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Toward More Energy-Efficient Buildings

A New Performance Standard Takes Shape

BY CICELY ENRIGHT

People live and work and shop at 245 Park Avenue, a 48-floor skyscraper in midtown Manhattan, one of many dotting the city's skyline. The Park Avenue building also became New York City's largest property sale last year at over \$2.2 billion (USD).

As part of the sale process and the details associated with it, a firm conducting the property condition assessment, or PCA, looked at the building from bottom to top and all the systems in between, as well as recent site improvements, using an ASTM International physical condition assessment (PCA) standard. They also audited the building's energy performance — referring to different regulatory requirements in different states as well as what it takes to receive an Energy Star label for a building.

But unlike the general PCA, no standards currently guide the conduct of building energy performance assessments, and groups that take on this task differ in their approaches. A recently formed task force in the ASTM International committee on environmental assessment, risk management, and corrective action (E50) is beginning to change that.

Leading the effort is Anthony Buonicore, P.E., chairman of Sustainable Real Estate Solutions, and an ASTM International member for almost 30 years. "There's nothing out there on building energy performance screening — no standard, and the industry is in dire need of such a standard," Buonicore says. "Development of such a standard is a key goal of our task force."

Energy Performance Gains Traction

Building energy performance has been gaining importance and is gathering momentum in commercial real estate transactions.

"Growth in building energy performance disclosure legislation hasn't been piecemeal; it has been a wave moving across the country," says Buonicore. "A few years ago, 10 U.S. cities had such legislation. Now it exists in 24 cities, a number of counties and two states, with more coming." The end result of this legislation is to penalize less energy-efficient buildings.

Also advancing the preference for energy efficiency in multi-family buildings are "green" programs offered through government-sponsored lenders such as Freddie Mac and Fannie Mae. Both include energy performance considerations in their mortgage lending: Fannie's Green Building Financing Program and Freddie's Green Advantage Program. Even the U.S. Small

Business Administration offers “green” loans for energy improvements and more sustainable building construction on commercial properties.

On the research side, studies such as one conducted by San Diego State University and the University of Arizona in 2015 have reinforced the impact of these programs and the importance of better building energy performance. Close to 23,000 loans were analyzed in the study and higher energy performance correlated with reduced default risk.

Better energy performance also can mean lower interest on a loan, lower operating costs, and a more attractive property for tenants. Poor energy performance increasingly may be viewed as another type of building deficiency, not unlike a deteriorating parking lot or faulty air conditioning system, which can impact sales price.

So how do you gain a sense of energy efficiency in a practical way?

That is the question the E50 group will respond to in their work.

Getting Underway

More than 100 people expressed an interest in participating in the new standard’s development ahead of an April kickoff meeting held as part of E50’s regular spring meeting. Commercial real estate firms, environmental and property condition consultants, lenders, government representatives, and others were ready to participate.

At its April 10 meeting in San Diego, the task force met to discuss building energy performance data collection; how a “poorly performing” building as compared to peer buildings might be defined; and the methodology to evaluate and improve building energy performance. The task force also discussed including both a screening step and a more comprehensive assessment step.

The proposed standard is tentatively referred to as a “guide to address building energy performance and improvement in property condition assessments conducted for commercial real estate” (WK62226).

The E50 committee is warming up to incorporating building energy performance in the due diligence process with plans to build on two existing standards:

- Guide for property condition assessments: baseline property condition assessment process (E2018), and

- Practice for building energy performance assessment for a building involved in a real estate transaction (E2797).

The former provides a baseline assessment for how to survey the building on a walk-through and how to do research about it.

The latter — which reflects a commercially practical and reasonable inquiry — describes how to collect data to determine a building’s existing energy performance.

Buonicore is looking forward to the consensus process in action on this proposed standard. “Achieving consensus from all stakeholders makes it much easier for the industry to adopt the standard. I believe this standard can have a significant impact on commercial real estate due diligence.”

Guidance for Environmental Assessments of Property

Twenty-five years ago, landmark ASTM International standards — the practice for environmental site assessments: Phase I environmental site assessment (E1527), and the companion transaction screen standard guide (E1528) — gained approval.

As reported in the June 1993 issue of Standardization News, before the first of these, E1527, was published 3,000 requests had already been received from people eager to obtain the standard.

Clearly, there was a huge need in the commercial property industry for standards that would help professionals conduct environmental site assessments. That same article quoted then-subcommittee chairman Richard Jones, Pepe & Hazard, that the “publication of the standard practices is the most important thing to have happened to the environmental site assessment industry in many years.”

The first draft of the standard was developed by hundreds of interested parties, including real estate attorneys, environmental attorneys, corporate attorneys, regulators, home builders, mortgage bankers, environmental bankers, insurers, consultants.

Simply put, E1527 helps users identify environmental conditions — the presence or likelihood of releases of hazardous substances or petroleum products — on a parcel of commercial real estate. The standard covers how to conduct an inquiry designed to identify problems with property such as a gas station or dry cleaner. E1528, a companion standard, provides a similar, slightly simpler, approach: one that does not require an environmental professional. The E1528 process has evolved into a screening tool that may be sufficient when the more comprehensive assessment under E1527 is not needed.

The U.S. Environmental Protection Agency cites the E1527 standard in its All Appropriate Inquiries law. That means that the E1527 process satisfies EPA requirements for how to conduct such inquiries under the scope of the Comprehensive Environmental Response, Compensation, and Liability Act, and its provisions for liability (who is responsible for cleanup when there is an environmental problem).

E1527 has spawned training courses that have shown thousands of users the finer points of gauging the environmental conditions of commercial properties since the 1990s.

Julie Kilgore, president of Wasatch Environmental and an E50 member, wrote a number of years ago that the “practice has stood the test of time.” Those words continue to be true.

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