

GREEN LEASE CASE STUDY

BREWING UP



A PLAN TO PERCOLATE ENERGY SAVINGS

THE CHALLENGE

In order to analyze the potential for cost-effective Energy Conservation Measures (ECMs) for The Coffee House, located at 11300 Juniper Road in Cleveland, Ohio, the Council of Smaller Enterprises (COSE) performed a thorough energy assessment. They found that the 9,233 square-foot building consumed 121,560 kilowatt hours (kWh) of electricity and 4,119 therms of natural gas per year for a total annual energy expenditure of



\$18,187 per year. The largest three consumers of energy being heating, cooling, and miscellaneous appliances, which represented approximately 93 percent of total annual energy consumption.

Out of the many ECMs considered, 13 rose to the surface as candidates for implementation. They included reduction of plug loads through controls, upgraded lighting, proper set points on thermostats, and several behavioral measures. If all ECMs were implemented, the facility could expect to reduce electricity consumption by 12 percent and natural gas consumption by 32 percent. This would produce an annual operational savings on the order of 14,761 kWh and 1,326 therms for a combined \$2,950 of utility and operations & maintenance (0&M) expenditure reduction. The full implementation cost of these projects was estimated at \$8,630, yielding a simple payback of 2.9 years.

The Coffee House

The Coffee House was founded in 2009 and is owned by Case Western Reserve University. The shop is situated in a threestory building located in a center of education, medicine, arts, and cultural institutions, known as University Circle. In addition to coffee, the business serves homemade pastries, teas, soups, sandwiches, and pasta. The Coffee House building was originally constructed in 1907 as a residence by the founder of Central National Bank, and comprises approximately 9,233 square feet, including the basement. It was later endowed to Case Western and lived many lives before transforming into the retail establishment that it is today.









Looking deeper at potential changes, an energy audit and a green lease can address both landlord's and tenant's sustainability goals.

Although the payback was short, the investment was still more than The Coffee House could pay up front, and the business needed to evaluate its long-term investment in a building it didn't own. Upon meeting with Eric Meyer, one of the business's managing partners, he informed COSE that their lease was due for renewal, which is typically the best time to discuss modifications to a lease. He was intrigued to learn about the concept of green leasing and eager to introduce new energy-saving language to Case Western. Meyer saw the lease renewal as a great opportunity to get the University on board to help reduce utility costs and integrate the building into the campus-wide sustainability master plan.

As Meyer and other savvy tenants and landlords have come to realize, an energy audit combined with a green lease can address the sustainability goals of both parties, establishing a framework to justify costs and savings, and innovatively working building enhancements into the lease.

THE SOLUTION

During the lease negotiations for a 10-year renewal, Case Western agreed to share utility data since The Coffee House has ownership of the utility bills, and the University provides a monthly reimbursement based upon square footage. Having more transparency and data sharing will allow both parties to fully grasp how the building uses energy.

Case Western and The Coffee House agreed to create separate agreements outside of the standard lease that address the green leasing provisions requested, such as upgraded lighting, windows, and HVAC. Both parties also agreed that the University's sustainability director will incorporate The Coffee House into its master plan, which had not been considered before.

Specific ECMs that The Coffee House will focus on are:

CHANGE LIGHTS IN EXIT SIGNS TO LEDs that yield a simple

payback of less than one year. Not only do LEDs use less energy, but they also last much longer than both incandescent and CFL bulbs. reducing maintenance costs.

LIGHTING RETROFITS with a simple payback of 2-5 years. Savings can yield \$0.20-0.25 per square foot, or about 15-30 percent of energy costs. Lighting retrofits are the most effective and least expensive when combined with the installation of advanced lighting controls.

ADVANCED LIGHTING CONTROLS

also have a simple payback of 2-5 years and yield 15-20 percent in energy savings. This ECM will provide greater control for overhead lighting and using available daylight. The lighting controls also include occupancy sensors to ensure unnecessarily lit areas like restrooms and the basement waste less energy.





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ALIGNING TENANT AND LANDLORD GOAL

The Institute for Market Transformation (IMT) has worked with Cleveland small businesses to enhance their leases to incorporate sustainability measures. As part of their efforts, IMT conducted an extensive review for The Coffee House's existing lease and suggested they, along with Case Western, consider the following lease provisions to increase savings opportunities:

CAPITAL EXPENSE SHARING: From time to time, capital expenditures may be incurred during the lease term on the tenant's or landlord's end for energy efficiency retrofits and upgrades. The lease can be used to communicate the benefits, costs, rights, and obligations to the landlord, its tenants, and its appropriate legal parties.

ONGOING ALTERATIONS: This lease provision ensures that planned alterations within and surrounding the premises are designed, constructed, and operated in an energy-efficient manner. Case Western is obtaining quotes on updating some of the exterior lighting,

Green lease provisions will increase savings opportunities.

for example. As a result of The Coffee House's longstanding relationship with the University, both parties are actively communicating about all of these aspects.

LANDLORD AND TENANT MAINTENANCE— **SUSTAINABILITY BEST EFFORT:** This clause describes required efforts and reinforces a mutual understanding for both parties to take steps towards greener and more energy-efficient operations. Case Western will engage The Coffee House in its campus-wide sustainability master plan and set forth building-wide energy use reduction goals, slashing unnecessary use of electricity, water, heating, and air conditioning. The operation of common spaces and core building systems should align with the sustainability goals mentioned for both landlord and tenant. The Coffee House should also strive to meet building-wide energy use reduction goals, using the recommended use of window shades and curtains to keep out summer heat and keep in warmth during winter months.



Small businesses are largely focused on their daily sales—for The Coffee House, that includes attracting more customers to come in and purchase food and coffee. However, operations is another key area that businesses need to address to keep costs down. Energy efficiency upgrades present an opportunity for small businesses to shave dollars from their operating expenses. Yet, many don't know where to start or how to effectively allocate their limited resources. In fact, the presumed upfront costs often prevent businesses from even analyzing their opportunities for improvement.

Receiving an energy audit combined with green lease recommendations can provide landlords and tenants a solid framework that lends to a more informed and credible conversation. Both parties strive to reduce energy consumption; how they go about achieving it and sharing in the costs and benefits can be recognized through a mutually agreed-upon plan.