



The importance of comprehensive benchmarking

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Without a proper system of tracking a property's historical consumption and building characteristics, it is impossible to effectively sustain utility efficiency.

Utilities have become an increasing area of focus due to the growing cost of fuel, the realization that resources are limited and replacement costs are high, and the movement towards ecological responsibility.

Benchmarking plans should begin with a process that is similar to utility bill auditing. This requires the gathering of utility billing and property info which is currently the basis for local laws mandating benchmarking in N.Y.C. A proper benchmarking process goes even further.

Following up with demand response, applied engineering services determine a building's core and non-essential uses. This, along with 15 minute interval data, achieves a higher level of benchmarking data, allowing owners to better understand their utility use and identify savings opportunities. A properly managed process of deregulated energy purchases encompasses a comprehensive market survey and price discovery process. This includes an analysis of base and peak loads, assigning building uses to those loads which further enhances the database.

Finally, the holy grail of benchmarking is a physical AHSRAE Level II audit. This will identify specific efficiency projects, and yield long-term true cost effective savings. This also requires extensive resources, time, and dollars. Undertaking some form of this audit will ultimately become a law in most cities and states, as is currently the case in N.Y.C. beginning in 2013.

The info acquired from the ASHRAE Level II audit properly applied, will highlight the hierarchy of efficiency projects, prioritize investment dollars and maximize savings. The process may also uncover complementary opportunities that can potentially solve multiple goals.

Without properly measuring all aspects of historical usage for a project, one cannot understand the overall effect of future changes. Data that is not continuously measured and verified will include a great deal of perceived, but not realized savings. Any true realized savings are likely to degrade over time. Proper measurement and verification consists of a comprehensive strategy that begins with a plan (as described above), before implementing efficiency retrofits. Then it is incumbent upon management to continuously and accurately measure all ongoing use to gauge the real effects. This comprehensive monitoring plan requires a commitment of time, people and money; which historically has been lacking. As a result, owners may feel good about efficiency projects, but in reality, are leaving a big chunk of the potential benefits unrealized. Michael Steifman is the CEO of UtiliSave, LLC, Brooklyn, N.Y.