

MODEL ENERGY ALIGNED CLAUSE LANGUAGE

Re: Capital Improvements to Improve Energy Efficiency

1.1 Operating Expenses
(a) Definitions
(i) "Base Year" means
(ii) "Capital Improvement" means any alteration, addition, change, repair or replacement (whether structural or nonstructural) made by Landlord in or to the Building or the common areas or equipment or systems thereof, which under generally accepted accounting principles, consistently applied, is properly classified as a capital expenditure. The aggregate costs of any Capital Improvement shall be deemed to include, without limitation, architectural, engineering and expediting fees, legal, consulting, inspection and commissioning fees actually incurred in connection therewith, but shall be deemed to exclude actual or imputed financing costs in connection therewith.
(iii) "Comparison Year" means each period of twelve (12) consecutive months subsequent to the Base Year.
(iv) "Independent Engineer" means an engineer selected by Landlord from the list annexed hereto as Exhibit From time to time, but not more than once during any period of twelve (12) consecutive months, Landlord and Tenant may each recommend one or more independent professional engineers licensed by the [ENTER STATE NAME] or energy management specialists, in each case with at least six (6) years' experience in performing energy audits on commercial property similar in size and use to the Property, for inclusion on the list annexed hereto as Exhibit Any such recommendation(s) by Landlord or Tenant shall be subject to the written approval of the other party, which approval shall not be unreasonably withheld.
(v) "Operating Expenses" means all costs, expenses, disbursements and expenditures (and taxes, if any, thereon) incurred by or on behalf of Landlord (and whether paid or incurred directly or through independent contractors or outside vendors) with respect to operating, maintaining, repairing, replacing, lighting, insuring, staffing, cleaning, safeguarding and managing the Building and all common areas and equipment or systems thereof, including, without limitation(16) the cost of any Capital Improvement (as hereinafter defined) if and to the extent includable in Operating Expenses pursuant to Section 1.1(b) below, which cost shall be amortized on a straight line basis over the useful life of such Capital Improvement (such useful life to be determined in accordance with generally accepted accounting principles, consistently applied), except with respect to Capital Improvements described in Section 1.1(b)(i) below (which shall be amortized as provided in that subsection), with the annual amortization amount included in Operating Expenses for the

(vi) "Projected Annual Savings" means the average annual base building utility cost savings anticipated to be generated by a Capital Improvement, determined using commonly applied engineering methods and an estimate provided in writing by the Independent Engineer.

Comparison Year in question...



(b) Capital Improvements.

Landlord may include the costs of certain Capital Improvements in Operating Expenses pursuant to Section 1.1(a)(v)(16) in accordance with the following:

- (i) Capital Improvements Intended to Improve Energy Efficiency. In the case of any Capital Improvement that the Independent Engineer certifies in writing will, subject to reasonable assumptions and qualifications, reduce the Building's consumption of electricity, oil, natural gas, steam, water or other utilities, and notwithstanding anything to the contrary in Section 1.1(a)(v):
- A. The costs of such Capital Improvement shall be deemed reduced by the amount of any government, utility or other incentives for energy efficiency improvements actually received by Landlord to defray the costs of such Capital Improvement, and shall further be reduced by any energy efficiency tax credits or similar energy-efficiency-based tax incentives actually accruing to Landlord as a result of such Capital Improvement.
- B. For the purposes of this Section 1.1(b)(i), "simple payback period" means the length of time (expressed in months) obtained by dividing (x) the aggregate costs of any such Capital Improvement, by (y) the Projected Annual Savings. By way of example: If the aggregate costs of such Capital Improvement are \$2,000,000 and the Projected Annual Savings are \$500,000, then the simple payback period for such Capital Improvement is forty-eight (48) months.
- C. Commencing with the first Comparison Year following the year in which such Capital Improvement is completed and placed in service, and continuing for the duration of the Adjusted Payback Period (as hereinafter defined), Landlord may include in Operating Expenses a portion of the aggregate costs of such Capital Improvement equivalent to eighty percent (80%)* of the Projected Annual Savings, so that the aggregate costs of such Capital Improvement will be fully amortized over one hundred twenty-five percent (125%)† of the simple payback period (such period of time, the "Adjusted Payback Period"). By way of example: If the aggregate costs of such Capital Improvement are \$2,000,000, the Projected Annual Savings are \$500,000 and the simple payback period for such Capital Improvement is forty-eight (48) months, then Landlord may include \$400,000 of the aggregate costs of such Capital Improvement (i.e., an amount equivalent to 80% of the Projected Annual Savings) in Operating Expenses for five consecutive Comparison Years (i.e. sixty (60) months or 125% of the simple payback period).

*

^{*} Actual cost savings from energy efficiency improvements may equal, exceed or fall short of projected savings. The discount of Projected Annual Savings (and the concomitant extension of the payback period) is intended to provide a margin of error in case actual savings fall short of Projected Annual Savings.

[†] See Footnote 1.



The Energy Aligned Clause

An overview of leasing language that solves the Split Incentive Problem often present in modified gross commercial and net leases

The Split Incentive Problem

- The "Split Incentive Problem" occurs because building owners pay the capital expenses for energy retrofits to the base building, but tenants receive the financial benefits of energy savings through a reduction in their proportionate share of base building operating expenses.
- This "split" of responsibility for capital versus operating expenses leaves building owners with little incentive to undertake energy retrofits.
- This is not just a problem in theory. In a New York City Mayor's Office (OLTPS) survey, 60 percent of New York City commercial property owners said it was an impediment to making energy retrofits.

Current Leases do not Solve the Split Incentive Problem

Many modified gross commercial leases have a clause which allows owners to recover costs of
capital expenses that result in operational savings. But this recovery is typically based on the
useful life of the retrofit; this is too long to encourage owner investments.

Solving the Problem

- OLTPS convened a Working Group of major building owners, tenants, property managers, lawyers, and engineers, to address the split incentive issue.
- Owners expressed a strong preference to recoup the capital costs of efficiency retrofit measures based on a prediction of energy savings; a measured savings standard, from the owners' point of view, was too complex, expensive and unpredictable.
- Tenants, on the other hand, were concerned that predicted savings would not be realized and wanted cost recovery to be based on measured savings.

The Solution to the Split Incentive Problem

- The Working Group concurred that industry experience showed that actual commercial energy retrofit savings are generally within +/- 20 percent of predicted savings.
- Tenants agreed to base the owners' recovery on predicted savings as long as tenants could be protected against underperformance.
- Solution: The building owner's cost recovery is based on a prediction of savings as determined by an energy specialist agreed upon by both parties, but the owner's capital expense pass-through is limited to 80 percent of such predicted savings in any given year. This provides the tenant with a cushion to protect against underperformance; accordingly, the owner's payback (recovery) period is extended by 25 percent.
- OLTPS developed a financial model which shows that, under this arrangement, both parties benefit financially in the situations that cause concern: when energy savings are lower than expected, when retrofits occur late in the lease, or when the retrofits have a long payback. Even when all three occur, the downside risk to the tenant is minimal.

Why this Works

• A key conclusion of the Working Group was that energy efficiency retrofits in multi-tenant commercial buildings are not a zero sum game.



- The pass through structure, as detailed in the Energy Aligned Clause simply unlocks the potential for energy savings that result from retrofits.
- In almost all cases, the Energy Aligned Clause will make energy retrofits net present value (NPV) positive to both owners and tenants a true win-win situation. Even in cases where the retrofit substantially underperforms predictions, the downside risk to the parties is nominal compared to the overall costs of owning, operating and occupying a commercial building.

Key Features of the Energy Aligned Clause

Standardized Lease Language is Easy to Use.

The Energy Aligned Clause can be easily inserted into a typical modified gross commercial lease. This reduces transaction costs between owners and tenants who do not have to negotiate a new "green lease" simply to position themselves to accomplish energy retrofits.

Both Parties Benefit from Energy Savings.

If the energy retrofit performs as predicted, tenants keep 20 percent of their share of energy savings *immediately*, and enjoy the full amount of savings after the retrofit is paid off. The owner accrues the energy savings when the lease turns over because of the lower base building costs.

The Buffer Protects Tenants from Underperformance.

The tenant pays only 80 percent of predicted savings, which extends payback period to 125 percent. Keeping 20 percent of savings creates a performance buffer, which protects tenants in case of less-than-expected results from underperforming retrofits.

The Owners Recover Their Capital Costs.

The building owner can start recovering the cost of the retrofit from the tenant as soon as it is in place, with full recovery well before the end of the useful life of the equipment.

Predicted Payback Simplifies the Accounting.

Monthly payback amount is calculated upfront using predicted energy savings, as determined by a professional energy specialist, which is considerably simpler and less controversial than determining actual savings.

What the Energy Aligned Clause Does Not Do.

The Energy Aligned Clause solves the split incentive problem for energy used in the base building systems for typical modified gross commercial leases. It does not solve the split incentive problem for electricity used *within* tenant spaces when such spaces are not individually metered or submetered. To solve this issue, tenants must be individually metered or sub-metered, and pay for their metered electrical consumption. Note: In December 2010, New York City adopted Local Law 88. This requires the installation of meters or sub-meters for all large commercial tenant spaces by 2025. For more information, see www.nyc.gov/ggbp. OLTPS is also working to address this issue by inviting commercial tenants to join the Mayor's Carbon Challenge to reduce their carbon emissions by 30 percent in 10 years; visit http://www.nyc.gov/html/gbee/html/initiatives/carbon.shtml for details.



The financial model below shows how the Energy Aligned Clause protects the tenant from an underperforming retrofit.

Example of a tenant space:

Lease rent psf:

Operational expenses for energy in base year:

Year of retrofit implementation in 10 year lease:

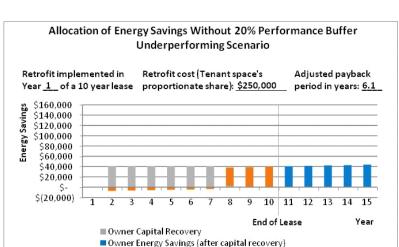
Retrofit cost psf.:

Predicted energy savings psf:

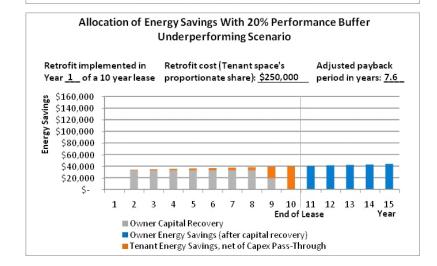
Predicted simple payback period:

Performance Buffer:

Adjusted payback period with Performance Buffer:

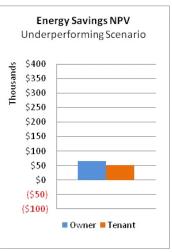


■ Tenant Energy Savings, net of Capex Pass-Through

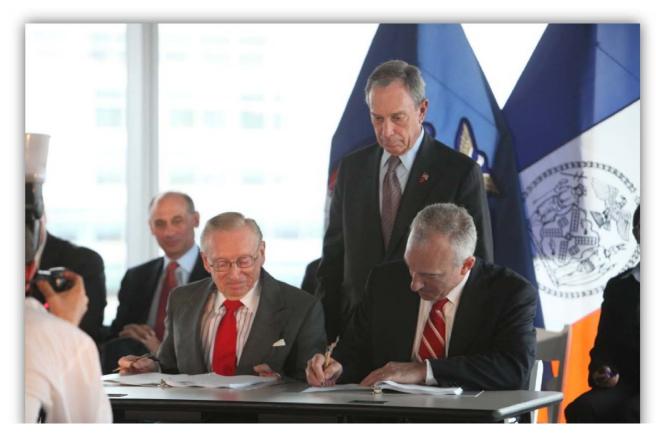


100,000 sf. \$60.00 \$2.00 Year 1 \$2.50 20% or \$0.41 6.1 years 20% 7.6 years









Mayor Bloomberg oversees the signing agreement between Silverstein Properties and WilmerHale, the first lease to use the Energy Aligned Clause.

Support for the Energy Aligned Clause

- On April 5, 2011, Silverstein Properties and WilmerHale signed the first lease including the Energy Aligned Clause for a floor in 7 World Trade Center (7 WTC). A second lease was signed by MSCI Inc. in 7 WTC on September 19, 2011.
- The City of New York will use the clause in new leases where the City is a tenant. Recent leases incorporating the Energy Aligned Clause include 285,314 square feet at 100 Church St. in June 2012, 21,651 square feet at 2865 8th St., Brooklyn in August 2012, and 102,000 square feet at 100 Church St. in September 2012.
- In early 2012, a major New York City commercial tenant committed to using the Energy Aligned Clause in its preferred leasing language.
- The Energy Aligned Clause has been endorsed by the following organizations: Real Estate Board of New York (REBNY), U.S. Green Building Council, Natural Resources Defense Council (NRDC), Environmental Defense Fund (EDF), and HR&A Advisors.
- The following lawyers, owners, tenants, property managers, and engineers helped develop the clause: Marc Rauch, Esq., Forest City Ratner Companies, First New York Partners, Cushman & Wakefield, Ernst & Young, Deutsche Bank, Goldman Copeland Associates, and JB&B.
- A six-month outreach effort was managed by the New York City Mayor's Office of Long-Term Planning and Sustainability and Urban Green Council, the New York Chapter of the U.S. Green Building Council. Funding for the effort was provided by the New York State Energy Research and Development Authority (NYSERDA), NRDC, REBNY, EDF, and the City of New York.