease Term:

**16 years**

Project Size:

**190,914 ft<sup>2</sup>**

Tenant Name:

**Reed Smith LLP**

Location:

**1717 Arch Street, Philadelphia, PA**

Number of Floors:

**6**

Lease Term:

**16 years**

Project Size:

**117,000 ft<sup>2</sup>**

**Measures implemented:**

- Replacement of tenant-side HVAC systems
- Controls
- Energy management system
- High efficiency LED lighting
- Day-lighting
- ENERGY STAR equipment
- IT and plug load management equipment
- Optimized after hours space usage

**Measures implemented:**

- High efficiency LED lighting
- Replacement of tenant-side HVAC systems
- Supplemental tenant air conditioning units
- IT and plug load management equipment

**Measures implemented:**

- Dimmable switching controls
- Energy efficient lighting design
- Daylight harvesting controls
- Energy Star Equipment
- Plug load management
- Bi-Level lighting controls

**Investment metrics:**

- Investment of \$400,000 was required to achieve the savings listed above
- Payback time for investment: 1 year
- Expected discounted ROI over the 20-year lease term: 1,141%
- Modified Internal Rate of Return (MIRR): 16.0% per year

**Investment metrics:**

- Investment of approximately \$270,000 was required to achieve the savings listed above
- Payback time for investment: Approximately 11 months
- Expected discounted ROI over the 16-year lease term: 1,071%
- Modified Internal Rate of Return (MIRR): 19.3% per year

**Investment metrics:**

- Investment of \$153,058 is required to achieve the savings listed above
- Payback time for investment (with incentives): 2.2 years
- Expected discounted ROI over the 16-year lease term: 410%
- Modified Internal Rate of Return (MIRR): 57% per year

**Estimated energy reduction:**

39%

**Estimated energy reduction:**

46%

**Estimated energy reduction:**

44.5%

**Estimated electric savings:**

\$7.7 million in estimated savings over the 20-year lease term

**Estimated electric savings:**

\$4.3 million in estimated savings over the 16-year lease term

**Estimated electric savings:**

\$1,126,498 million in estimated savings over the 16-year lease term

**Estimated annual cost savings:**

\$390,000

**Estimated annual cost savings:**

\$270,000

**Estimated annual cost savings:**

\$70,406

**Energy cost savings break down:**

- \$3.4 million in savings from more efficient plant and equipment
- \$2.5 million in savings from process and control improvements
- \$1.8 million in savings dependent on making changes to the work place culture and/or end-user behavior

**Energy cost savings break down:**

- \$2.5 million from plant and equipment upgrades
- \$700,000 in savings from process and control improvements
- \$1.2 million in savings from changes to workplace culture and/or end-user behavior

**Make your leased office space energy efficient.**

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