



Successes in Sustainability: Landlords and Tenants Team Up to Improve Energy Efficiency





CONTENTS



- THE POWER IN BUILDING COLLABORATION 1**
- FINDING & SHAPING GREEN SPACE. 3**
 - Taking Advantage of a Relocation to Go Green – Brandywine Realty Trust and Reed Smith LLP 4
 - A Model Relationship in Energy Savings – Empire State Building and Li & Fung USA 6
 - Teaming Up to “Walk The Talk” on Energy Efficiency –
Unico Properties and Northwest Energy Efficiency Alliance (NEEA) 7
- MEASURING & SHARING DATA TO ENABLE EFFICIENCY 9**
 - Breaking Down the Walls to Energy Efficiency – Vornado Realty Trust and New York City Tenants 10
 - Gaining Value from Data Center Metering –
USAA Real Estate Company, Vornado Realty Trust, and District of Columbia Government 12
 - Unleashing Innovation – Kilroy Realty Corporation and Bridgepoint Education 14
- CREATING TENANT ENGAGEMENT IN SUSTAINABILITY 16**
 - Leveraging Competition to Boost Energy Efficiency –
Beacon Capital Partners and Environmental Resources Management 17
 - Helping Tenants Score Big in Energy Efficiency – Hines, KPMG LLP, and Various Tenants 19
 - Tenants Go Green* at the Aon Center – Piedmont Office Realty Trust, JLL, and Various Tenants 21
- INNOVATIVE WAYS TO EDUCATE TENANTS 23**

The Power in Building Collaboration

Achieving top-level performance in a multi-tenant office building has its challenges. Landlords must consider the many factors that contribute to a building's energy efficiency, such as building design, base building systems, management, operation and maintenance, tenant build-out, and occupant behavior. An efficiently designed building may perform poorly if its systems are not well maintained, or if occupants do not use the systems as intended. Likewise, tenants who do all they can to reduce energy waste in their leased space may do little to improve the overall efficiency of a poorly designed or inadequately managed building. The best-performing buildings have one important element in common: tenants and landlords working together toward a unified goal of energy efficiency.



The organizations profiled here, many of them ENERGY STAR Partner of the Year winners, are shining examples of how landlords and tenants are tapping into the power of collaboration to overcome barriers to high-performance buildings. These innovative organizations demonstrate the value of retrofitting leased space as green space, measuring and sharing energy data to enable efficiency, and engaging tenants around sustainability. Their stories serve as models for other landlords and tenants who face challenges in coming together for top performance.

THE ENERGY STAR ADVANTAGE

Making It Easier for Everyone to Go Green



ENERGY STAR, perhaps best known as the little blue mark on more than 70 types of consumer products, is recognized by more than 85% of American households. Since 1992, EPA has also worked with businesses and public-sector organizations to transform the way that commercial buildings use energy.

Owners and managers across the country use ENERGY STAR to improve the energy efficiency of their properties, reduce greenhouse gas emissions, increase the value of their assets, and earn recognition. A widely recognized environmental certification that crosses both residential and commercial platforms, the ENERGY STAR label now appears on more than 23,000 buildings and plants, as well as more than 1.5 million homes.

The ENERGY STAR Bring Your Green to Work toolkit offers fun and interactive ways to engage employees and tenants, with ready-made posters, tip sheets, videos, and other resources. This toolkit, along with many more resources to help everyone – landlords, tenants, and employees – work together toward a greener, more energy-efficient environment, can be found at www.energystar.gov.

Finding & Shaping Green Space

When securing and building out new space, tenants and landlords have a great opportunity to collaborate and go green. As the following stories illustrate, working together to create green, efficient space not only offers environmental and financial benefits, but also sets the stage for a strong landlord-tenant relationship.



TAKING ADVANTAGE OF A RELOCATION TO GO GREEN

Brandywine Realty Trust and Reed Smith LLP



Reed Smith is optimizing lighting and HVAC, as well as plug and process load management.

International law firm Reed Smith's search for new office space in Philadelphia began primarily as a business move, motivated by the desire to reduce costs with a more efficient floor plan in a smaller space. Reed Smith soon found that leasing space in Three Logan, a premier Class A building in Philadelphia's Center City, offered much more than an opportunity to reduce operating expenses – it had the potential to position Reed Smith as a sustainability leader and to set an example for the community.

After talking with Brad Molotsky of Brandywine, Reed Smith's new landlord (and an ENERGY STAR Partner of the Year in 2013 and 2014), leadership at Reed Smith in Philadelphia understood that relatively small changes in the design and build-out of the space could have a big impact on its energy efficiency and sustainability. Their vision for the Philadelphia office included the health and wellness of employees, a positive impact on the company's brand, and bottom-line benefits. With support from senior management and a clear goal of establishing Reed Smith's

Landlord Challenge: Brandywine Realty Trust wanted to maintain a top-performing, competitive building.

Tenant Challenge: Reed Smith LLP, an international law firm, wanted to differentiate itself as a thought leader by committing to the health and wellness of its employees, its community, and its environment in a fiscally responsible way.

Building: Three Logan Square, Philadelphia, PA

Lease Type: Modified Gross (Tenant is billed by landlord for actual energy use)

office as a high-quality, sustainable workspace, personnel from all levels of the Firm – partners, associates, other professionals, and administrative staff – offered their support and ideas for the project.

“Innovators like Reed Smith who understand the connection between energy efficiency and providing the highest quality environment for their employees allow Brandywine to maintain and create competitive properties that are well positioned currently and for the future.”

–Brad A. Molotsky, Executive Vice President and General Counsel, Brandywine Realty Trust



To help guide the green build-out process, Reed Smith partnered with NRDC's Center for Market Innovation (CMI) High-Performance Tenant Demonstration project. CMI prepared a package of recommendations, including lighting, HVAC optimization, and plug and process load management, offering a projected 35% reduction in energy use compared to standard, code-compliant systems. The recommended best practices package included daylighting, occupancy sensors, ENERGY STAR equipment, smart power strips, variable frequency drives, and a high-performance lighting package. CMI estimates that it will take Reed Smith less than 2 years to earn back in energy savings the less than \$300,000 initial investment, with savings accruing every year after that through the remainder of the 16-year lease.

For Brandywine the benefit is a strong relationship with a new tenant and a more sustainable and valuable tenant

space within an ENERGY STAR certified building (one of 114 for which Brandywine has earned ENERGY STAR certification in the last three years). Reed Smith's high-performance, green build-out should also help Brandywine maintain Three Logan's ENERGY STAR certification.

“Everyone benefits by embracing a new, better approach to designing space. When you consider that these opportunities only come up every decade or so, you have to really seize the moment before it passes.”

*—Len Bernstein, Managing Partner,
Reed Smith, Philadelphia Office*

Lessons Learned

- Take advantage of a move or lease renewal to design and build a green, high-performance space.
- Leverage the direct financial benefits of green, efficient space and, more importantly, the potential positive impact on employees, organizational brand, and community relations.
- Designate a motivated and knowledgeable sustainability advocate who is adept at communicating benefits to all levels of the company.
- Tenants: Consider asking your landlord for help in finding guidance and partners in your green build-out.

A MODEL RELATIONSHIP IN ENERGY SAVINGS

Empire State Building and Li & Fung USA

Adapted from a case study on the CMI High Performance Tenant Demonstration website: nrdc.org/business/cgi



In 2008, building owner Empire State Realty Trust committed to establishing the Empire State Building as one of the most energy-efficient buildings in New York City and the world's most environmentally conscious office tower built before World War II. By renovating its central systems, the Empire State Building made it easier for tenants to realize savings as spaces are leased and built out.

In 2011, Li & Fung USA (LFUSA) leased nine floors in the Empire State Building, the largest leasing transaction in the building's 80-year history. Motivated by the company's sustainability policy, LFUSA had considered several options when selecting office space for its expansion in New York. However, the company was drawn to the Empire State Building because of the owner's commitment to retrofit it as a leading example of making a landmark building energy efficient and sustainable.

After LFUSA signed its lease and began its design process, the Empire State Building's ownership recommended that LFUSA partner with NRDC's Center for Market Innovation (CMI) as part of the High-Performance Tenant Demonstration Project. CMI has helped LFUSA analyze the potential performance of its space and select a package of measures to maximize cost-effective energy savings, thereby reducing operating costs and minimizing environmental impact.

TEAMING UP TO “WALK THE TALK” ON ENERGY EFFICIENCY

Unico Properties and Northwest Energy Efficiency Alliance (NEEA)



NEEA's headquarters, located in Unico's Commonwealth Building in Portland, Oregon, demonstrate a win-win when both landlord and tenant share a commitment to sustainability.

NEEA needed to find a new home in downtown Portland, Oregon, one that would allow the organization to create a showcase energy-efficient, green office. NEEA realized from the get-go the importance of bringing together key representatives from across the organization to guide the process, forming a team that included representatives from senior management and staff. And when the team was ready to hire a broker, they looked beyond the standard qualifications to find a partner who understood the organization's unique goals and who would seek a property owner and manager willing to collaborate on and support NEEA's energy performance focus.

In Unico Properties' Commonwealth Building, NEEA found not only a suitable space, but a partner in its desire for top energy performance. Together, NEEA and Unico embarked on a unique negotiation process that ultimately benefited both organizations. Unico agreed to provide a turnkey tenant improvement that met NEEA's specific requests for

Landlord Challenge: Unico Properties sought to position the Commonwealth Building as a green, high-performance building.

Tenant Challenge: NEEA was searching for a highly energy-efficient space that would allow the organization to remain fiscally prudent on behalf of its regional utility and energy-efficiency stakeholders.

Building: Commonwealth Building, 421 SW Sixth Avenue, Portland, OR

Lease Type: Triple Net (Tenant pays energy bills directly to the utility)

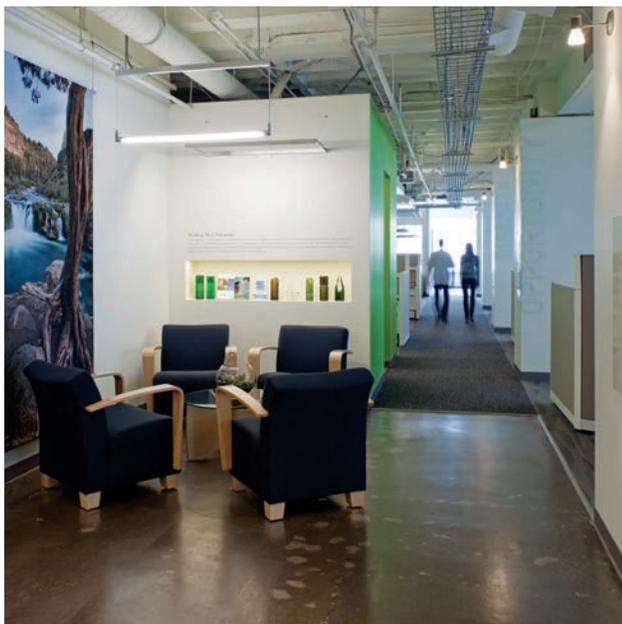
high-performance space, including more costly lighting than the standard package. Unico funded the upgrades – even those that cost more than an agreed-upon budget – because it felt confident that the investment would increase the value of the space and make it attractive to future tenants.

“This partnership with NEEA represents a commitment between landlord and tenant. When you marry a green building with a sustainability-minded tenant, you create high-performing building systems that maximize environmental and economic efficiencies.”

–Ty Barker, General Manager, Unico Properties, LLC

At NEEA's request, Unico agreed to benchmark the building's energy and water consumption in EPA's ENERGY STAR Portfolio Manager and disclose the performance data to NEEA quarterly. Unico agreed to other important green practices as well, such as sub-metering NEEA's space, forming a Tenant Sustainability Committee (which brings additional tenants into discussions about efficiency measures and other sustainability efforts), and pursuing ENERGY STAR certification for the Commonwealth Building. What does Unico get out of this arrangement? For one thing, NEEA has committed to a 10-year lease, longer than the standard for commercial office space. NEEA also agreed to follow sustainability practices in its space, and to let Unico pass through the costs of energy-efficiency improvements. Unico can position the Commonwealth Building as a hub for green businesses, helping to attract and retain tenants who share their passion for environmental sustainability.

The results are impressive. NEEA achieved LEED Commercial Interiors Platinum certification and enjoys 15% lower energy use for plug load and lighting systems than tenants with similar profiles in the same building.



Unico's Tenant Sustainability Committee has engaged other tenants in the building in sustainability initiatives, and some are requesting sub-metering as they seek to better understand their energy performance as well. NEEA's efforts to achieve top performance in its space help Unico Properties maintain the building's ENERGY STAR certification.

Lessons Learned

- When seeking a new space, form a selection team that includes senior management and staff. Make sustainability a key goal for the team.
- Choose brokers and other external partners who understand the importance of achieving an organization's sustainability goals.
- Identify ways to achieve efficiency and sustainability goals that benefit both tenant and landlord, be willing to negotiate, and document agreed-upon measures.
- Be responsive to the efficiency and sustainability ideas prospective tenants and landlords bring to the table.
- Consider how efficiency improvements in tenant spaces – at build-out and beyond – can increase a building's and organization's value and attract and retain tenants.

For more information about the NEEA/Unico collaboration see: [BetterBricks.com/office-real-estate/reading/greenest-lease-around-nea-and-unico-collaborate-win-win](https://www.betterbricks.com/office-real-estate/reading/greenest-lease-around-nea-and-unico-collaborate-win-win).

Measuring & Sharing Data to Enable Efficiency

Data is the foundation of efficiency. Having energy data at both whole-building and tenant levels supports benchmarking of efficiency and informed decision-making. These leading landlords and tenants recognize the power of data, measured and shared in a form that fosters action.



BREAKING DOWN THE WALLS TO ENERGY EFFICIENCY

Vornado Realty Trust and New York City Tenants



Vornado convenes tenants and building management teams in regular sustainability meetings.

Vornado Realty Trust, one of the largest commercial real estate investment trusts in the United States, is a leader in sustainability and energy efficiency. The company's many successful environmental and energy programs garnered it the ENERGY STAR Partner of the Year award in 2013 and 2014. One of the keys to Vornado's success is the company's understanding of the value and power of energy data.

Vornado's Corporate Sustainability group, led by Sukanya ("Suki") Paciorek, pays attention to the data, and realized several years ago that energy use in common areas was going down while the energy use in tenant spaces – accounting for up to 70% of energy consumption – was staying flat. So Vornado brought the power of data to its tenants. Vornado's Energy Information Portal (EIP) collects energy data from 3,000 sub-meters in New York City buildings and translates this real-time energy consumption data into actionable information. Any of the 80,000+ occupants in Vornado's 17-million-square-foot

Landlord Challenge: Vornado Realty Trust wanted to engage tenants in achieving and maintaining top energy and environmental performance across the portfolio.

Tenant Challenge: Tenants lacked insight into their own energy consumption and did not have a meaningful way to track usage.

Lease Structure: Modified Gross (Tenants are billed by landlord for actual energy use)

Manhattan portfolio can access the EIP to view their own company's energy use in real time. As a result, tenants can connect their actions to actual energy savings, gaining a way to understand the impact of their behavior and motivation to improve.

“Engaging with tenants is a critical part of any successful sustainability program.”

*–Suki Paciorek, Senior Vice President,
Corporate Sustainability, Vornado Realty Trust*

By working with tenants to explain the value of the data they can view through the EIP, Vornado is helping its tenants understand their energy consumption and make improvements to reduce usage. In 2009,

L (formerly Limited) Brands, a tenant occupying more than 350,000 square feet and 15 floors of Vornado's building at 1740 Broadway in New York City, acted on information provided by the EIP to reduce daily electric consumption by 15%, resulting in a savings of almost \$150,000.

According to L Brands, the opportunity EIP provides to reduce energy use is part of smart facilities management and sustainable improvement, allowing the company to use its resources to better serve customers.* Vornado earned ENERGY STAR certification for 1740 Broadway in 2008 with a score of 80; in 2011, 2 years after Vornado launched the EIP, the building's score increased to 86 (and increased again to 88 in 2012).

Paciorek, along with Vornado's Energy and Sustainability Director for the New York region, Daniel Egan, and the rest of her team see their role as more than just providing data; rather, they act as "ambassadors" to the resources, programs, and recognition that data can help unlock. For example, they connect tenants to utility incentives for efficient practices, convene tenants and Vornado representatives in regular sustainability meetings, and provide sustainability information as well as data. This approach breaks down the figurative walls between landlord and tenant to benefit both and the environment.

*Adapted from *Unprecedented Visibility*, The Steven L. Newman Real Estate Institute Research Publication, Fall 2010.

Lessons Learned

- Closely track energy data, particularly sub-metered data, to identify trends and make strategic time and resource investments.
- Landlords: Motivate tenants to take action by making energy and cost data available and understandable.
- Landlords: Seeing your role as an "ambassador" to tenants for energy and environmental opportunities may increase tenant willingness to engage in green initiatives.

GAINING VALUE FROM DATA CENTER METERING

USAA Real Estate Company, Vornado Realty Trust, and District of Columbia Government



USAA Real Estate Company, Vornado, and the DC Government worked together to illuminate Waterfront Station's data center energy demand.

When most people think of green buildings, they picture buildings that look a lot like 1100 and 1101 4th Street SW at Waterfront Station in Washington, DC: new LEED Gold office buildings adjacent to public transit. But the sustainability of these buildings extends beyond the construction phase because an innovative team is exploring the next frontier of green building with collaborative landlord and tenant energy management.

USAA Real Estate Company, a top real estate owner, capital provider to developers, and asset manager with a longstanding commitment to sustainability, owns Waterfront Station as part of its U.S. Government Building Fund. Vornado Realty Trust originally developed and now manages the property. The District of Columbia's Department of General Services manages the building's energy expenses and the District of Columbia Government (DC Government) is the sole office tenant.

In July 2013, after a 3-year grace period allowing the use of default values, EPA ENERGY STAR began requiring that buildings applying for ENERGY STAR certification use

Landlord/Property Manager's Challenge: USAA Real Estate Company and Vornado Realty Trust wanted to accurately benchmark the building's energy use, but needed information from the tenant about the energy demand of its data center.

Tenant's Challenge: The District of Columbia's Department of General Services sought to improve the ENERGY STAR score of its building and better understand the energy costs of running its data center.

Lease Structure: Triple Net (Tenant pays energy bills directly to the utility)

metered values for a key data center metric. To obtain the necessary metric, landlords need an energy reading at the output of the tenant's uninterruptible power supply (UPS). The catch is that not all data centers have meters installed in this location. And when they do, the meter and associated energy data is owned by the tenant, which makes it difficult for the landlord to gather the necessary information.

“We needed tenant buy-in to get the data. As a building owner, we put a lot of emphasis on tenant service and engagement and this was a great opportunity to work with the DC Government in a way that served all of our goals.”

—Brenna Walraven, Managing Director, USAA Real Estate Company

Meeting the ENERGY STAR requirement called for a new kind of landlord-tenant collaboration. The building management team started by engaging with the tenant's IT department and energy management staff. The tenant's interest in sustainability and transparency was evident, as DC recently became the first jurisdiction in the country to publicly disclose the real-time energy use of its own buildings (via BuildSmartDC.com), and requires larger privately owned buildings to benchmark and disclose their annual energy use. "This was a great opportunity to learn something new and improve our energy transparency," said Sam Brooks, Director of Energy and Sustainability at the DC Department of General Services. "By taking this next step, we knew we could more accurately calculate our building's ENERGY STAR score and set an example for others in the District."

Property manager Vornado was also well-positioned for this initiative. Its Tenant Service Center, one of the largest and most sophisticated remote monitoring and emergency response centers in the country, controls the operations of all of Vornado's buildings in the Washington, DC region and monitors real-time energy use 24/7 across its portfolio. "The first step was to do a little research," said Jonathan Gritz, Director of Sustainability for Vornado's Washington Division. He set up a meeting with the DC Government's IT department to learn about the UPS system at Waterfront Station. Vornado discovered that the UPS had integrated energy meters; the digital screen showed real-time energy demand in voltage, amperage and kilowatts. But it wasn't clear whether the UPS had a communications card installed, something Gritz and his team would need in order to export the real-time energy readings and track them over time. They set up a second meeting in the data center and this time, with the tenant's support, brought in the UPS maintenance contractor. He removed the UPS's panels and found there was a communication card already installed, with an Ethernet cable plugged into it. After tracing the cable out of the data center, they found it rolled up and hanging from the wall in an electrical closet, not connected to anything.

The final step was to connect the Ethernet cable to the DC Government's data center so continuous energy demand readings could be logged and monthly reports compiled to track energy consumption. Once the energy use of the data center is tracked for 12 consecutive months, a more accurate ENERGY STAR score can be generated, normalizing the building's energy use for the data center energy demand.

In the process of this research, USAA Real Estate Company and Vornado discovered that the data center IT consumption, in combination with the associated air conditioning, were consuming about 15 percent of the building's energy while accounting for only 1 percent of the building's square footage. The data center cost about \$100,000 per year in electricity and consumed more than 800,000 kWh. "The DC Government has already done a lot to reduce energy use in their data center," said Sam Brooks, "and this is a helpful reference point to better understand and further reduce our energy use."

USAA Real Estate Company, Vornado, and the DC Government are continuing to explore additional metering and real-time energy management strategies to reduce building energy use. "Landlord and tenant collaboration is the future of energy management," said Brenna Walraven, "it's a win-win-win for all of the parties involved."

Lessons Learned

- Landlords/Property Managers: Before you reach out to your tenant, learn the ENERGY STAR rules for data center submetering and the IT nomenclature so that you can speak knowledgeably with your tenant's IT managers.
- Landlords/Property Managers: It's important to communicate with the tenant's IT department and non-IT, senior-level managers in the organizations. Each will have a different and valuable perspective.
- Tenants: Be open to tracking your energy data, including that from the data center itself. This data will help you underwrite investments that improve the capability of your data center.

UNLEASHING INNOVATION

Kilroy Realty Corporation and Bridgepoint Education



KRC helped tenant Bridgepoint Education find innovative financing for efficiency upgrades through the local utility.

Recognizing the vital role that tenants play in energy consumption, Kilroy Realty Corporation's (KRC) interest in high-performing, energy-efficient space extends beyond its new construction projects and common area spaces. The company has continually looked for opportunities to influence the energy consumption of tenant spaces as a way to further improve the performance of its buildings. In Bridgepoint Education, KRC found the perfect partner.

The engagement between KRC and Bridgepoint around sustainability blossomed after the KRC asset management team requested utility consumption data from Bridgepoint's corporate campus on Evening Creek Drive in San Diego. Bridgepoint leases two full buildings and part of a third on the property owned and operated by KRC. The asset management team and Sara Neff, KRC's Vice President of Sustainability, needed the data – pulled from 21 meters in one of the buildings – in order to apply for ENERGY STAR certification. Bridgepoint willingly shared the data, allowing Neff to complete the application, earn ENERGY STAR

Landlord Challenge: Kilroy Realty Corporation wanted to engage with a tenant to encourage energy efficiency, even though the tenant pays the energy bill directly.

Tenant Challenge: Bridgepoint Education sought Kilroy Realty Corporation's help to increase the efficiency of their leased space.

Building: 13480/13500 Evening Creek Drive, San Diego, CA

Lease Type: Triple Net (Tenant pays energy bills directly to the utility)

certification, and demonstrate both organizations' commitment to energy efficiency. This collaboration set the stage for future energy-efficiency upgrades.

With a foundation of energy data and an established relationship, Bridgepoint sought KRC's help in piloting a cutting-edge, efficient lighting technology. Neff and her team worked with the tenant to green-light the project, but the high upfront cost was a barrier. Neff and the third-party vendor proposed that Bridgepoint consider On-Bill Financing (OBF). Through her relationship with San Diego Gas and Electric and other California utilities, Neff had learned about the utility's OBF, which provides up to \$100,000 in 0% financing for efficiency upgrades tied to a single meter, with repayment through the energy bills. With OBF a possibility, Bridgepoint took a step back and worked with the vendor to identify a more comprehensive package of energy-efficiency improvements, including hot water and discharge air temperature reset, cooling tower filtration pump runtime optimization, and installation of

variable-frequency drives on chilled water pumps. The estimated energy savings from these improvements, supported by the energy benchmarking data, is close to \$40,000, with a simple payback of less than 2 years.

In addition, Bridgepoint installed test window film in two offices. KRC was impressed with the results, and the two companies are now planning to work together to install window film on the entire campus, both the buildings that Bridgepoint occupies and the third multi-tenant building. Although the original lighting project is not part of the OBF package (as it would have exceeded the utility's payback limit), both Bridgepoint and KRC are inspiring each other to explore energy-efficiency opportunities and look forward to continuing this relationship in the future.

“We love it when we have an open dialogue with tenants about energy efficiency, and this dialogue inspires each of us to pursue more and more projects to reduce energy consumption in our buildings.”

—Sara Neff, Vice President, Sustainability, KRC

Lessons Learned:

- Start with the data. Sharing utility data creates an opportunity for conversations around sustainability, and an accurate energy baseline allows analysis of project savings.
- Be patient. It can take time for landlords and tenants to find the right upgrade package and the proper financing to allow projects to move forward.
- Collaborate. No matter who pays the energy bills, landlord-tenant collaboration on efficiency pays off for both.
- Explore programs offered by your local utility to provide financing and other support for your efficiency initiatives.
- Landlords: Consider the opportunities for tenants with an interest in sustainability to be incubators for new technologies and practices. Both landlords and tenants can gain from experience and duplicate successes in other buildings.

Creating Tenant Engagement in Sustainability

Engaging tenants in sustainability initiatives offers opportunities for positive interaction among landlord, tenant, and property manager, helping to strengthen the relationships. The following stories demonstrate that there are many innovative ways to start the conversation.



LEVERAGING COMPETITION TO BOOST ENERGY EFFICIENCY

Beacon Capital Partners and Environmental Resources Management



Environmental Resources Management won Beacon Capital Partner's Energy "STAR" Cup competition where tenants used ENERGY STAR's Bring Your Green to Work campaign toolkits to adopt proven energy-saving practices.

Beacon Capital Partners, a private real estate investment firm, has a long history of promoting energy conservation and sustainability throughout its properties. Providing high-quality office space in major U.S. markets, the company has historically focused energy-efficiency efforts on landlord-controlled equipment and systems. Understanding that many of its tenants had public and personal commitments to sustainability and environmental issues, Al Scaramelli, Managing Director and head of Beacon Capital's sustainability and energy program, decided to leverage the Beacon Capital tenants' competitive spirit to promote energy efficiency.

Scaramelli organized a race for the Energy "STAR" Cup competition among four major tenants in the One Beacon Street building in Boston, where electricity use is sub-metered, and the tenants pay for actual electricity used within their space. After establishing a baseline

Landlord Challenge: Beacon Capital Partners wanted to promote energy conservation in space not controlled by the landlord.

Tenant Challenge: Environmental Resources Management wanted to engage employees in advancing corporate sustainability and energy conservation goals.

Building: One Beacon Street, Boston, MA

Lease Type: Modified Gross (Tenants are billed by landlord for actual energy use)

of electricity consumption for each participant, Beacon Capital encouraged tenants to see how much they could reduce usage over a 4-week period.

To help the tenants get started, the property team provided them with ENERGY STAR's Bring Your Green to Work campaign toolkits for adopting proven practices to save energy, such as turning off lights that are not in use and shutting down computers at the end of the day. The property team kept the competitors motivated by displaying the tenants' progress as a car race on a status board. Although motivated by potential savings, participants were driven primarily by their corporate missions and personal beliefs in supporting conservation efficiency and sustainability.

Bring Your
GREEN TO WORK
with ENERGY STAR®

All of the competitors saved energy, but Environmental Resources Management (ERM) crossed the finish line with the greatest savings; Scaramelli and the property team recognized ERM with a catered breakfast and glass trophy. Despite starting at a lower energy per square foot baseline than the other competitors, ERM lowered consumption from its lighting and plug loads by an impressive 20%. Even better, the organization has been able to maintain a lower level of energy consumption since the competition ended. In fact, all of the contest participants are enjoying continued savings from competition-inspired, low-cost improvements, such as identifying and fixing malfunctioning occupancy sensors.

Through this engagement, Beacon Capital built a deeper relationship with its tenants. After the success of its first energy competition, Beacon Capital is ready to raise tenants' awareness about the value of efficiency and sustainability throughout its other properties.



Lessons Learned

- Consider starting with the buildings, or the tenants within a building, who are most likely to be receptive to sustainability messaging, especially when leasing arrangements limit direct incentives for tenants to increase efficiency.
- Creating a tenant-based competition can be a great way to engage tenants; keeping the competition period short makes it easier to sustain motivation among tenants.
- Landlords: Taking advantage of opportunities for positive interaction with tenants around efficiency and sustainability may help retain tenants, as well as boost the environmental performance of the building.

“ERM was very excited when Beacon Capital Partners proposed an energy competition... not only have we reduced our energy use, operating expenses, and emissions, we have also strengthened the relationship with our landlord and engaged our employees.”

—Matthew Yamatin, P.E., LEED AP Building Design and Construction, Project Manager, Environmental Resources Management



Need help planning an energy-efficiency competition?

Use EPA's ENERGY STAR Guide to Energy Efficiency Competitions for Buildings & Plants to get started. Available at: www.energystar.gov/buildings/tools-and-resources/energy-efficiency-competition-guide

HELPING TENANTS SCORE BIG IN ENERGY EFFICIENCY

Hines, KPMG LLP, and Various Tenants



Hines developed its own recognition program that is easily scalable. Tenants can adopt the principles of the Hines program in offices across the country.

A privately owned, international real estate firm with offices in 18 countries, Hines has long been a leader in providing high-performing office buildings, evidenced by its 155 ENERGY STAR-certified buildings covering more than 72 million square feet. Contributing to that success is Hines' recognition that achieving and maintaining green buildings requires an ongoing commitment to energy efficiency and other sustainable practices. So in 2008, Hines developed and launched the internally focused HinesGO (GREEN OFFICE) program to measure and reward sustainable practices in the firm's more than 200 offices worldwide. Through the program, Hines tasked building managers and their teams with promoting initiatives that improve energy efficiency, create healthy and engaging work environments, and reduce waste. Capitalizing on the opportunity to lead by example with the office space it owns and occupies, Hines encouraged employees to use their own offices to demonstrate to clients, owners, investors, and tenants the many actions they can take to make their operations more sustainable.

Landlord Challenge: Hines sought opportunities for positive interactions with tenants that deepen relationships, enhance customer service, and achieve sustainability objectives.

Tenant Challenge: Many tenants in Hines buildings sought help to make their office space more sustainable, validate existing practices, and gain recognition for achievements.

Building: All leased offices in Hines-managed buildings

Lease Structure: Range of lease types represented across more than 100 million square feet

As the program spread to Hines-occupied offices across the country, tenants began to ask property teams for ways to improve sustainability in their leased spaces. Hines recognized the value of interacting with tenants around sustainability – in terms of fostering stronger landlord-tenant relationships, as well as the energy and environmental benefits for the company's portfolio. On Earth Day 2009, Hines brought a tenant-focused version of HinesGO to all of its tenants, challenging them to work with on-site Hines staff to assess a broad set of sustainable practices and offering recognition to those that adopt the practices. Hines developed a tenant guide, distributed by all building managers, that clearly outlines the practices, and a scorecard that office teams fill out to evaluate various sustainability metrics (with bonus points for ENERGY STAR certification). Building management teams, including Hines and tenant representatives, evaluate the scorecard; tenants earning at least 70 points out of a possible 100 are awarded the GREEN OFFICE designation.

KPMG, a national audit, tax, and advisory services firm with many of its 87 U.S. offices in Hines properties, was an early adopter of the GREEN OFFICE program. In fact, KPMG's outreach to property managers as part of its own sustainability program called *Living Green* paved the way for collaboration around GREEN OFFICE. Darren McGann, KPMG Associate Director of Sustainability, worked with the Hines property management team at the Wells Fargo Center in Minneapolis, Minnesota, where KPMG leases two and a half floors, to implement the program. McGann says that working with Hines has been beneficial in *"validating KPMG's sustainability commitment and practices. Working with Hines, we have been able to get new ideas as to what we can do to be more sustainable, as well as enhancing our own practices."* KPMG encourages all of its office teams in Hines-managed properties to apply for the designation and has even distributed GREEN OFFICE materials to office managers in properties not managed by Hines.

Since HinesGO began in 2008, all Hines offices worldwide and more than 725 of Hines tenants' office spaces have voluntarily achieved a GREEN OFFICE designation. This includes more than 32 million square feet, or over one-third of Hines-managed space. The success of GREEN OFFICE developed organically, growing first from employee demand for the program, then more with tenant interest in the designation. For Hines, the program demonstrates a commitment to sustainability and energy efficiency while establishing the company as an industry leader in encouraging tenants to set and achieve sustainability goals. GREEN OFFICE for Tenants has allowed Hines to collaborate with tenants while providing a value-added service at little to no cost. Tenants, property managers, and landlords all benefit from the program through increased positive public relations, reduced operating

expenses, realized lower net operating costs, and increased asset value.

Lessons Learned

- Landlords: Use recognition as a powerful tool to motivate tenants to take efficiency and other sustainability actions.
- Capitalize on the opportunity to lead by example.
- Landlords and tenants can engage on energy efficiency regardless of lease structure.
- Engagement around sustainability can help to build strong landlord-tenant relationships.

"What happens in the tenant space can have a huge impact on expenses, the environment, and employee productivity. So, encouraging occupants to make greener choices is just as important as designing healthy, productive, environmentally friendly workplaces ... As we were completing buildings at the top of the sustainability spectrum, but had no effective way to influence what happens inside tenant spaces, expanding HinesGO to include our tenants has been a real value-add."

—Jeffrey C. Hines, President and CEO of Hines

"The program is designed to create opportunities for the on-site Hines staff to interact with tenants in a productive, mutually beneficial way. The outcome of these interactions is clear – a stronger bond between landlord and tenant that yields lower operating expenses, sustainable practices, and self-help tools for the firm's clientele."

Adapted from *Sustainable Investment in Real Estate*, chapter by Gary M. Holtzer, Global Sustainability Officer at Hines

TENANTS GO GREEN AT THE AON CENTER

Piedmont Office Realty Trust, JLL, and Various Tenants



As part of its Tenants Go Green program, Piedmont and JLL created a Sustainability Board of Directors at the Aon Center in Chicago.

As one of the largest professional real estate service and management firms in the world, JLL understands the importance of engaging tenants, in terms of building performance and client satisfaction. The Aon Center in Chicago is owned by Piedmont Office Realty Trust and co-managed with JLL. In addition to being the property co-manager, JLL's World Headquarters is also located at Aon Center. The desire was to provide an opportunity to raise the level of attention and engagement around sustainability with tenants. Matthew Amato, the Aon Center's General Manager, and John Schmidt, Chief Engineer, had been focusing on upgrades to the base building, but heard from many tenants that they wanted to learn more about sustainable practices in the building. Bob Best, JLL Executive Vice President for Energy and

Landlord/Property Manager's Challenge: Piedmont Office Realty Trust and JLL (co-property managers of the building) sought to promote high performing and sustainable features of the building to tenants and gain buy-in for future projects.

Tenants' Challenge: Tenants wanted to learn about sustainable practices in the building as well as participate in initiatives that both align with corporate sustainability goals and engage employees.

Building: Aon Center, 200 East Randolph Street, Chicago, IL

Lease Structure: Net (Tenants pay energy bills directly to the utility)

Sustainability Services, Amato, and Schmidt realized that providing a forum for tenants to exchange information with building management could foster innovation and a spirit of collaboration. So they asked tenants to appoint representatives to a "Sustainability Board of Directors" and convened a meeting.

From this first meeting, Piedmont and JLL realized that the group offered much more than a forum for dialogue between landlord and tenant, as tenants began to share ideas and experiences with each other as well. For example, one tenant shared signage it created to remind employees to recycle, and another shared artwork behind a campaign to encourage employees to turn lights off when not in use. As the group continued to meet,

tenants even presented suggestions for less conventional ways to promote sustainability among occupants, such as connecting with a local organic farm's community supported agriculture program.

As a result of the Sustainability Board of Directors meetings, Piedmont and JLL worked with tenants to create a sustainability pledge, energy challenge, and other initiatives. The program was formalized under the name *Tenants Go Green* and was promoted to tenants throughout the Aon Center. Property management utilized a vacant space on the ground floor of the Aon Center to display the pledge with signatures from the CEOs of tenant companies Microsoft, Aon, Edelman, JLL and KPMG. This space became known as the "Green House" or the hub of the Tenants Go Green program where building occupants could find resources for reducing energy use, joining the community supported agriculture program, and taking advantage of preferred parking for hybrid cars, among other building sustainability projects.

The tenant representatives on the Sustainability Board of Directors continued to meet regularly to share ideas and discuss initiatives. The property team uses those meetings as an opportunity to share best practices for reducing energy use within tenant spaces, allowing the Aon Center to maintain high performance and its ENERGY STAR certification (achieved every year since 2009). In early 2014, Aon Center achieved LEED Silver certification - the property team used the Sustainability Board of Directors to gather needed information from tenants to support the LEED certification project. After the success of Tenants Go Green at the Aon Center, JLL offered the program to all buildings that they manage in the Chicago market as a best practice and is continuing to promote the benefits of tenant sustainability efforts to buildings throughout its managed portfolio.

Lessons Learned

- Capitalize on tenant interest in sustainability. Consider forming a tenant-landlord committee that offers tenants an opportunity to share ideas and help drive sustainability initiatives for the building, while providing property management with an opportunity to share accomplishments and promote best practices.
- Engage tenants to ensure your building is as energy efficient as possible, but also be open to broader sustainability initiatives that match tenant and occupant interests (such as participation in an organic community-supported agriculture program).
- Test ideas for tenant engagement in one property and/or with tenants most likely to be receptive, and replicate success at other properties.
- Recognize and capitalize on the important role property managers can play in engaging both tenants and landlords in sustainability initiatives.

“Microsoft is proud to partner in the Aon Center’s ‘Tenants Go Green’ initiative. Our goal is to drive responsible environmental leadership and we are committed to helping reduce the impact of our products and global operations on the environment. The Tenants Go Green campaign highlights the importance of collaboration as our society adapts and works to find solutions to help improve the environment.”

*—Rob Bernard, Chief Environmental Strategist,
Microsoft*

Innovative Ways to Educate Tenants

Landlords have many options for educating and engaging tenants around energy efficiency and sustainability. The following are just a few examples of innovative approaches for reaching tenants.

LEVERAGING AN EXISTING CAMPAIGN

Since 2008, TIAA-CREF, a national financial services firm and one of the largest institutional investors in real estate, has participated in ENERGY STAR's *Change the World, Start with ENERGY STAR* campaign. The campaign encourages organizations and individuals to adopt ENERGY STAR products and practices that reduce energy use and greenhouse gas emissions. Since joining, TIAA-CREF has distributed more than 325,000 compact fluorescent lamps and almost 900 high-efficiency LED lamps to tenants, employees, and residents in its investment real estate portfolio – with estimated savings of more than 150 million kilowatt-hours of energy consumption and \$16 million in electricity costs. The campaign gave TIAA-CREF the opportunity to strengthen its tenant-landlord relationship and demonstrate leadership in sustainability.



HOSTING A SUSTAINABILITY FAIR

Principal Real Estate Investors, the property's owner, and KG Investment Management, its property management team, wanted a compelling way to increase their tenants' awareness of the many sustainability initiatives they had undertaken at the AmberGlen office park in Hillsboro, Oregon. The initiatives include recommissioning HVAC systems, using goats for vegetation maintenance, installing an Eco lawn, using irrigation controllers, and building two electric car charging stations. The solution? A sustainability fair for tenants. Now on its fourth year, the fair offers Principal Real Estate Investors and KG Investment not only a great opportunity to share information on sustainability projects but also a chance to connect tenants with important stakeholders, such as local utilities and the city's sustainability office.



MAKING A VIDEO

Cassidy Turley, a leading commercial real estate services provider in the U.S., developed a short video entitled *Sustainable Solutions for the Built Environment* to support a multi-platform communications campaign revolving around energy efficiency and sustainability in commercial buildings. In addition to using typical communications like newsletters, email blasts, and flyers, the firm sent this video to stakeholders, posted it on the company's website, and shared it with the public through social media sites including Facebook, Twitter, and YouTube. The video describes the substantial role that commercial buildings play in energy consumption nationwide and offers easy-to-follow steps for decreasing energy use in office space. This is an innovative way to highlight accomplishments and recruit building occupants to be active participants in efforts to reduce energy use and improve the working environment.



For more ideas, see **ENERGY STAR's 8 Great Strategies to Engage Tenants.**

Available at: energystar.gov/buildings/tools-and-resources/8-great-strategies-engage-tenants-energy-efficiency.

Learn more at
energystar.gov/buildings

