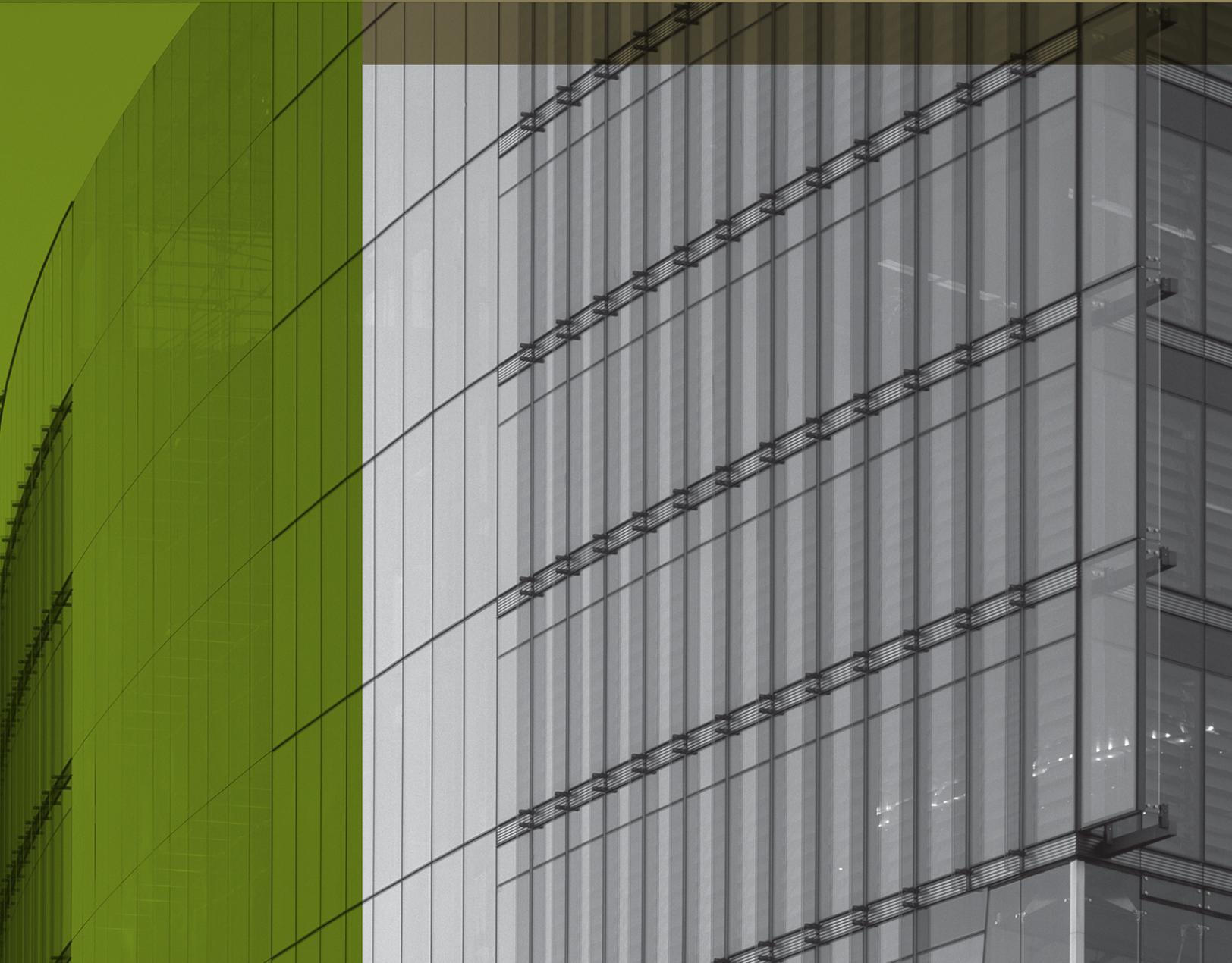


Working Together for Sustainability:

The RMI-BOMA Guide for Landlords and Tenants





About Us

BOMA International

The Building Owners and Managers Association (BOMA) International is an international federation of more than 100 local associations and affiliated organizations. Founded in 1907, its 16,500-plus members own or manage more than 9 billion square feet of commercial properties. BOMA International's mission is to enhance the human, intellectual and physical assets of the commercial real estate industry through advocacy, education, research, standards and information.

BOMA International
Suite 800
1101 15th Street, NW
Washington, DC 20005

202.408.2662

www.boma.org

Rocky Mountain Institute

Rocky Mountain Institute is an independent, entrepreneurial, nonprofit think-and-do tank. Co-founded in 1982 by Amory Lovins, who remains active as a thought leader, Chairman, and Chief Scientist. The Colorado-based organization now has approximately 80 full-time staff, an annual budget of nearly \$12 million, and a global reputation. RMI's mission is to drive the efficient and restorative use of resources. Our vision is a world thriving, verdant, and secure, for all, forever.

Rocky Mountain Institute
2317 Snowmass Creek Road
Snowmass, CO 81654

970.927.3851

1820 Folsom Street
Boulder, CO 80302

303.245.1003

www.rmi.org

June 2012

ISBN #978-0-9840153-3-7

Acknowledgements

BOMA International and Rocky Mountain Institute wish to extend our appreciation to those companies and individuals who contributed to the development of *Working Together for Sustainability: The RMI-BOMA Guide for Landlords and Tenants*.

Sarah Bahan, *Rocky Mountain Institute*
Michael Bendewald, *Rocky Mountain Institute*
Jeannie Bernard, *BOMA/Denver Metro*
Bob Best, *Jones Lang LaSalle*
Cara Carmichael, *Rocky Mountain Institute*
Mark Casey, *Tenant Wisdom*
John Christmas, *Hannon Armstrong*
David DuBois, *True Market Solutions*
Don Fitzmartin, *Fitzmartin Consulting*
David Glasscock, *TIAA-CREF*
Greg Hale, *Natural Resources Defense Council*
Stephanie Hodgkin, *Rocky Mountain Institute*
Elliot Hoffman, *True Market Solutions*
R.J. Mastic, *Ecosyste.ms*
Shawn Murphy, *Grubb & Ellis*
Emily Naden, *BOMA International*

Sean Neill, *Transcend Equity*
Victor Olgyay, *Rocky Mountain Institute*
Karen Penafiel, *BOMA International*
Josh Radoff, *YR&G*
Chris Robbins, *SClenergy*
Adam Sledd, *Institute for Market Transformation*
Brant Smith, *Lake Erie Real Estate Co.*
Kelly Smith, *Johnson Controls Inc.*
Troy Smothers, *Waypoint Building Group*
Steve Teitelbaum, *WMATA, author of the "BOMA Green Lease Guide"*
Michael Tobin, *CresaPartners*
Roy Torbert, *Rocky Mountain Institute*
Tolga Tutar, *Rocky Mountain Institute*
Elizabeth Vasatka, *City of Boulder*

The efforts of Rocky Mountain Institute were made possible through the generosity of Laney and Pasha Thornton



Photos: Allen Krughoff, *HardcastlePhotography.com* 2011



Introduction

Over the past decade, many commercial real estate leaders have been demonstrating the environmental and financial benefits of energy-efficient buildings. As a result, more and more building owners and tenants have been searching for the game changers that will result in widespread reductions in building energy use. While some buildings are performing well, with both the tenant and landlord reaping the benefits of more efficient spaces, the availability of new technologies and processes does not always result in people actually applying those solutions, even where there is a clear positive return on investment and a short payback period.

One of the main barriers is the “split incentive” issue, which results from the structure of many commercial leases. Net leases and modified gross leases, the most common types of leases, typically make the building owner responsible for bearing the cost of all capital upgrades. Energy costs, being a routine operating expense, are paid by the tenants. In other words, the owner makes the capital investment to improve the building and the tenant is the sole beneficiary of the reward of reduced operating expenses. The result is that commercial real estate owners have little direct financial incentive to upgrade their buildings to save energy. To further complicate the issue, unless the tenant space is separately metered or submetered¹, all of the tenants pay a pro rata share of the building’s energy costs. Therefore, tenants have little incentive to modify their behavior or implement any energy-reduction strategies because they must share the reward of their improved behavior while also sharing the costs of other tenants’ wasteful behavior.

In the fall of 2011, Rocky Mountain Institute (RMI) and the Building Owners and Managers Association (BOMA) International partnered to explore ways to overcome the split incentive barrier. RMI and BOMA assembled a select group of leasing and commercial real estate stakeholders, as well as individuals and organizations that have already explored these issues and developed potential solutions. Attendees included building owners and managers, tenant representatives, financing and leasing experts, city planners, environmental organizations, and energy service companies.

This guide is a result of the workshop. It provides a framework for instituting cooperative and productive relationships between landlords and tenants and seeks to address some of the non-technological barriers to energy efficiency, such as split incentives, tenant behavior, and transparency.

This guide outlines five actionable steps that building owners and tenants can take to partner in the shared goal of energy efficiency. While the steps are not necessarily sequential, they can build on each other in order to achieve greater energy savings. Each of these five sections offer simple solutions and ways to push for deeper and more aggressive energy savings:

1. Make Energy Use and Costs More Transparent
2. Engage Building Occupants in Saving Energy
3. Incorporate Energy Efficiency in Tenant Fit-Outs
4. Plan Ahead for Deep Energy Retrofits
5. Structure Agreements to Benefit Both Parties

Instead of reinventing the wheel, this guide provides links to other resources, information, examples, and breakthroughs to aid commercial buildings and their occupants in finding solutions that work to conserve energy without jeopardizing occupant health or productivity, thus creating financial and environmental win-win situations.

¹ A submeter is a system that allows the owner to disaggregate building utility bills by tenant, by floor, or even within individual spaces.

SECTION 1

Make Energy Use and Costs More Transparent

As a building owner or manager, before taking any steps to reduce energy consumption, you should first understand how much energy your building is using and how much it costs. Once you are more aware of the complete energy picture, you can then identify various actions to save energy, whether it's a major building retrofit or simply turning off lights and equipment at the end of the day.

You can start by benchmarking your buildings' energy use. EPA's ENERGY STAR® Portfolio Manager is a useful tool to begin the process of measuring—and understanding—how the building is consuming energy as well as how to identify and prioritize energy reduction strategies.

Communicating this information to building tenants will help to build trust and cooperation. The tenants will gain a clearer understanding of the owner's intent to make the building more efficient and lower energy costs. The tenants will also gain a better understanding of their crucial role in successfully lowering building energy consumption, as well as their own costs. In situations where the tenants are responsible for paying their own utility bills, the tenants should share energy usage data with the building owner in order to enlist their help to identify more energy-efficiency opportunities.

A growing number of cities and states have begun to mandate the benchmarking of buildings. Some are even requiring full disclosure of building energy usage data. This trend is likely to continue, so implementing transparency practices now will put you ahead of the curve.

Process

For building owners or managers, the best way to start is to track building performance information and then set up regular ways to share results and improvements with the building tenants. EPA's Portfolio Manager is perhaps the most widely used benchmarking tool, and you can use it for any property regardless of your intention to pursue an ENERGY STAR rating. The data collected within Portfolio Manager can also be shared with other programs, to show compliance with disclosure regulations, for example, or for LEED certification purposes. EPA also provides a wide variety of resources, including tutorials on how to benchmark and how to use the energy usage data to identify and prioritize potential retrofit opportunities. Many other benchmarking and energy tracking software programs are also available. While many are not free, you may find that some have certain components or features that work better for you.

Once you've begun the process of benchmarking, communicate this information to your tenants. Many companies have begun to use a "building scorecard" to illustrate how the building is being a good steward of natural resources. Consider delivering this information along with monthly invoices or quarterly reports or newsletters.

For building tenants, if you are not receiving this type of information about the building or your premises, ask for it! By initiating the conversation with the building manager, you will show that you are committed to the process of reducing energy consumption and costs. If your building manager is providing this type of information, make sure you understand it and use it as a tool to help you reduce energy consumption in your space. Also, share it with all employees—getting the buy-in of all energy users is imperative to success.

KILOWATT CRACKDOWN

Kicked off in 2009 by BOMA International local association BOMA/Seattle-King County in association with the Northwest Energy Efficiency Alliance, the Kilowatt Crackdown is a series of locally hosted energy benchmarking competitions that challenge owners and managers to reduce energy use over time. Building owners who wish to compete enter their information into ENERGY STAR's Portfolio Manager and track their progress over the next 24 months. Prizes are often awarded for Most Improved, Most Efficient and many more. Currently, there are 14 Kilowatt Crackdown programs across the country. You can find a list of these programs [here](#).

Going a step further, building owners can take their benchmarking information and show how the building is performing compared to other properties. The auto industry has long used fuel efficiency as a way to compare cars to one another. The miles per gallon rating is something almost no one today would buy a car without knowing. Similarly, building ratings, such as ENERGY STAR, LEED, and Green Globes, can help owners and tenants make decisions regarding commercial buildings. The energy consumption of an office building involves many more calculations than a simple MPG rating. ENERGY STAR handles this by distilling its calculations to a 1-100 scale, where a rating of 50 indicates average energy performance and a rating of 75 or better indicates best-in-class performance. Buildings that achieve the top performance rating of 75 or higher are eligible to become ENERGY STAR-labeled and can receive the familiar ENERGY STAR plaque to place on their building.

ENERGY STAR ratings take climate, location, number of occupants, building energy data, and more into consideration, so it's an apples to apples comparison of where your building ranks relative to its peers. This rating helps the building stakeholders determine if they should be considering major investments in energy efficiency upgrades or simply maintaining the current practices and systems they have in place. The rating also helps a building track its progress over time. For each year you enter data, the building will receive a new score and you can see how it is improving.

Resources

RESOURCE	DESCRIPTION
EPA: Portfolio Manager	This free online tool allows building owners and occupants to track energy use, water consumption, and greenhouse gas emissions in a single building or across an entire portfolio. It is available through the ENERGY STAR website, which also has guidance for how to get started using the tool for benchmarking and for reducing energy use.
IFMA Foundation: Sustainability "How-To Guide" Series	This guide is a comprehensive, in-depth exploration of EPA's ENERGY STAR Measurement and Tracking Tool: Portfolio Manager.
Better Bricks: Software Tools for Utility Bill Tracking, Benchmarking, & Trend Logging	This list of multiple utility-sponsored, public, and commercially available software tools designed to help you with utility bill tracking, benchmarking, and trend logging.
Better Bricks: Energy Transparency & Reporting	This report discusses ideal procedures for information sharing and reporting between stakeholder groups in a building.
BOMA: Sample Building Scorecard	Scorecards give an example of the types of energy and sustainability information, such as ENERGY STAR rating, certifications, etc., the building owner or manager can communicate to tenants.
ENERGY STAR: Statement of Energy Performance	This sample of a 'Statement of Energy Performance' shows the metrics that ENERGY STAR considers for a building's energy performance rating as well as the format of the final report.

RESOURCE	DESCRIPTION
<u>Better Bricks: Green Building Rating Systems</u>	This information sheet covers the benefits that building tenants, owners, investors, and property managers gain from participating in a green building rating system. It profiles the most common rating systems to consider: LEED, Green Globes, and ENERGY STAR.
<u>ENERGY STAR: Teaming up to Save Energy</u>	This guide describes how to structure, launch, and maintain an energy management team that can develop and achieve clear energy-based goals.
<u>Better Bricks: Energy Management Checklist</u>	This checklist for implementing a comprehensive energy management program identifies areas for improvements and specific actions that can be taken.
<u>Benchmarking and Disclosure Laws</u>	This website lists the state and local building energy policies in the US with specific benchmarking, rating and disclosure requirements for buildings.



SECTION 2

Engage Building Occupants in Saving Energy

While a large part of the energy used in a building is determined by the building's characteristics and systems, the behavior of the occupants also has a significant impact. Occupancy schedules, usage patterns, behaviors and attitudes of the occupants, and the appliances and equipment used by the people in the building can either increase or help to decrease energy usage and costs.

In commercial buildings, plug and process loads—the equipment and appliances that are plugged into electrical outlets—typically account for 30-35 percent of the total electricity used and are one of the largest and fastest-growing electric end uses in the United States. Energy reductions related to plug and process loads can be challenging since they are not typically viewed as integral building systems and are not addressed by building codes. Additionally, the usage intensity varies depending on occupant behavior, such as how often people turn off their computers or use the printers. However, a well-structured occupant engagement process can identify significant energy savings opportunities.

Some studies have shown that simply informing occupants of their current energy usage can reduce energy consumption by 10-15 percent. Programs to further engage occupants can achieve even greater savings.

Process

Building owners and managers can form a tenant council, or tenants themselves can form a similar collaborative group that meets regularly to coordinate sustainability efforts, share success stories and determine the optimal ways to engage occupants throughout the building. The organizers can invite the building occupants to the meetings in order to generate buy-in and clarify goals and resources. These meetings can be informal, and may include the building owner or manager, depending on the nature of the goals of the tenants. Tenants have opportunities to merge the goals of their own organization with the sustainability goals of a building—while tying the program to broader societal concerns, such as climate change or environmental stewardship, that resonate with occupants on an emotional level. In addition to energy efficiency, the sustainability group may also address areas such as transportation, green cleaning, comfort controls, recycling, and reporting practices.

To reduce the energy used by plug and process loads, building occupants should first inventory their existing equipment, such as computers, monitors, copiers, and kitchen appliances, and then determine if they are using the most efficient versions of that equipment. In some cases, upgrading to a newer model may result in significant energy savings. Procurement and purchasing plans should be updated regularly to include the most efficient technology that is available.

Tenants and owners have opportunities to engage the occupants of the building through a variety of new technologies. These can include building metering and displays in lobbies, interactive web sites with tips and hints, and building competitions. Sometimes the incentives for lowering energy use can be as simple as offering coffee and donuts. The results can be striking—occupants can become inspired by their connection to their building, and may become the most vocal and committed supporters of aggressive building performance targets. From the owner's perspective, this can help to retain tenants, while the tenant organizations benefit from having engaged employees participating in cost-saving programs.

REDUCING PLUG LOADS

For the National Renewable Energy Laboratory’s (NREL) new Research Support Facility in Golden, Colorado, the building owner and design team realized that addressing plug and process loads was essential for reaching the aggressive energy performance goals set for the project. The team examined the equipment used within NREL’s existing office spaces to determine a baseline and then came up with a comprehensive strategy to reduce the energy used by plug and process loads by 47 percent. This multistep process has been generalized for application to other buildings. You can find more details [here](#).

Resources

RESOURCE	DESCRIPTION
ENERGY STAR: Bring Your Green to Work	This free toolkit educates employees and encourages them to save energy and money in their office spaces. The resources include information about why reducing energy use is important and how to implement successful programs.
Better Bricks: Motivating & Rewarding Success	This document discusses how to motivate both employees and contractors to achieve energy savings through specific incentive structures, covering everything from monetary awards to financial support to taking relevant courses or attending conferences on energy efficiency. Beyond concrete rewards, the piece also explores the potential of tapping into occupants’ natural passions and desires to participate in meaningful, cutting-edge endeavors.
E Source: Managing Office Plug Loads	Published in Energy Manager’s Quarterly, this article provides a comprehensive overview of plug loads and opportunities for minimizing them in office spaces. After a brief introduction to the issue, the piece focuses primarily on IT energy use—namely computers, servers, and peripherals—describing typical loads and strategies for reducing them.
Negawatt Research: Green Risk Strategy of Plug Load Management	This executive summary of a strategy briefing that rates the regulatory, technology, and financial risk associated with plug load management. It also provides management strategies tailored to the risk profile of a given company (from conservative to industry leader).
NREL: How-To Guides for Plug and Process Load Reduction For Office For Retail	This document provides a general overview of plug and process loads as well as developed strategies for building owners and occupants to reduce them in office buildings. Specific suggestions are based on space and equipment type and are incorporated into a total savings—energy and money—calculator.
ENERGY STAR: Energy Efficiency Challenge Toolkit	ENERGY STAR has issued a national challenge to improve the efficiency of commercial and industrial buildings by at least 10%. This toolkit is full of useful information on everything from statistics about energy use to key leverage points and even provides communication materials that owners and occupants can use to encourage efficiency.
Lucid Case Study: “Do It In the Dark” Energy Reduction Competition	Lucid’s Building Dashboard displays energy and water use in real time on the web and allows you to make portfolio or even community-wide comparisons between buildings. This case study describes a competition among residence halls across nine college campuses.
Business Council on Climate Change: Green Tenant Toolkit	This toolkit includes a framework for stakeholder engagement, along with guidance for each audience. It also includes information on the green leasing process.

SECTION 3

Incorporate Energy Efficiency in Tenant Fit-Outs

The tenant fit-out process holds significant potential for incorporating sustainability in the tenant spaces and potentially in the building as a whole.

To drive energy efficiency and sustainability, tenants should evaluate the following aspects of a fit-out project: initial space selection process and leasing, product selection, contractor practices, an integrated design/green team to improve initial and ongoing performance, and the possibility of bringing on a third-party to coordinate tenant initiatives and maximize the efficiency potential. Throughout the tenant fit-out process, effective collaboration between the tenant and the building owner can improve the fit-out and obtain additional energy savings. Moreover, a tenant fit-out may spark a whole-building, deep energy retrofit (see [Section 4](#)).

Process

As a tenant, you can influence your fit-out to include energy efficiency measures. Typically, tenant fit-outs are considered after selecting a building and formalizing a lease. However, for a comprehensive sustainable fit-out, tenants should consider the efficiency possibilities before negotiating the lease and tenant improvement allowance, in order to unlock additional possibilities. You should make sure the action strategies for the project (tenant fit-out) are included in all leases and contracts, and create an equitable division of costs and benefits with the building owner. The letter of intent (LOI), setting forth the most important initial lease terms, is essential for this process. The LOI should include all efficiency and sustainability goals (thus earning the name “green letter of intent”) and forms an important foundation for an effective green lease.²

Evaluating costs over the full life cycle of the efficiency or sustainability measures will show the full long-term value, rather than just the initial capital costs. Working with the owner to determine this cost consideration approach can go a long way toward instituting an ongoing sustainability policy. The costs of sustainability measures often boil down to a cost-benefit analysis, but an efficient fit-out has a variety of costs and benefits that go beyond simple energy savings. You should make it clear which benefits are most important and relevant to you to better coordinate with the building owner. In certain instances, these additional benefits can drive optimal tenant situations and create value far in excess of the available energy savings.

Asking for comparable examples of tenant fit-outs from the building owner (including similar space types that have been designed to be radically efficient) can drive energy use lower while managing costs and reducing the analysis that is required. Coordinating efforts to engage occupants with multi-tenant efficiency strategies is an integrated solution that can lead to much greater energy savings.

Tenants should also establish green construction practices in conjunction with the landlord, including the requirements for indoor air quality during the process. The contractor can play a significant role in the energy retrofit process and support sustainable procurement practices. Durable materials, most prominently carpet tiles and furnishings, typically save money over a 10-year life span (the recommended minimum). Tenants should schedule a “lessons-learned” meeting with the contractor and the property manager to discuss how to best operate the tenant space and building while improving the performance of future tenant fit-outs.

² The LOI should define all relevant terms (such as “Energy Savings,” “Efficient Equipment,” “Data Reporting,” “Building Baseline,” and “Deep Retrofit”).

TENANT CASE STUDY

For its new U.S. headquarters in New York City, construction company Skanska coordinated an extensive build-out with the owner-led deep retrofit of the Empire State Building. The energy-related improvements included raised floors for underfloor air distribution, which also allowed for uncovering the ceiling and exposing more window area. The increased natural light was paired with energy-efficient electric lighting to make a bright and enjoyable space. The total LEED Platinum fit-out was achieved with only a 4.7 percent cost premium over a typical Class A office fit-out budget. You can find more details about the tenant fit-out [here](#).

Use of an integrated green leasing, design and construction team will provide opportunities for education, promote employee buy-in, and improve purchasing procedures, which will greatly benefit the tenant, and better position the building in the market, which will greatly benefit the building owner. Including the landlord in the process has the added benefit of creating opportunities to improve systems that are outside of the tenant's control.

At times, including a third party (either a consultant, non-profit, or government representative) can drive everyone involved to establish high-level principles for the building. The third party can also be responsible for ensuring that parties adhere to their objectives and offer assistance in coordinating tenant fit-outs with broader, building-wide efficiency efforts.

Building owners can also drive this process by utilizing a green lease form that requires that tenant fit-outs follow the sustainable practices put in place in the property (see [Section 5](#)).

Resources:

RESOURCE	DESCRIPTION
City of Portland: Green Tenant Improvement Guide	This guide discusses the costs and practical implications of a highly efficient tenant fit-out. It also includes suggestions on driving the process and negotiating a tenant improvement allowance.
NRDC: High Performance Tenant Spaces	This website provides information and resources focused on making the case for designing energy efficient tenant spaces, sharing success stories, and describing the steps needed to achieve a high performance tenant build out.
USGBC: LEED for Commercial Interiors	This is the LEED green building rating system that is likely to be the most applicable for a majority of tenant fit-out projects. It is a resource for designers, builders, developers and new building owners who want to address sustainability in tenant spaces and can also be used to demonstrate each project's performance.
BOMA: Green Lease Guide Contractor Info Sheet	This section (Exhibit D) forms the basis of an agreement with the contractor to ensure sustainable implementation of construction or renovation of the building. It contains a combination of rules and regulations sometimes found in leases regarding the conduct of alterations and sometimes found in leases regarding the initial tenant build-out.
Better Bricks: Hiring the Right Team—Integrated Design Services	This document provides guidance on putting together an experienced, interdisciplinary design team. It includes qualifications to seek, considerations for structuring contracts, and a sample request for proposals (RFP) for integrated design services.

4

SECTION 4

Plan Ahead for Deep Energy Retrofits

As a building owner or manager, regular energy management and maintenance practices should be implemented as part of the overall energy-reduction strategy for your building. Ongoing commissioning (or retro-commissioning) will make sure that the building systems are operating properly and may identify minor efficiency improvements that can be made. However, building owners should also plan ahead for significant events, such as a major tenant fit-out, that could provide an opportunity for substantial energy reductions.

A deep energy retrofit is a whole-building analysis and construction process that achieves much larger energy cost savings—sometimes over 50 percent reduction—than those of conventional, shallow retrofits and creates value for both the owner and tenant. The whole-building analysis portion of the deep energy retrofit can identify short, medium, and long-term measures to drive down energy use over time. The owner and tenants of the building can determine when to implement measures for minimum occupant disturbance and lowest cost. Early discussions of these trade-offs may help to identify opportunities and manage expectations.

The benefits of a deep energy retrofit for the tenant, above and beyond lowering energy costs, may include increased occupant productivity, reduced employee sick days, and enhanced ability to attract and retain employees. For the building owner, the benefits may include higher rent premiums, increased occupancy rates, and improved community stature and public relations. As the trend toward top-tier tenants demanding highly efficient spaces increases, avoiding comprehensive energy efficiency solutions will result in a higher risk of building obsolescence—due to an inability to attract tenants.

Process

Several situations in a building's life cycle could trigger a deep energy retrofit. For example, you may need to change the function or purpose of the building, the HVAC or other building systems may wear out and need replacement, or a major tenant's lease may expire. Transfers in ownership or refinancing may also make deep retrofits a more attractive possibility.

If any of these situations applies to a building, either the tenant or owner can broach the topic of planning for a deep energy retrofit. So, instead of simply aesthetic remodeling or replacing an old piece of equipment, you would look at the whole building and see what other improvements you can make as part of the upgrade. Sometimes the improvements are so much more efficient than the old systems, you can pay for the upgrade with cost savings that result from reduced energy use.

A deep energy retrofit process begins with the building owner's creation of Owner's Project Requirements, which lay out the vision and objectives for the project. The long-term vision for the building may contain a pathway to very low energy use, or even net-zero energy use (by incorporating on-site renewable energy generation when practical). Tenants are increasingly demanding these sorts of analyses, and often appreciate being incorporated into the process.

Also consider the impact that the tenants have on your building. Repositioning of the building may protect you from losing your tenants—but if you have lost a key tenant, the resulting vacancy could make significant improvements, including comprehensive energy efficiency measures, a more realistic option.

RETROFIT CASE STUDY

When the time came to renovate the historic Joseph Vance Building in Seattle, Washington, the building owner worked with an integrated design team to evaluate many potential strategies for the building. By using an iterative analysis process, the team developed a comprehensive renovation plan that included both energy efficiency and aesthetic upgrades. As a result of these improvements, the owner has increased occupancy from 68 percent to 96 percent and has seen increased rents, tenant retention and net operating income. You can find more information about this building and other deep retrofit case studies [here](#).

For buildings in a portfolio, the owner may have a portfolio-wide energy management strategy. The tenant should inquire about this strategy, and if interested, discuss the possibility of a deep retrofit in their building. The portfolio owner may already be interested in testing out some deep retrofits within the portfolio. The tenant should be incorporated into the discussion if the building is a possible candidate for deep retrofits.

Resources

RESOURCE	DESCRIPTION
IFMA Foundation: Sustainability "How-To Guide" Series	This overview of the commissioning (or retro-commissioning) process for existing buildings provides guidance to building owners, teaching them what they should expect during each step of the commissioning process, what everyone's roles are, and approximate commissioning costs. It includes a guide on drafting a request for qualifications (RFQ) and what a typical scope of work should look like.
RMI: RetroFit Depot	This website is dedicated to catalyzing deep retrofits across the U.S. commercial building stock. It provides free tools and comprehensive information about the deep retrofit process for building owners, service providers, and investors. The website shows owners and service providers how to build the case for deep energy retrofits, and walks the audience through the steps of implementing a deep energy retrofit, from conception to completion.
Green Building Finance Consortium	Due to its unique combination of capital markets and sustainability knowledge, this website provides those with money the methods and practices necessary to assess the value and risk of sustainable property investment, while providing those seeking money an insider's view on how capital providers value property and make investment decisions. It includes a comprehensive and up-to-date research library and the book <i>Value Beyond Cost Savings</i> free for download.
BOMA: Energy Performance Contracting Toolkit	BOMA's Energy Performance Contract model was designed to help building owners and operators define the financial and environmental goals for a project and then have an energy-service company, or ESCO, provide a solution to meet or exceed them. In conjunction with the Clinton Climate Initiative, BOMA has created a Tool Kit, complete with boiler-plate documents to help streamline the deep retrofit process.
Database of States Incentives for Renewables and Efficiency (DSIRE)	This website provides a comprehensive and up-to-date list of government and utility financial incentives that promote energy efficiency in the United States, enabling viewers to quickly determine the incentives available for their projects.
ENERGY STAR: Financial Analysis for Commercial Real Estate	EPA's Building Upgrade Value Calculator estimates the financial impact of proposed investments in energy efficiency in office properties. The calculations are based on data input by the user, representing scenarios and conditions present at their properties.

SECTION 5

Structure Agreements to Benefit Both Parties

The obvious place for building owners and tenants to work together is right from the beginning—during the leasing process. In the past, commercial leases typically avoided any mention of sustainability, but recently owners and tenants have looked at the lease as a means to provide an opportunity to enable greater energy efficiency or sustainability improvements than either party could achieve on its own.

A green lease does not simply equate to leasing space in an ENERGY STAR-labeled or LEED-certified building. Rather, a green lease expands on existing clauses to codify the sustainable operation goals for the building and identify how each side will meet them. Greening the lease offers a method for realigning the costs and benefits of the improvements, thereby establishing benefits of investing in energy efficiency for both the landlord and the tenants.

Beyond realigning costs and benefits, a green lease may add or change clauses affecting many sections in the typical commercial lease. For example, the BOMA Model Lease incorporates changes to clauses including alterations, maintenance and repairs, subletting, insurance, utilities/services, relocation, and the workletter. Depending on which party drives the process, a green lease may cover everything from daytime cleaning to who owns the rights to potential carbon credits under future regulations.

Without delving too deeply into potential clauses, the three principles forming the basis of the Natural Resources Defense Council's *Energy Efficiency Lease Guidance* are a good starting point for a larger conversation between landlords and tenants:

1. The landlord should operate the building and the tenant should operate its premises as efficiently as possible.
2. For any given system, installation, or piece of equipment, the responsibility for the capital expense and the benefit of savings should reside with the same entity. Alternatively, all of the savings achieved by virtue of a system improvement should be available to pay for the improvement.
3. To the extent feasible, both consumption and demand for resources throughout the building should be measurable and transparent to both the landlord and the tenants.

These principles and green leasing can be introduced to a lease negotiation at any time, whether during the initial lease negotiation or upon a lease renewal, or at any time in between. Of course, once the initial lease is signed the parties have little incentive to bring up green issues—even renewals usually only focus on the lease term and rental rate, unless the green features benefit both parties sufficiently enough to overcome the usual inertia. Even when a comprehensive greening is not possible or practical, the parties may agree to amend an existing lease to implement specific sustainability objectives.

However, one of the main impediments to green leasing is that it is not a practical option for an existing tenant. Even at the time of lease renewal, the landlord and tenants are often reluctant to enter into a new lease agreement, as it is often a very lengthy and arduous process. Frequently, the only terms of the lease that are renegotiated are the term and rate. To combat this barrier, letter agreements have been successfully implemented in some cases and could prove useful when renegotiating a green lease is not practical. A letter agreement is typically used when the building owner has a specific retrofit planned and needs to get the tenants' buy-in, or renegotiate some of the terms of the lease to more equitably share the costs and the savings of the proposed retrofit—without reopening any of the other terms of the lease contract.

GREEN LEASING CASE STUDY

At the LEED Gold 7 World Trade Center building, leading law firm WilmerHale has incorporated New York City’s energy aligned green lease language into its lease with Silverstein Properties. The lease language allows the owner to pass 80 percent of the costs of an energy-saving capital improvement project through to the tenants. Mayor Michael Bloomberg noted that the lease “breaks new ground in the field of energy conservation—and we expect it will be a pioneering model for commercial leases.” You can find more information about the agreement [here](#).

Process

Either the tenant or the landlord can initiate discussion of a green lease, energy-aligned lease, lease amendment or letter agreement. The most convenient time to do this can be at lease turnover or during the annual “true-up” process, reconciling the annual operating expenses charged to tenants.

For a new lease, the green letter of intent (see Section 3) will help guide the lease negotiation process. Lease amendments or letter agreements will generally be initiated when a lease already exists and a specific retrofit of the building or the tenant premises is desired.

To get started, both parties must have a clear understanding of what they want. Is there a specific retrofit project in mind, or is the intent to incorporate sustainable practices throughout the operations and management of the building or leased space? For the building owner or manager of a multi-tenant building, the process may be more complex, as there will be several tenants that will need to be parties to the agreement. Education, communication, and transparency of energy use and the building’s energy goals (see [Section 1](#)) will be the key to success.

Resources

RESOURCE	DESCRIPTION
Better Bricks: Leasing & Energy Allocations	This document provides a comprehensive overview of the various ways in which energy costs are usually paid by building owners and tenants, particularly for commercial office spaces. It describes the general frameworks of the three main types of leases—net, gross, and fixed-base—then lists the advantages, disadvantages, and how each can be used to improve a building’s energy efficiency.
Green Lease Library	This comprehensive website houses multiple green leasing resources in one location. It includes sample lease language, best practices, and various toolkits to help the commercial building sector implement green leases.
BOMA International Commercial Lease: Guide to Sustainable and Energy Efficient Leasing for High-Performance Buildings	BOMA’s green lease guide walks you through the complex language of commercial real estate leases so that you can maintain a green building through operations and management practices, educate brokers and prospective tenants about what it means to occupy a high performance green building and communicate the responsibilities of all parties in the ongoing efforts to keep the building green.
California Sustainability Alliance: Green Leases Toolkit	This toolkit aims to integrate sustainability practices into the entire commercial leasing process which includes service provider selection; marketing of buildings, development of green specifications; request for proposal (RFP) and letter of intent (LOI) drafting; site selection and due diligence; and the negotiation and drafting of lease language.



Summary of Action Items for Landlords and Tenants

Owners / Landlords

- Use EPA's Portfolio Manager (or another benchmarking tool) to track your building's performance and consider pursuing an ENERGY STAR label
- Adopt a building scorecard to help communicate success to tenants
- Consider developing sustainable build-out guidelines
- Articulate your long-term energy management strategy to tenants, and work with tenants to determine if a deep energy retrofit is appropriate for your building
- Find and recommend architects and contractors with sustainable construction experience
- Identify and provide incentives for sustainable tenant practices
- Revise leases with green lease information

Tenants / Brokers

- Ask the owner to share building energy consumption data
- Inventory existing equipment used in tenant spaces and determine if there are more energy efficient options
- Update procurement and purchasing plans to include the most efficient technology choices
- Consider creating a collaborative tenant group within the building to engage occupants on sustainability efforts
- Utilize a green lease LOI
- Discuss sustainability build-out issues with tenants early in the search process
- Find and hire architects and contractors with sustainable design and construction experience
- Propose green lease clauses in lease negotiations
- Find incentives for sustainable practices

BOMA International

Suite 800
1101 15th Street, NW
Washington, DC 20005
202.408.2662
www.boma.org

Rocky Mountain Institute

2317 Snowmass Creek Road
Snowmass, CO 81654
970.927.3851
1820 Folsom Street
Boulder, CO 80302
303.245.1003
www.rmi.org