



GREEN LEASE LEADERS: USING THE LEASE TO DRIVE INNOVATION AND CLEAN ENERGY



➔ THIS RESOURCE IS PART OF A SERIES TO SHOWCASE EXCITING GREEN LEASE TRENDS AND STORIES ABOUT THE GREEN LEASE LEADERS THAT ARE DRIVING THEM. VISIT [GREENLEASELEADERS.COM/RESOURCES](https://greenleaseleaders.com/resources) FOR MORE ON HOW GREEN LEASE LEADERS ARE USING THE LEASE TO CATALYZE HIGH PERFORMANCE IN BUILDINGS.



COMMERCIAL BUILDINGS ACCOUNT FOR APPROXIMATELY 20 PERCENT OF ENERGY USE IN THE U.S., WITH LEASED SPACES REPRESENTING 50 PERCENT OF CONSUMPTION.

Conventional leases typically result in the creation of the split-incentive issue where owners are responsible for capital costs for energy efficiency and sustainability investments and tenants reap all the benefits through reduced operating expenses and better building performance, or vice versa. Green leases, also known as high-performance or energy-aligned leases include lease clauses that effectively break down pervasive barriers in the commercial, industrial, and retail sectors by equitably aligning the costs and benefits of energy and other sustainability investments of landlords, tenants, and real estate teams. With a green lease, landlords and tenants can better work together to save money, conserve resources, and ensure smarter, more efficient operation of buildings.

A study by the [Institute for Market Transformation \(IMT\)](#) shows that green leases have the potential to reduce energy consumption in U.S. office buildings by as much as 22 percent, yielding reductions in utility expenditures in commercial buildings up to \$0.51 per square foot. This research shows that when executed, green leases have the potential to provide the leased U.S. office market alone \$3.3 billion in annual cost savings.

Since its inception in 2014, [Green Lease Leaders](#), a nationally-regarded industry recognition program created and managed by IMT and the U.S. Department of Energy's (DOE) [Better Buildings Alliance](#), has grown to represent over 1.8 billion square feet of building space—a clear indication that green leasing is no longer considered an exception, rather it is becoming best practice across real estate markets. As building efficiency efforts have progressed to more advanced holistic approaches, green leases have evolved as well. The 2018 cohort

of Green Lease Leaders are using the lease to not only overcome split incentives but also drive innovation and adoption of forward-thinking strategies that create value.

In the following case study vignettes, IMT and DOE's Better Buildings Alliance highlight 2018's Green Lease Leader designees that have successfully implemented innovative strategies into their green leases and overall operations. In each vignette, leading sustainability professionals share their organization's best practices that every real estate or sustainability practitioner should consider when leasing property.

[Brixmor Property Group's](#) expansion of green lease terms include onsite renewable energy generation purchase requirements.

[Digital Realty's](#) successful procurement of zero-emissions renewable energy and its comprehensive renewable energy credit program.

[Kilroy Realty Corporation's](#) pioneering green leasing efforts and its integration of broker education on the value of high-performance buildings and market trends.

[Rocky Mountain Institute](#), [Morgan Creek Ventures](#), [Coburn](#), [Packard Dierking](#), and [Holland & Hart](#) collaborative efforts to use green leasing towards maintaining net-zero building operations success.



BRIXMOR PROPERTY GROUP

Using the lease to tackle multiple energy and sustainability goals

Brixmor Property Group (Brixmor) owns and operates one of the nation's largest portfolios of open-air shopping centers, with more than 475 commercial real estate properties strategically located across 36 states. Brixmor is committed to sustainable growth for stakeholders through focused investments in priority areas such as reducing direct environmental impacts by improving energy efficiency 25 percent by 2025 as compared to their baseline. Expansion of onsite renewable energy generation is another core sustainability goal for Brixmor, with efforts geared towards reaching their goal of 15 megawatts of onsite renewable energy by 2022.

The organization's green lease provisions have facilitated the creation of a pathway to solar developments that are financially viable, while also providing tenants the opportunity to achieve savings using a two-pronged approach. First, lease clauses ensure Brixmor, as the landlord, has the right to install renewable energy systems on the roof and at the property. Second, tenants are required to purchase electricity from the landlord, or landlord designee, which provides an efficient and financially responsible manner to sell the power generated onsite. These efforts have resulted in the successful completion of three solar projects with 10 additional in development across California, New York, and Connecticut.



Measuring Progress with Energy Data

Creating baselines for energy usage and benchmarking against them is necessary when working to reduce overall energy goals. Brixmor's green lease includes a clause that requires tenants to install submeters in their spaces and when they don't have submeters, they are required to report electricity, gas, water, and waste generation and diversion data on a quarterly basis. The emphasis on data collection helps Brixmor make informed decisions about energy efficiency upgrades that the landlord would be responsible for under a conventional lease, and can also serve as an educational opportunity for tenants. Improving energy use is as much about application of technologies as it is about behavior modification. Submetering provides an added benefit to tenant as it provides a source of data which can inform the tenant where they may have opportunities to become more efficient and reduce expenses.

Lighting the way to major cost savings

Additionally, Brixmor has been working to upgrade all properties within its 85 million square-foot portfolio to LED lighting by leveraging the capital reimbursement or tenant pass-through provisions for capital improvements. Brixmor is planning to have more than 50 percent of its portfolio upgraded by the end of 2018, clearing the path to its goal of completing all upgrades by 2025. This will serve to enhance visibility of the properties, minimize security concerns, and achieve an estimated 50 percent reduction in overall electricity use for upgraded properties.

Above: The green lease clauses at Gateway Plaza have assisted with more than 20 tenants signing up as electricity off-takers for the property's solar development. In addition, Gateway Vallejo has electric vehicle (EV) charging stations that powered approximately 100,000 EV miles in 2017, a smart irrigation system that has saved 40% over the baseline year, and LED lighting, with individual fixture dimming motion sensors, reducing energy consumption by 80% annually.

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DIGITAL REALTY

Digital Realty, a real estate investment trust (REIT) with a portfolio of over 200 facilities across four continents, has built the standard for data center real estate, having developed a unique capability to acquire, manage, and scale data center campuses. Data center energy consumption is substantial and as the industry grows, stakeholders are recognizing the opportunity to minimize the burden on natural resources through improved efficiency. Digital Realty has implemented the use of green leases across its portfolio to expand existing efforts and to simplify a pathway for efficiency improvements, compliance with benchmarking requirements, and the integration of renewable energy generation.

Accountability for Landlord and Tenant

Power usage effectiveness (PUE) is the most common method of calculating how energy efficient a data center is based on energy use. In multi-tenant data centers with shared infrastructure, the PUE of the facility can be affected by the performance of individual tenant spaces. Digital Realty developed language to incentivize both landlord and tenant to engage collaboratively on cost-effective energy-saving improvements. The landlord is responsible for identifying, vetting, and managing the projects, and costs are shared by building tenants that benefit from the energy savings. With a transparent and open planning process, and robust measurement and verification procedures, Digital Realty ensures that tenant operating expense savings exceed the investment in the improvements.

Launching Green Lease Initiative

Digital Realty officially launched its Green Lease Initiative in 2017 and has seen an 85 percent adoption rate among tenants. Tenant demand for energy sourced from renewable resources prompted the integration of a renewable energy provision, which passes the savings and costs of incremental renewables to tenants. On a global basis, Digital Realty has successfully procured nearly more than a third of its electricity from renewable sources on behalf of tenants.

Educating to Address Challenges

The creation of an online training for company staff and the development of customer-facing educational materials has helped Digital Realty address unfamiliarity with green leasing provisions among tenants, especially those that entail energy efficiency cost-share and provisions that allow for the purchase of renewable energy on behalf of tenants. The company's Sustainability and Legal teams collaborated to create materials for the company's sales, sales engineering, and asset teams, so that they are able to serve as effective advocates of green leases while on the frontlines with tenants. Proactive engagement between tenant and Digital Realty's sustainability teams has also been an effective method to get both parties seeing eye-to-eye on the intent and benefits associated with green leases. This engagement continues after the lease is signed, with Digital Realty's operations team's ongoing assessment of opportunities to reduce PUE and improve efficiency.

Above: Digital Chicago Campus is a 40-acre master-planned hyper-scale and enterprise-class data center campus in the Chicago suburb of Franklin Park. It consists of three buildings, totaling over 500,000 square feet of space.



DIGITAL REALTY



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Kilroy leadership recognized that successfully executing LEED certifications throughout its building portfolio required an integrated green leasing program. As part of a lease standardization program in 2013, Kilroy expanded its leasing language to include many environmental provisions, such as those that require tenants to share energy, water, and waste data to facilitate benchmarking performance and to identify where improvements can be made to meet goals. Taking these steps has also helped demonstrate to investors and other stakeholders that Kilroy's leadership has an understanding of the value reducing energy consumption adds across its portfolio. Green leasing requirements that contribute to energy and water efficiency projects save Kilroy's tenants approximately \$4,150,000 on an annual basis.

Brokers for Better Buildings

Given the integral role that brokers play in marketing, selling, and leasing buildings, it is essential for them to understand the full value of high-performance buildings beyond energy efficiency designations, and how the market is trending. Kilroy has provided training for and actively engaged with brokers to ensure that they are comfortable with priority sustainable real estate concepts like submetering, efficient lighting, onsite generation, and greywater systems. Adequate training has also helped brokers address pushback from tenants regarding certain lease provisions. Kilroy launched a recognition campaign in Summer 2018 to feature brokers who have contributed to the successful execution of green leases.

Green Leases as Standard Protocol and Brokers for Better Buildings

Kilroy Realty Corporation (Kilroy), a publicly traded real estate investment trust (REIT), has over 70 years of experience owning, developing, acquiring, and managing real estate assets as one of the west coast region's premier landlords. Company-wide social and governance practices supplement Kilroy's sustainability objectives and its commitment to leading the market by example. With all development projects being built to Leadership in Energy and Environmental Design (LEED) Platinum and Gold standards, the REIT has been able to reduce energy consumption by 14 percent, water consumption by 12 percent, and increase recycling diversion from 28 percent to 47.5 percent since 2010. A pioneering adopter of green leases and inaugural Green Lease Leader, Kilroy has leveraged lease provisions to ensure return on investments in energy and water efficiency.

Supplementing Green Leases

Kilroy has developed a design and building standard document that complements its green leases and applies to all tenant fit-outs and provides guidance to tenants to ensure that changes to their physical spaces align with the quality and performance Kilroy expects of its Class A properties. Design criteria are included to maximize energy efficiency, materials use, and indoor environmental quality. Projects are also required to implement energy efficiency measures such as reduced lighting power, integration of water sensors, and waste management.

Above: Kilroy's first green lease to contain the contact information of its sustainability team lead was for the Skyline Tower building, which underwent an extensive multiyear retrocommissioning program in partnership with Puget Sound Energy. Conducted in three large phases at a total cost of \$466,157, the project was completed in 2016 and has resulted in a verified 15% decrease in cost per square foot of energy—going from \$2.01 in 2014 to \$1.71 in 2017. This sustainability project is an example of how the landlord and tenant have worked together on a pathway to meet the lease stipulation requiring the maintenance of LEED Gold certification.

KILROY



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ROCKY MOUNTAIN INSTITUTE

Collaborating for Success

Morgan Creek Ventures (MCV), a sustainable real estate firm, recently completed its first net-zero energy (NZE) building, and the largest NZE multi-tenant building in the U.S. to date. An NZE building is one that is highly energy efficient and produces enough carbon-free energy, onsite or through offsite procurement, to meet the building's annual energy demand. These buildings have been on the rise given their clear benefits to thermal comfort, indoor air quality, and daylighting. However, leased buildings have lagged noticeably behind due to the complex nature of tenant-landlord lease structures.

High-performance buildings are often created through collaboration—from inception to fruition—among developers, architects, engineers, and building stakeholders; Morgan Creek Ventures (the developer and landlord), Rocky Mountain Institute (anchor tenant), Coburn (architect), and the legal teams at Holland & Hart and Packard and Dierking worked collaboratively to develop a lease structure for the Boulder Commons development that included provisions to hold both tenant and landlord to meeting the development's net-zero goals.

Staying Within an Energy Budget

All tenants are required to stay within a plug-load energy budget of 7 kBtu/sq ft. per year, which is 69 percent lower than the average office plug load in the U.S. To help tenants track their plug load budgets, Morgan Creek Ventures set up plug load

submetering for each tenant and provides monthly reports on consumption. Lease provisions state that if a tenant exceeds the energy budget, an associated fee will be charged to offset the overage with renewable energy certificates (RECs). Additionally, tenants that exceed the energy budget are responsible for performing a plug load energy audit of their specific space. To ensure other systems in the building are also performing as they should, lease language for Boulder Commons mandates annual recommissioning for base building systems with expenses passed through to tenants as a part of operating expenses.

Securing Savings with On-site Renewable Energy

While the building does not have full operating data yet, energy modeling projects that it will have an energy use intensity of 26 kBtu/sq ft. per year, significantly less than the average of 86 kBtu/sq ft. per year for buildings in Boulder, Colorado. Morgan Creek Ventures anticipates a return on its solar PV investment by placing a fixed energy charge on tenants' base rent. The developer pays any actual utility energy bills and any difference between the energy charge and actual energy bills are used to offset the cost of solar. This approach should result in an additional value stream of approximately \$150,000 per year.

Above: Boulder Commons is a net-zero energy development located in Boulder, Colorado and the home of Rocky Mountain Institute's Boulder office. It sets a new paradigm for net-zero energy lease structures, alternative mobility, and high-performance speculative buildings.



MORGAN CREEK
VENTURES



COBURN

HOLLAND & HART



PackardDierking
ATTORNEYS AT LAW



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BECOME A GREEN LEASE LEADER

If you are a tenant encouraging your landlord to collaborate on sustainability goals, or if you're a landlord working closely with tenants to make their space more efficient and healthy, you might be a candidate for IMT and DOE's Green Lease Leaders recognition.

A first step is to assess your lease and corporate documentation in comparison to the standards specified by the Green Lease Leaders recognition program. Even if you are not currently including energy efficiency and sustainability in your lease, but practice sustainability in building operations and management, the Green Lease Leaders criteria can serve as a guide for enhancing a lease to account for sustainability. For more information on applying for Green Lease Leaders, or for help in building your own green lease, contact IMT at imtweb@imt.org or visit the Green Lease Leaders website to learn more about the program and how to apply for recognition: <https://www.greenleaseleaders.com/apply/>

