A Brave New World for Commercial Buildings: ASTM's "BEPA" Standard

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On February 10, 2011, ASTM formally published its Building Energy Performance Assessment (BEPA) Standard - E 2797-11. This standard will enable users to measure the energy performance of a commercial building in connection with a real estate transaction. Regulatory drivers spurred the development of the BEPA standard, even in the midst of a construction recession. In the past few years, several states and local governments passed mandatory building energy labeling and transactional disclosure regulations. These disclosure regulations, combined with some building codes that are now requiring specific energy-efficiency improvements, triggered the development of a standardized methodology to assess and report on a commercial building's energy use. The BEPA's passage arrives at a crucial time when building certification standards face increased scrutiny, both in the market and the courtroom.

The ASTM BEPA standard includes the following five components: (1) site visit; (2) records collection; (3) review and analysis; (4) interviews; and (5) preparation of a report. ASTM is not creating or implying the existence of a legal obligation for the reporting of energy performance or other building-related information. Rather, the BEPA offers certain guidelines to the industry to promote consistency when collecting (and perhaps reporting) buildings' energy usage data, such as:

- collecting building characteristic data (i.e., gross floor area, monthly occupancy, occupancy hours)
- collecting a building’s energy use over the previous three years (with a minimum of one year) - including weather data representative of the area where the building is located;
- analyzing variables to determine what constitutes the average, upper limit, and lower limit of a building's energy use and cost conditions;
- determining pro forma building energy use and cost; and
- communicating a building’s energy use and cost information in a report

One of the options available to users of the BEPA standard is to identify government-sponsored energy efficiency grant and incentive programs that may be available for any energy efficiency improvements that could be installed at the building (thereby increasing its value, and making it more attractive to potential buyers).

Building benchmarking (i.e., comparing a building's energy output to its peers) is not part of the ASTM BEPA standard's primary scope of work, but rather a "non-scope consideration." The BEPA certainly could be used in conjunction with building certification tools already in the marketplace, such as ASHRAE, Green Globes, and U.S. Green Building Council (LEED), to name a few.

However, as the economic noose has tightened in recent years, green building standards have received increased scrutiny. Indeed, builders and landlords who sell their properties with the promise that they have some green certification (which can be expensive to obtain), and that promise for whatever reason fails to translate to the economic savings contracted for, could face liability.
The *Gifford v. USGBC* lawsuit currently pending in the United States District Court for the Southern District of New York crystallizes the debate over green building certification (in this case - LEED). The core allegations in the lawsuit prompt this author to see significant value for stakeholders to use ASTM’s BEPA as a supplement to applying rating and benchmarking systems like LEED.

Gifford’s primary complaint is that LEED-certified buildings are not as energy-efficient as advertised. Support for this contention rests on Gifford’s analysis of a 2008 New Buildings Institute (NBI) study comparing predicted energy use in LEED-certified buildings with actual energy use. In the study, NBI concluded that LEED buildings are 25-30% more energy-efficient compared to the national average. To the contrary, Gifford concluded that LEED-certified buildings use 29% more energy than the national average. He further emphasized that the NBI results were skewed in part because the NBI study compared the median energy use of LEED buildings to the mean energy use of non-LEED buildings.

The purpose of this article is not to comment on the merits of the *Gifford* lawsuit or criticize LEED. But this apples-to-oranges argument articulated by Gifford magnifies the proverbial elephant in the "green" room - the need for sufficient objective data to accurately compare the energy use and energy cost of buildings against their relevant peer groups. With such data in hand, the benchmarking and rating systems already in place can be buttressed with a greater measure of consistency and transparency (a big issue for detractors of green building certification, like Gifford). Furthermore, the more stakeholders in the real estate industry (buyers, sellers, lenders) understand how a building’s energy performance was determined, the better equipped they will be to put a price on the economic and environmental benefits of green buildings.

In sum, the ASTM BEPA standard is expected to become the standard for building energy use data collection. It can be used to quantify a building’s energy use as well as its projected energy use and cost ranges, factoring in a number of independent variables (i.e., weather, occupancy rates), by way of a transparent process. Finally, the BEPA building energy use determination can complement compliance reporting under applicable building energy labeling or disclosure obligations. In the end, ASTM’s BEPA can provide the foundation by which an apples-to-apples comparison can take place in evaluating commercial building energy performance determinations and certifications.