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It seems everywhere I look; talk about climate change continues to grow louder. Pressure for commercial buildings to ramp up their efficiency efforts is increasingly becoming a topic, not just in commercial property management circles—but in the media at large. Cities such as Manhattan, San Francisco and Houston already have efficiency legislation, and more and more cities nationwide are following their lead. Additionally, utilities across the country are running shorter on power as greater demand for energy becomes the norm. To prevent blackouts and brownouts, programs called Demand Response are spreading like wildfires. Once voluntary and financially advantageous to building owners, these programs are starting to become mandatory and potentially costly to building owners who chose not to participate.

One area that requires more attention in our quest for meeting corporate sustainability goals is Heating, Ventilation and Air Conditioning systems (HVAC). The HVAC system is frequently the single largest energy draw—about 40% in a typical building—it plays a key role in a building’s energy use reduction plan. Plus, making an HVAC system demand-response-compatible can contribute significantly to relieving grid strain during times of peak demand. “LEED Pilot Credit 8: Demand Response” was created to incentivize buildings to participate in Demand Response programs for properties seeking LEED certification, and there are numerous utility funding structures out there to help commercial buildings finance the retrofits necessary for participation.

But, HVAC systems in commercial buildings have long been a point of contention and tenant complaints—we have all experienced being too hot or too cold in the typical office building. Because of this, owners and property managers have some rightful apprehension regarding modifying a system for energy reduction that is already a notorious comfort offender.

Enter HVAC optimization. HVAC optimization, which is typically installed either on top of or instead of existing HVAC controls, has come quite a long way in recent years toward bridging the gap between corporate and national sustainability efforts, occupant comfort and economic feasibility. Two recent examples; HVAC optimization software creator Enerliance (a Yardi company) showed how an 800,000-square-foot building in Southern California with a central plant is currently achieving over one million kilowatt hours (kWh) in annual energy savings without compromising occupant comfort, and HVAC optimization controls manufacturer BesTech showed how a 130,000-square-foot building in Phoenix with multiple small package units is currently saving 41% in HVAC related kWh and 48% in kW demand reduction without compromising occupant comfort.

These technological advancements eliminate the cycles of over-cooling and over-heating office space, thus improving efficiency and comfort simultaneously. Good news for both climate change and occupants. Great news for building owners considering these technologies are typically eligible for rebates and pay back quickly while reducing complaints and helping maintain occupancy.

Now there are advances in technology to help both large and small commercial properties reach much greater HVAC efficiencies. Energy Management efforts like these are as good for business as they are for the environment.