



Question of the Month: How can building owners and managers find opportunity in today's "new" energy market? - by Dailey Tipton

July 07, 2020 - Front Section

History has shown us that the energy industry responds greatly to fluctuations in the financial markets. With the stock market in distress and international relations on high alert, the price of energy recently hit rock bottom. In mid-March, energy prices hit a 20-year low, a result of historically warm winter months and COVID-19 reducing both commercial and industrial demand for energy products. Experts have expressed concern that the current downturn could be disastrous to the industry, leaving the market forever changed.

The uncertainty of today's world is forcing businesses to adapt and reposition themselves so that they can make it through these challenging times. With so many unknowns, let us not lose sight of opportunity. Finding savings is critical, especially for organizations that have felt the financial impact of COVID-19.

With many businesses working remotely, many office buildings are vacant or at low capacity. Building owners and facility managers have a unique opportunity to implement energy efficiency measures by completing a "low-occupancy energy audit" to determine what loads can be turned off, set back, etc. Below are some no-cost to low-cost practices to follow after completing an internal audit.

HVAC Processes

The first place to look is your building automation system or manual HVAC processes.

Optimize start-up time, power-down time, equipment sequencing, and temperature schedules. Set temperatures back in the evening or weekends and other times when the building isn't occupied. With most people working from home now, lowering temperatures during weekdays can be a significant savings opportunity.

Perform simple maintenance of your HVAC system. Change or clean HVAC filters and clean the evaporator and condenser coils on heat pumps, air-conditioners, etc. right away. Dirty filters are inefficient, overwork the equipment, and result in lower indoor air quality. Dirty coils inhibit heat transfer which increases the workload on the equipment and wastes energy and money.

Adjust your ventilation systems. Look at your fans, VAV boxes, etc. and adjust ventilation in unoccupied and low-density areas to reduce the amount of outside air that is being brought in and conditioned.

Lower boiler and chiller water temperatures. With no or low occupancy, less hot water or steam will be needed for comfort heating and, as we enter the spring/summer months, less chilled water will be needed for comfort cooling. For every 4°F the water temperature is reduced, energy savings of 1% will result. Therefore, if you lower the boiler set point from 180°F to 120°F, you'll save 15%!

Lighting Loads

There are a few easy ways to reduce lighting costs (which can account for more than 25% to 40% of your building's electric bill).

Consider a quick LED lighting upgrade. LED lighting can reduce the energy consumption of your lighting systems by up to 70%, which along with free rebate discounts from utility programs, leads to very fast payback and high ROI. Financing an LED project requires no upfront capital and the savings will generate new positive cash flow, increasing NOI. Now is the perfect time to implement an LED lighting project because the project can be completed very quickly with few or no tenants in the building.

Leave lights off in unoccupied BOH areas and reassess your janitorial practices. We recommend having your building janitors coordinate with the security crew to walk through the building and turn off all lighting and plug load equipment that was inadvertently left on. If the building is virtually vacant, have the cleaning crew clean during the daytime so all lights are off during the evening.

Quick but Meaningful Measures

Use shades and blinds to control direct sun through windows to prevent or encourage heat gain. In cooler weather, open all shades and blinds to allow sunlight to enter. In warmer weather, reverse the process and close all shades and blinds.

Make sure that areas in front of vents are clear of obstructions such as furniture, equipment, etc. 25% more energy is required to distribute air if your vents are blocked.

Maintain a minimum 3-inch airgap between the back of refrigerators, water coolers, ice machines, etc. and the wall. Keep the condenser coils of these appliances clean.

Additional Cost Savings

With energy prices coming off extreme lows, owners and operators should look to re-contract their energy supply agreements. This can lead to savings of more than 20% on your annual energy spend. Before restructuring your contract, be sure to contact a procurement specialist to make sure

your current contract does not have any hidden terms and conditions.

Considering the unique challenges COVID-19 brings to our customers and the buildings in which they are operating, we hope these tips can reduce the financial strain in some small way.

Dailey Tipton is the leader for revenue generation for Evolution Energy Partners (Evolution Sustainability Group), Exton, PA.

New York Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540