



How energy efficiency benefits your buildings

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I speak publicly about energy efficiency and its many financial benefits. At a recent presentation, a few people in the audience questioned my statements. Although they acknowledged that financial value could come from energy reduction, there are cases where improving energy efficiency does not lead to cost savings; a strategy may be so expensive that it does not pay back the initial investment. This is technically true; however, with electricity, gas, and oil prices rising, there are fewer such cases. This is why one needs to bring in an experienced engineering professional to look individually at every building and situation and devise a host of potential strategies so you can pick what's best for you. Remember that "just going to Home Depot" to pick up some LEDs guarantees neither good savings nor proper lighting. Experienced professionals are worth their cost in additional cost savings and reliability.

My favorite example is a small business called Colonial Needle, a light industrial/warehouse/office 2-building complex in White Plains. The buildings were built in the 1950's and were nearly unchanged since then, including having their original boiler and windows. Not only were their energy costs very high, but their workers were still uncomfortable; some having to wear parkas at their desks! Colonial Needle finally realized they had to upgrade and did so comprehensively. They brought me in and we developed a number of specific strategies, which they chose to implement gradually, such as the replacement of their single-pane windows with modern double-paned ones. While this was a little expensive upfront, it was worth it given the improvement in worker morale and productivity (nobody wears parkas indoors anymore!) Each building and situation is unique. It is important to bring in the right energy professional to lay out options and to look deeper into what the long-term costs and benefits are.

Another wonderful factor that favors energy efficiency projects is the availability of incentives. N.Y. understands that incentives for private companies to implement energy efficiency projects is a productive way to spend money. Incentives help companies reduce expenses (raising tax revenues), create new jobs, have healthier citizens (using less public health services), and reduces the stress on energy delivery. On this latter point, one apartment complex in Manhattan that switched from oil to natural gas (oil backup) noted that the number of annual oil truck deliveries dropped from nearly 300 to two through the narrow streets of the neighborhood. Besides causing traffic jams, truck deliveries took boiler workers away from their jobs. So this not only made the boiler workers more productive, but improved the lives of the residents, too.

And Con Edison has energy incentive programs, too, in order to avoid or scale back the building of new or expanded power plants, transmission lines, and other necessary equipment and use existing infrastructure more effectively. But do note for New York and for Con Edison that their energy incentive programs have a finite life, and many will not be extended past 2016.

But back to you, our readers, who primarily work for companies and building owners and deal with a

finite number of buildings and facilities. Why should your company invest in energy efficiency and how can you get others to push for this?

Payback periods for many energy efficiency projects are dropping and are even greater when productivity and operational gains are estimated and included.

Energy efficiency makes buildings more comfortable, yielding healthier conditions for workers and residents. According to the International Energy Agency (IEA), for every \$1 invested, energy efficiency provides up to \$4 in total financial benefits.

Energy efficiency strategies can attract new business, tourists, and investment dollars to the company or building. This is especially true in real estate, as energy efficiency can attract more potential renters (giving the owner the upper hand), the entertainment and health care industries, and for universities.

Companies, building owners and managers should stop thinking about energy efficiency as just another expense, and instead think of it as an investment to be studied and benefits maximized. No, not every energy efficiency project is ideal for you. An experienced professional can determine the most cost-effective projects and manage their implementation properly.

CCES has the experts to perform an energy assessment to determine specific energy efficiency projects for your building or facility. We have the experience to quantify potential costs and long-term benefits, not only direct cost savings, but other business benefits, as well. Join the growing number of businesses who understand energy efficiency is a positive business investment with many short- and long-term benefits. Contact us today at 914-584-6720 or at karell@CCESworld.com.

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