



19
89 | **OVER**
TWENTY
FIVE
YEARS

Making energy efficient investments work for you

March 24, 2014 - Green Buildings

It has been well-established that investing smartly in a building's energy efficiency will result in a robust payback and other business benefits. Much energy is wasted and strategies exist to reduce the waste. According to the USDOE, over 4.2 million commercial buildings waste an average 30% of their energy, causing a cumulative estimated excess cost of \$60.7 billion in 2007. Given an 8% capitalization rate, the cumulative loss of real estate value is \$750 billion. An example applied to an individual building (from Energy Star): A 200,000 s/f building pays \$2 per s/f in energy. Energy reductions resulting in only a 10% decrease in energy costs translates into \$40,000 in additional net operating income annually. Energy Star states that common energy recovery opportunities range from 20%-40%.

Given this opportunity to turn wasted energy into income, why aren't all property owners and managers investing in energy efficiency upgrades right away? A Deloitte survey, reSources 2012, found that 90% of companies surveyed had energy management goals. Yet, the survey also found that few companies had actually developed and implemented significant energy efficiency improvements. Many property owners and managers have one or more of the following impressions about energy upgrades: Improving energy efficiency is a complex, unreliable process, investing in energy efficiency is almost always expensive, and pursuing energy efficiency is risky business (under deliver).

Each assumption has been shown to be incorrect based on real life examples. So, how can these fears be overcome? How to better ensure your energy investment is successful in maximizing business benefits?

1. Perform a site-specific energy assessment led by an experienced professional. Make sure the data is accurate and complete. Data quality is of prime importance.

I once performed an energy audit for a commercial facility and a manager gave me some stock info about their boilers. When he dug for other data, he found out that his long-held assumptions about the boilers were wrong. The true, revised data affected the recommendations greatly, resulting in better investment in energy reducing strategies. The bottom line is that having quality information reduces the fear that management may have.

2. Focus on your highest energy usage activities and identify multiple solutions. To reduce the fear of risk in energy upgrades, it is critical to focus on big energy usage operations and determine the costs, reductions, and paybacks of multiple potential solutions.

Obtain multiple bids and identify the best combination of solutions based on financial analysis.

3. Put all matters in writing. It is important to be transparent in the energy evaluation and calculations. Prepare professional memos or reports along the way, and don't hide any data or reasoning for decisions.

Proposing this approach will reduce the fear that some C-level executives have about performing energy assessments and investing in energy waste reduction strategies and better ensure success.

CCES has the technical experts to help you prepare energy evaluations and audits to maximize your energy and cost reductions and gain the greatest business benefits in a reliable, programmatic, transparent way.

Marc Karell, P.E., CEM, is the president of Climate Change & Environmental Services, LLC, Mamaroneck, N.Y.

