

“Green Lease Guide: Issues, Sample Clauses and Leases, and Links”

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A Report by the 2012 Green Lease Workgroup
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Executive Summary.

This Green Lease Guide was prepared by the Green Lease Workgroup, a joint activity of the Environmental Law Section and Real Estate Section of the Boston Bar Association (BBA).

This Guide aims to introduce and summarize green lease terms for attorneys so they can **use green lease terms** in their practice *or advocate for green leases* (in their own lease or as a public policy).

The Guide outlines green lease issues, offers sample green lease clauses and lease forms, and provides links to other resources on green leases; the focus is on office leases. More specifically, this Guide:

1. Explains *why greening our leases and building operations* is both *important AND feasible*:
 - a. Buildings account for 50% of U.S. energy use.
 - b. Buildings have major negative impacts on climate change and water supplies.
 - c. New technologies and building practices can reduce those impacts and provide long-term cost savings.
2. Offers *samples* of (a) green lease *terms* you can add to any regular lease and (b) a *full* green lease.
3. Lists *issues to address* (energy, recycling, cleaning, etc.) with a green lease or with green lease *clauses*.
4. Notes *tax aspects* of green leases (capital cost amortization, tax credits).
6. Provides *links to green lease forms and resources* (REALPac, US General Services Admin., etc.).

The Guide explains how you can make a lease greener and why green leasing is good policy.

1. Why “greening” leases and building operations is important - and feasible.

Buildings are critical to our current energy challenges and to climate change. Buildings account for **over 50%** of total energy consumption in the U.S. (significantly more than transportation).ⁱ

In terms of climate change, about **40%** of U.S. carbon emissions are from buildings. In urban areas like Boston and New York, it’s far higher – perhaps more than 75%.

U.S. buildings emit more greenhouse gases (“GHGs”) than the transportation sector.ⁱⁱ

U.S. buildings (by themselves) emit more GHGs than any other country (ALL sectors) in the world (except China).ⁱⁱⁱ This may not be surprising when one realizes that buildings accounted for 74% of total US electricity consumption in 2009,^{iv} half of all electricity in the US comes from coal, and coal-fired power generation is the biggest source of GHG emissions in the US.^v

Buildings also use staggering amounts of water - U.S. buildings use up more than 38 billion gallons of water every day.^{vi}

Dramatic changes are underway in building technologies and operations that reduce the environmental and energy impacts of heating, lighting, and water use. Buildings are becoming “greener”.

What’s a “green” building? While “green building” is well-known, some call these “*high performance*” buildings. Green buildings provide environmental benefits compared to standard buildings, but they also perform better on measures for electricity and water use, offer advanced heating and cooling options, and can result in significant savings in operating costs. There is also evidence that they can improve morale and employee or student performance, perhaps through providing better air and lighting.^{vii}

One definition of green building is: “The practice of (1) increasing the efficiency with which buildings and their sites use energy, water, and materials, and (2) reducing building impacts on human health and the environment, through better siting, design, construction, operation, maintenance, and removal – the complete building lifecycle.”^{viii} Green building is especially important in Massachusetts as our offices use more heating oil and gas than the national average.

There are various green building measures and programs. The U.S. Green Building Council (USGBC) established the LEED program (Leadership in Energy and Environmental Design), a *voluntary* program that building owners or developers can elect to use for different types of buildings (new commercial, commercial renovation, interiors, LEED for Homes, etc.).^{ix} LEED uses a list of categories on sustainability measures in buildings (energy use/conservation, water use/conservation, lighting, materials, site location, landscaping, etc.). Parties using LEED select green building options from the list.

There are increasing numbers of *mandatory* green building requirements. Some government owners - federal GSA (General Services Agency), state, and local - require LEED certification (or design and construction that would be eligible for LEED certification) or other green measures for certain buildings, either ones that they develop themselves or ones they fund (or provide other incentives for).

The International Code Council (ICC) has issued an International Green Construction Code (IgCC) that can be adopted, in whole or in part, by state or local jurisdictions in the U.S. The IgCC in essence takes the categories in the *voluntary* LEED program and allows a jurisdiction to adopt some or all of them as the *mandatory* code requirements for some or all buildings in a jurisdiction.^x

How can we make buildings greener? Well-established energy efficient practices and technologies are now capable of achieving 15% to 25% savings over standard building operations.^{xi}

McKinsey and Company did a study on “Reducing US Greenhouse Gas Emissions: How Much, At What Cost” in 2007. The report concluded that (1) improving energy efficiency in buildings and appliances provides the largest cluster of options to reduce greenhouse gases that are “negative-cost” (meaning these options lead to savings) and (2) improving energy efficiency in buildings could offset increasing demand for electricity, and thus largely negate the need for more coal-fired power plants.^{xii}

What about offices and leases? This report focuses on leased commercial office buildings.

The operation and maintenance of office buildings in terms of energy efficiency and other green building criteria is important not only to building owners but also to tenants. This is true both for new buildings and for existing buildings that can be renovated (“retrofitted”) to be more energy efficient.

One key challenge in making building operations greener relates to barriers in how leasing works.

Green leasing barriers include financial issues (e.g., standard lease terms, capital upgrade costs), building infrastructure/technology issues (e.g, metering), and human behavior (landlords and occupants).

Building owners generally do not have a financial incentive to invest in energy efficiency to reduce electrical uses (to take one example) if under the typical commercial *net* lease the tenants pay the electric bills and tenants are therefore the ones who will save money from the energy efficiency investments. (In a *gross* lease, while the landlord may have an incentive to have the building be more efficient, the tenants have no incentive to conserve energy so the landlord might not have cost savings.)

Also, most leases for multi-story buildings just divide the total energy cost to heat the building by area leased and charge each tenant for its square footage. There is no financial incentive for the owner or a tenant to reduce its heating use, because the savings go to others.

A technical challenge is most buildings lack equipment for separate metering for different tenants. An operational challenge is occupant behavior (how to get “buy in” from office workers).

Greening office buildings can involve modifying either (1) infrastructure and improvements (the existing building and site) through audits and upgrades, (2) operations and behaviors (by the landlord, tenants, and property manager) through new policies and guidelines, or both (1) and (2).

One part of the solution is use a “green lease”, a set of “green lease terms”, or a “green lease addendum” that replaces or supplements standard long-term leases for commercial landlords and tenant by adding terms and incentives. These green lease terms and incentives can enable investments in energy-saving technologies, provide for sharing between landlords and tenants of long-term cost-savings, and institute “best practices” on non-capital intensive lease terms (such as cleaning of offices and recycling) that can improve building operations from both environmental and health perspectives.

Steps to take toward greening a building. This report provides information for landlords, tenants, and advocates on the first steps to take in greening a building and greening their lease.

Individual buildings owners, managers, and occupants can each take one or more steps in a wide range of categories to make an individual building “greener”. These include steps to address:

1. An audit of (a) overall energy use and (b) building practices (e.g, recycling, cleaning).
2. Overall energy use (electricity, heating and cooling of tenant spaces, hot water). Steps include an energy audit, installing thermal shades, using programmable thermostats, adding insulation, and doing periodic audits and/or commissioning of all energy systems.
3. Just electricity use. Steps include replacing lights, getting more energy efficient office equipment, and using software that automatically reduces electricity use in lighting, computers, copiers, etc. at night and on weekends.
4. Overall water use. Steps include audit, installing low-flush toilets, rainwater collection.
5. Recycling and waste reduction. Improve system by infrastructure changes and awareness (increase number of recycling bins, reduce size of wastebaskets, single stream).
6. Indoor air quality and materials. Use low VOC paints and carpets. Add more plants.
7. Cleaning products. Have building managers require use of healthier cleaning products.
8. Certifications and benchmarking. Seek green building certification. Provide building energy, etc. information for “benchmarking” (efforts to measure building performance).
9. Guides and Reminders for Tenants. Provide simple “green” guides for tenants on what measures have been taken to make building operations greener and what both organizational tenants and individual occupants can do to maximize sustainable features. Building managers can offer periodic reminders – in lobby or elevator, email alerts, etc.

People may feel a green lease is only worth considering if you have a new building or a new lease that you negotiate for a new space. But any lease (existing or new, commercial or residential, for a big law firm in an office tower or a low-income family in a multi-family residence) can be made greener.

2. Samples of a green lease CLAUSE (to supplement and be inserted into regular lease), a full (free-standing) green LEASE, and green lease ADDENDUM (to attach to regular lease).

In the footnotes at the end of this Guide are links to two samples of commercial green leases. The first is a *clause* that one adds to an existing lease. The second is a *complete* green lease form. At the end of this Section (at “E” below) is an outline of sample “*Green Lease Addendum*” with simple terms you might consider adding as an attachment to supplement an existing lease.

A. The first sample is the clause added to an existing lease. It is a New York City model, developed by the administration of Mayor Bloomberg with input from the National Resources Defense Council and the real estate community.^{xiii} It was used for a law firm’s 2011 lease at 7 World Trade Center.^{xiv} This green lease effort was part of New York City’s “PlaNYC” and its “Greener, Greater Buildings Plan”.

The two-page New York City green lease clause is called the “**NYC Model Energy Aligned Lease Language**”.^{xv} It is a clause on capital improvements to improve energy efficiency. It amends a typical commercial modified gross lease. This approach is aimed for retrofits (modifying or upgrading energy systems) for existing offices. It can be added to an existing lease if landlord and tenant agree.

The NYC sample clause focuses on the definitions of “Operating Expenses” and “Capital Improvements.” It introduces the terms “Capital Improvements Intended to Improve Energy Efficiency” and “Projected Annual Savings” and includes an estimated savings with a payback. The functioning of the clause rests in part on an “Independent Engineer” (selected by Landlord from names recommended by the Tenant and the Landlord) who is to certify the Project Annual Savings and the payback period.

The concept behind the NYC green lease clause was to solve the “split incentive” problem and give incentives to *both* landlord and tenant to enjoy savings from energy efficiency upgrades.

B. The second sample was developed by the Real Property Association of Canada (REALpac). The **REALpac “Green” Office Lease for Single Building Projects** is a full green lease.^{xvi} The REALpac green lease may be most appropriate for a new building that is LEED-certified, but it is well worth reviewing for examples and ideas of various issues and clauses that might be adapted or adopted in existing leases or new leases for existing buildings.

REALpac’s standard green lease incorporates green lease concepts by referencing its Environmental Management Plan (EMP) throughout the lease and by incorporating the EMP itself into the lease as an attached schedule provision. (Note: Some REALpac terms reflect Canadian law, so appropriate modifications of the form to account for relevant law in Massachusetts must be considered.)

REALpac’s lease form gives the option to landlords and tenants to agree to either (1) incorporate the EMP as a part of the lease itself (it would operate as a covenant on the part of the landlord or tenant), or (2) decide a breach by the landlord or tenant of the EMP is not a default under the lease, and instead the parties can use commercially reasonable efforts to cooperate with the other to remedy a breach.

C. Environmental Management Plan (EMP) – Schedule E of REALpac Lease. The overall objectives of the EMP include a landlord’s intent to provide a productive and healthy indoor environment;

reduce energy use and production of greenhouse gases; reduce use of potable water and increase use of recycled water; recycle tenant waste streams and divert waste from landfills; use ecological-friendly cleaning products; facilitate the use of alternative transportation options; and avoid the use of high-VOC emitting materials.

The REALpac lease incorporates LEED provisions and accordingly would be an appropriate guide for new LEED-certified buildings. The EMP requires a tenant to acknowledge the specific accreditations, ratings, or certifications that buildings have achieved including, among other things, LEED (silver, gold, platinum ratings) and ENERGY STAR ratings. A tenant agrees that a landlord is entitled to operate, manage, and maintain a building to retain a certain level of accreditation, including seeking other certifications to comply with changing laws.

A landlord also incorporates in the EMP specific objectives to reduce energy consumption where a landlord requires specific targets for and limits electricity use, natural gas consumption, water consumption, a waste diversion rate, and indoor carbon dioxide levels. A landlord has the authority to adjust the specific targets based on the type and intensity of space usage for the building, the energy or other resource consumption profile of a tenant, and the change in use or energy consumption for various parts of the building. The EMP also provides for a landlord to modify specific targets with standards established pursuant to a certification such as LEED or ENERGY STAR. The specific targets can also be changed to comply with amended government regulations.

The EMP provides that whether a landlord or tenant receives carbon offset credits depends upon who is entitled to recovery as a result of their activities in accordance with the law. If a carbon offset cost is incurred, such cost shall be included in the operating costs in the main lease.

If there are issues of noncompliance of the EMP, a landlord can hire an expert to determine whether the building is on target to achieve its goals.

It is a tenant's primary responsibility to implement the EMP. A tenant is required to provide a comfortable, healthy, and productive indoor environment by allowing the landlord to undertake greenhouse gas monitoring and testing, and to also meet certain standards in a tenant's use of cleaning supplies, furniture, and fixtures. A tenant is required to reduce indirect and direct energy consumption and greenhouse gas emissions by installing electricity smart meters at the tenant's sole expense and by adopting conservation practices to minimize electrical consumption. A landlord can acquire shared electric power from sources with low greenhouse gas emissions. A tenant is required to reduce water consumption by agreeing to install water meters and check meters at a tenant's sole cost, and to strive to use treated recycled or natural water when potable water is not necessary. A tenant is entitled to use recycled materials for any improvements and alterations, and a landlord may refuse to collect or accept from a tenant's premises waste that is not sorted into the appropriate recycling container.

In the EMP, a landlord certifies that it will use commercially reasonable efforts to cooperate with a tenant, at a tenant's sole cost, in the certification of the premises pursuant to any rating scheme, and a tenant agrees to provide all reasonable information required by a landlord consistent with the accreditation. A landlord and tenant both agree to cooperate to meet the environmental objectives and to meet periodically to discuss progress.

D. Incorporation of Environmental Management Plan in Main Body of Lease. Terms and reference to the EMP are incorporated throughout the REALpac lease; for example, specific environmental terms are defined at the outset of the lease. Costs resulting from upgrading energy and water consideration equipment and carbon offset costs are included in the Operating Costs described in detail in Article 6.5. There are references to the requirement to meet standards in the EMP in Article 7 of

the lease that addresses utilities. There are also requirements in Article 9 of the lease mandating that tenants at their sole cost pay for leasehold improvements, and that such improvements must comply with the EMP.

E. Here is a **sample Green Lease Addendum** the terms of which can be edited and the Addendum added as a supplement to any lease, as long as the landlord and tenant can agree on such terms:

“Green Lease Addendum

This Addendum modifies the attached Lease Agreement between Landlord and Tenant, who have agreed to cooperate on meeting sustainability and high performance building goals.

1. Landlord shall:

- (a) Purchase [50% / or 75%/ or 100%] “Green Power” (electricity from documented renewable energy sources) for the [common areas / or/ entire building].
- (b) Set up an energy efficiency products buying pool for tenants (and for common areas), which shall maximize opportunities and discounts for products such as LED light bulbs, power strips, phantom load light switches (ensure no draw on electricity when switch is off), etc.
- (c) Always purchase Energy Star or comparably efficient appliances for [the building and/or unit].
- (d) Set up a building-wide infrastructure for materials recycling and supply a “Single-Stream” bin to Tenant for paper, metals, plastics. Landlord shall also provide electronics disposal bins for computers, etc.
- (e) Protect indoor air quality by using low-VOC paints and carpets and requiring office cleaners to use “green” and non-toxic cleaning products and providing appropriate plants in common areas.
- (f) Keep HVAC units tuned up to work efficiently, including annual commissioning of systems.
- (g) Publish an annual report on Green Lease and sustainability measures. This shall include monthly measurements of building energy and water use, and shall annual targets for those measures.
- (h) Re-issue this Green Lease Addendum annually to Tenant on the lease anniversary date.
- (i) Designate a representative for questions or suggestions on Green Lease sustainability issues.

2. Tenant shall:

- (a) Use best efforts to recycle by separating waste stream into Single Stream (paper, plastic, metals), and dispose of all electronic items (cell phones, computers, etc. in designated bins.
- (b) Give Landlord access to data on unit energy and water use for annual reports.
- (c) Use best efforts to help meet building-wide energy use reduction goals and minimize unnecessary use of electricity, water, heating, and air conditioning, including recommended use of window shades and curtains to keep out summer heat and keep in winter warmth.
- (d) Consider using the energy efficiency products buying pool that Landlord has set up and consider Energy Star or comparably efficient appliances for Tenant’s unit.

3. Landlord and Tenant agree that a material violation of this Green Lease Addendum that continues more than 30 days after written notice of such violation shall be considered cause for dispute resolution under the Lease Agreement, with potential set-offs, penalties, or consequences as set forth in the Lease Agreement.” *[end of Green Lease Addendum]*

3. Sustainability issues to address in green lease terms or a green lease.

This section of the Guide identifies key issues related to sustainability that can be addressed by green lease terms or by a green lease. These include issues related to:

- Operating expenses and tax provisions;
- The building's LEED or other green building certification;
- Benchmarking of the building's energy use or other reporting requirements;
- Cleaning, recycling, and building rules and practices;

For each issue, the Guide provides questions to consider how a lease might address the issue and what alternatives are available for a particular building, lease, or set of landlord and tenant.

A. Operating Expenses and Tax Provisions:

1. Who will pay the costs of performing energy efficiency and other sustainable improvements or upgrades?
2. Who will own the energy efficiency and other sustainable improvements or upgrades?
3. Who should receive the benefit of utility savings, tax credits and grants?
4. If tax grants and rebates are of shorter duration than the Lease Term, should these tax credits be reflected in the base year tax amount or in future tax year calculations?
5. Who should be responsible to perform and pay for government-mandated energy upgrades, such as required metering of utilities and installation of energy efficient lighting fixtures? Even if not required today, these may be implemented during the term of the Lease.
6. If costs qualify as operating expenses, what is the recovery period for these costs?

Also see Section 2 above for a discussion of (and link in the corresponding footnote to) the Plan NYC Model Energy Aligned Lease Provision for how it addresses the split incentive problem.

Other alternative clauses include some variations that permit Landlord to pass through the capital expenditures but with the pass through capped at actual savings. Difficulty exists in establishing clear terms on savings, especially in light of utility rate increases.

B. Lease Mandates to Obtain and/or Maintain LEED or Other Sustainability Certifications:

7. Should Landlord or Tenant be affirmatively required to design and perform its build out to comply with LEED or other rating requirements? What additional costs will this entail?
8. Should Landlord or Tenant be exposed to liability or a default if they fail to perform their build out and obtain a specified rating or certification?
9. Should Tenant be in default if its operations or actions adversely affect the Building's sustainability rating or certification? Should Landlord be in default if the LEED or other certification is lost during the lease term?
10. Should Landlord or Tenant have remedies (default, self-help, etc.) if the other party fails to obtain and maintain such ratings or certifications?

C. Benchmarking and Other Reporting Requirements:

11. Changes in legislation may require benchmarking, reporting of energy and water use, including, in some areas, public posting of energy use, and reporting of material purchases, including the amount of recycled content, diversion of construction debris from landfill, geographic origin of materials and others. How will these requirements affect Tenant's business? How will Landlord obtain the necessary information and/or data?
12. LEED certifications may require future documentation to assess whether there are any gaps between the projected savings that were associated with a project and the actual savings achieved.
13. In order to fulfill reporting requirements, leases may require numerous reports and/or data from Tenants. Tenant or its contractor will need to keep these records and/or data.

D. Cleaning, Recycling, and Building Rules and Regulations:

14. As noted earlier in this report, cleaning and recycling – refer to REALPAC? Discussion below?
15. Rules and regulations should specify the construction and other mandatory requirements for operating in the Building and performing alterations to the leased premises in a manner consistent with the Building's LEED or other rating/certification and/or the Landlord's sustainability practices for the Building, including restrictions on types of materials used, geographic origin of materials, green cleaning supplies, debris removal and other similar requirements. Tenants will need to evaluate the additional time and costs this may add to their initial build out and their operations in the Premises.
16. Are these rules and regulations in conflict with the way Tenant operates its business?

E. Cooperation and Flexibility:

17. Requirements are evolving and will likely continue evolving during the Term. Leases should contain requirements that Landlord and Tenant cooperate with each other and take actions reasonably required to preserve the sustainability ratings or certifications achieved by the other party.
18. The parties may also need flexibility to stray from Lease covenants and rules and regulations as needed to comply with changes in LEED or other agency requirements.

F. Changes in Laws and Rating Requirements:

19. Some jurisdictions may mandate reductions in utility usage and/or requirements to obtain certain percentages of energy from renewable sources.
20. What impact will these have on the operation of the Building, operating costs, and Tenant's business?
21. What if the requirements for obtaining or retaining a sustainability rating or certification change and require alterations or other changes? If major costs are involved, should a Landlord or Tenant have the option to abandon its respective rating or certification?

4. Information about tax aspects of green leases (capital cost amortization, tax credits).

This section of the Guide notes key issues related to tax aspects of leases that should be addressed or considered when using green lease terms or by a green lease. These include issues related to Capitalization, Depreciation, Income, Expense Deductions, and Energy Specific Tax Credits or Deductions (federal, and state in Massachusetts)

A. Capitalization and Depreciation - Capital Improvement to Improve Energy Efficiency

(1) **Capital Improvement vs. Operating Expense** – Capital improvements are distinguished from deductible operating expense repairs, which are more minor in nature (e.g. repairing a roof). For GAAP,^{xvii} a capital improvement is generally a betterment to a building or equipment, which extends its life or increases its usefulness or productivity. For tax purposes, a capital improvement adds to the value of your property, prolongs its useful life, or adapts it to new uses (e.g. replacing a roof). Operating expenses, on the other hand, are deductible if they relate to a taxpayer's trade or business activity. In order to be a trade or business expense and qualify for a deduction, it be ordinary and necessary, paid or incurred during the taxable year in carrying on a trade or business activity. The Internal Revenue Code permits the deduction of business expenses in the taxable year in which those expenses are paid or incurred. This is in contrast to capital expenditures that are paid or incurred to acquire an asset and are amortized over a period of time. Be clear in the lease which is intended for specific energy efficiency improvements and to integrate the proper definition for any payment formulas established.

(2) **Categorization of Improvements for depreciation purposes (equipment vs. real property)** Realty is an ownership interest related to land, improvements, and fixtures. Fixtures are determined, based on the degree of permanence required to characterize a piece of property (e.g., a boiler or heat duct) as a fixture. Items that can be removed without significant damage or alteration to the rest of the property are fixtures and therefore could qualify for tax incentives for real property. Likewise, property that is integral to manufacturing and certain other activities, such as fuel storage facilities, elevators, and escalators, is treated as personal property. Energy efficiency improvements may be categorized as one type or another.

(3) **Who owns capital improvements and tax benefits (Landlord vs. Tenant)** – There must be an analysis of the benefits and burdens relating to the use and/or ownership of property that govern the characterization of a transaction involving the property as a lease or some other contractual relationship that may retain or transfer tax-ownership of property in or between the parties. Some incentives reduce both the tax basis and the financial costs of the capital improvements. One must be clear who gets the costs and benefits of these tax basis reductions.

(4) **Qualified leasehold improvement property** – A qualified leasehold improvement property is any improvement to an interior part of a building that is non-residential real property, made under or pursuant to a lease either by the lessee or sublessee or the lessor of that portion of the building. The improved portion has to be occupied exclusively by the lessee or sublessee, and the improvement must be placed in service more than three years after the building was first placed in service. It does not apply to improvements enlarging the building, any elevator or escalator, any structural component benefitting a common area, or the internal structural framework of the building.

B. Rental Income and Expense Deductions

(1) **Improvements as in lieu of rents to Landlord** - the value of an improvement made by a lessee to the lessor's property are not included in the lessor's gross income unless the improvements were made in lieu of rent. Factors indicating an intention to provide a rent substitute are a lease term shorter than the life of the improvement, or a lease terminable by the lessor.

(2) **Special energy property related income for Landlord** – Landlord may have unexpected income from energy property generating revenue.

C. Energy Specific Tax Credits or Deductions

(1) **Federal**
a. **Section 45 - Renewable Energy Production** - The Federal Internal Revenue Code provides a business income tax credit in the amount of \$0.021 (2009) per kilowatt hour of electricity

produced from qualifying renewable resources during a ten-year period. The tax credit is available to Taxpayers producing electricity from qualifying renewable resources and selling the electricity produced to an unrelated person. Taxpayer must produce electricity from qualifying renewable resources and sell the electricity produced to an unrelated person. Qualifying energy resources are wind, closed-loop biomass, open-loop biomass, geothermal energy, solar energy, small irrigation power, municipal solid waste, hydropower, marine and hydrokinetic renewables.

b. Section 48 - Investment in Energy Property - The Federal Internal Revenue Code provides a business income tax credit in the amount of 10 or 30% the basis of qualifying energy property investments. The tax credit is available to Taxpayer owners placing qualifying energy property in service. Qualifying energy property is fuel cell property, solar energy property, small wind energy property, geothermal property, geothermal heat pump systems property, microturbine property and combined heat and power system property.

c. Section 179D - Energy Efficient Commercial Buildings - The Federal Internal Revenue Code provides an income tax deduction in the amount of 100% of the cost of energy efficient commercial building property placed in service. The tax deduction is available to Taxpayer owners placing energy efficient commercial building property in service. Taxpayer must place in service energy efficient commercial building property. Energy efficient commercial building property is depreciable property installed on or in a building located in the U.S. which is installed as part of the interior lighting systems, the heating, cooling, ventilation, and hot water systems, or the building envelope and is certified as being installed as part of a plan designed to reduce the total annual energy and power costs of the building by 50% or more in comparison to a reference building that meets the minimum requirements of ASHRAE Standard 90.1-2001.

d. Section 168(e)(3) - Certain Energy Property - The Federal Internal Revenue Code provides an income tax accelerated cost recovery over 5 years for energy property. The tax deduction is available to Taxpayer owners placing in service energy property subject to cost recovery. Taxpayer must place in service energy property. Energy property is any property which is (1) equipment which uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat, excepting property used to generate energy for the purposes of heating a swimming pool; (2) equipment which uses solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight but only with respect to periods ending before January 1, 2017; (3) equipment used to produce, distribute, or use energy derived from a geothermal deposit, but only, in the case of electricity generated by geothermal power, up to (but not including) the electrical transmission stage; (4) qualifying fuel cell property or qualifying microturbine property; (5) combined heat and power system property, (6) qualifying small wind energy property; or (7) equipment which uses the ground or ground water as a thermal energy source to heat a structure or as a thermal energy sink to cool a structure.

e. Section 25C - Nonbusiness Energy Property (EXPIRED) - The Federal Internal Revenue Code provides a personal income tax credit in the amount of 10% of the costs for qualifying building envelope components or residential energy property expenditures. The tax credit is available to Taxpayer individuals installing energy efficient property in the Taxpayer's principal residence. Taxpayer must install energy efficient property in Taxpayer's principal residence. Qualifying energy efficient property is energy efficiency improvements to the building envelope and residential energy property expenditures. The maximum tax credit amount is \$1,500 in total for 2009 and 2010, and \$500 in 2011.

f. Section 25D - Residential Energy Efficient Property - The Federal Internal Revenue Code provides a personal income tax credit in the amount of 30% the cost of residential energy efficient property, including qualifying solar electric property, qualifying solar water heating property, qualifying fuel cell property, qualifying small wind energy property, and qualifying geothermal heat

pump property. The tax credit is available to Taxpayer individuals installing residential energy efficient property. Taxpayer must install residential energy efficient property. Residential energy efficient property includes solar electric, solar hot water, fuel cell, small wind energy, and geothermal heat pump. Qualifying solar electric property uses solar energy to generate electricity for use in a dwelling unit. Qualifying solar water heating property heats water for use in a dwelling unit, if at least half of the energy used by the property for that purpose is derived from the sun. Qualifying fuel cell property is an integrated system comprised of a fuel cell stack assembly and associated balance of plant components that converts a fuel into electricity using electrochemical means, has an electricity-only generation efficiency of greater than 30%, and generates at least 0.5 kw of electricity. Qualifying small wind energy property is property that uses a wind turbine to generate electricity. Qualifying geothermal heat pump property is property that uses the ground or ground water as a thermal energy source to heat the dwelling unit or as a thermal energy sink to cool the dwelling unit, and meets the Energy Star program requirements in effect when the expenditure is made.

(2) State (in Massachusetts)

a. Solar Or Wind Powered Systems Tax Deduction - Massachusetts provides a corporate excise tax deduction in the amount of 100% of the cost of any solar or wind powered climatic control or water heating units used exclusively in a trade or business. The tax deduction is available to Taxpayer corporations placing solar or wind powered climatic control or water heating units in service used exclusively in a trade or business. Taxpayer must install a solar or wind powered climatic control or water heating units.

b. Renewable Energy Property Tax Exemption - Massachusetts provides a property tax exemption in the amount of 100% of the tax on solar and wind energy systems used as a primary or auxiliary power system. The tax exemption is available to Taxpayer owners of solar and wind energy systems used as a primary or auxiliary power system.

c. Energy Conservation Or Alternative Energy Patents Tax Deduction – Massachusetts provides a corporate excise and personal income tax deduction in the amount of 100% of the income received from the sale or lease of a U.S. patent beneficial for energy conservation or alternative energy development and any income received from the sale or lease of personal or real property or materials manufactured and subject to the approved patent. The tax deduction is available to Taxpayer corporations or individuals with income from a qualifying patent beneficial for energy conservation or alternative energy development. Taxpayer must derive income from a qualifying patent. Income from a qualifying patent is any income, including royalty income, received from the sale, lease or other transfer of tangible, intangible, personal or real property or materials manufactured in the Commonwealth subject to such patent.

d. Renewable Energy Systems In Primary Residences Tax Credit - Massachusetts provides an income tax credit in the amount of 15% of the cost of a renewable-energy system installed on a primary residence. The tax credit is available to Taxpayer owners or tenants of residential property installed with renewable-energy system. Taxpayer must install renewable energy source property in residential property. Renewable energy source property is property that when installed in connection with a dwelling, transmits or uses solar energy or any other form of specified renewable energy, for the purpose of heating or cooling the dwelling, providing hot water for use within the dwelling, or for producing electricity for such purposes, or wind energy for non-business, residential purposes. Renewable energy source property include solar water and space heating, photovoltaics (PV), and wind-energy systems. The maximum tax credit amount is \$1,000.

5. Information about/ links to green lease forms, legal educational resources prepared by others.

There are a few green lease forms and a wide variety of educational materials available on the Internet. Here are links to a few helpful resources on green lease issues:

(a) Calif. Sustainability Alliance “Green Leases Toolkit 2.0”

http://sustainca.org/green_leases_toolkit

(b) US GSA “Green Lease Policies and Procedures”

<http://www.gsa.gov/portal/content/103656>

(c) REALPac (Real Property Assoc of Canada) “Green Lease Guide”

<http://www.realpac.ca/assets/Uploads/Research/Leases/Green-Office-Leases/GreenLeaseGuideFinal05Feb10.pdf>

(d) The NYC Model Energy Aligned Lease Language can be found at

<http://newyork.uli.org/Community%20Building/Sustainable%20Building%20Council/~media/DC/New%20York/NY%20Docs/Green%20lease%20language.ashx>

(e) Green Real Estate Law Journal “Green Lease Guide”

<http://www.greenrealestatelaw.com/tag/boma-green-lease-guide/>

(f) Seattle “Quick Guide to Green TI (Sustainability Tenant Improvements)– Green Lease”

http://www.seattle.gov/dpd/cms/groups/pan/@pan/@sustainableblding/documents/web_informational/dpdp016422.pdf

(g) Green-Buildings.com “Green Leases: Five Must Have Items”

<http://www.green-buildings.com/content/78338-green-lease>

(h) Building Owners and Managers Association: “BOMA International Commercial Lease: Guide to Sustainable and Energy Efficient Leasing for High-Performance Buildings”

<http://shop.boma.org/showItem.aspx?product=GL2011&session=961836F9C2674B9ABE37644AE403A4F4>

(i) U.S. GSA “Potential Cost Effective Energy Efficiency and Conservation Improvements for Leased Buildings” <http://www.gsa.gov/portal/content/103656>

(j) US Green Building Council “Green Office Guide: Integrating LEED Into Your Leasing Process”

http://www.usgbc.org/Store/PublicationsList_New.aspx?CMSPageID=1518

(k) US GSA “Energy Savings and Performance Gains in GSA Buildings: 7 Cost-Effective Strategies”

http://www.gsa.gov/graphics/pbs/GSA_SevenStrategies_090327screen.pdf

Conclusion.

Interest in green leasing is growing. Any lease can be made greener or more sustainable if a landlord and tenant agree. Any office can become greener or more sustainable by adopting simple practices. Any building can become greener or more sustainable with help from architects or engineers.

This Green Lease Guide provides initial information for lawyers, landlords, tenants, and advocates on relevant issues, plus samples and links for how to get started.

Please feel free to contact any of the authors of this Guide^{xviii} for more information.

ⁱ In 2009, U.S. buildings (commercial and residential) were responsible for over 50% of total annual US energy consumption. US Energy Information Administration, Annual Energy Outlook 2009 Early Report, see page 372 of Practicing Law Institute Green Real Estate Summit 2011 (“PLI”) (“Municipal Efforts to Improve Building Energy Efficiency” by J. Cullen Howe and Michael Gerrard at page 2). (For more current information, see the U.S. Energy Information Administration website at <http://www.eia.gov/>.) See also Daniel Yergin, *The Quest: Energy, Security, and the Remaking of the Modern World* (Penguin Press 2011), at 647. Yergin notes on pp. 630 – 631 that U.S. commercial building energy consumption has nearly doubled since the 1970s; reasons include air-conditioning, “gadgiwatts” (more and more electricity is consumed by gadgets that did not exist in the 1970s - computers, printers, fax machines, microwave ovens, telephones, smart phones and devices that need to be recharged), and data centers with servers that generate heat thus needing cooling just to remove the heat from servers. The US transportation sector is responsible for approximately 30% of GHG emissions. Jody Freeman, “The Obama Administration’s National Auto Policy: Lessons from the Car Deal,” 35 Harvard Environmental Law Review 343, 366 (citing EPA 430-R-11-005, Inventory of US Greenhouse Gas Emissions and Sinks: 1990 – 2009, ES-8 (2011)). (For more information on GHG emissions, see EPA’s climate change website at <http://www.epa.gov/climatechange/>)

ⁱⁱ US Dept of Energy (DOE), 2009 Buildings Energy Data Book, cited in PLI at 372.

ⁱⁱⁱ Id.

^{iv} Id.

^v Id., at 375.

^{vi} Id. at 374.

^{vii} A 2010 study by the University of Michigan concluded occupants who moved from conventional offices to a LEED Certified building increased productivity by 39 hours per year. Cited in “What Color is Your Lease” at <http://www.cassidyurley.com/research/white-papers>

^{viii} Id at 374. Definition by US Office of the Federal Environmental Executive. See <http://www.ofee.gov/>

^{ix} Learn more about LEED and the USGBC at <http://www.usgbc.org/>

^x Learn more about the International Green Construction Code (IgCC) at <http://www.iccsafe.org/cs/igcc/pages/default.aspx>

^{xi} US DOE 2009 Buildings Energy Data Book (see 2 above) at 200. Daniel Yergin’s book (see 1 above) notes on p. 632 that a major shopping mall operator reduced its energy use by 25 percent (between 2003 and 2009).

^{xii} Id. at 327

^{xiii} The NYC Model Energy Aligned Lease Language can be found at <http://newyork.uli.org/Community%20Building/Sustainable%20Building%20Council/~media/DC/New%20York/NY%20Docs/Green%20lease%20language.ashx>

^{xiv} The April 2011 press release for the WilmerHale lease in NYC is at this link <http://newyork.uli.org/Community%20Building/Sustainable%20Building%20Council/~media/DC/New%20York/NY%20Docs/April%205%202011%20Green%20lease%20for%207%20WTC%20tenant.ashx>

^{xv} The NYC “PlaNYC Green Lease Program” and links to the NYC “Greener, Greater Buildings Plan” are here <http://newyork.uli.org/Community%20Building/Sustainable%20Building%20Council/PlaNYC%20Green%20Lease%20Program.aspx>

^{xvi} The REALpac (Real Property Association of Canada) Green Office Lease and related information can be found here <http://www.realpac.ca/?page=GreenOfficeLeases>

^{xvii} “GAAP” is Generally Accepted Accounting Principles.

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