NATIONAL GREEN BUILDING ADOPTION INDEX 2017

It is an unsettled time for matters of energy efficiency and sustainability, at least from a policy perspective. A question we are hearing is how businesses will respond to these changing policy priorities – will their historical focus on energy efficiency, green certification, and renewable resources waver, or will they stay the course?

In the early 2000s, energy efficiency was for the committed few, and "green" building was a niche concept. But with the advent of strong tenant and investor interest in constructing, operating, and occupying better buildings, the concept of energy efficiency and sustainability in buildings has taken a firm hold. To quantitatively measure the growth and uptake of this phenomenon, Maastricht University and CBRE as part of our Real Green Research Challenge grant program developed the CBRE Green Building Adoption Index, working in close collaboration with USGBC and CBRE Research. Based on a rigorous methodology, the adoption index shows the growth of ENERGY STAR and/or LEED certified space for the 30 largest U.S. office markets, both in aggregate and for each individual market, since 2005. The headline statistic – the percentage of commercial office space that has been certified as "green" or "efficient" – now stands at 38 percent across 30 office markets in the U.S. That percentage grew from less than 5 percent in 2005. This long term and consistent increase in certified buildings is but one of the signs of continued and growing interest in energy efficiency and sustainability in the built environment.

Underlying the headline statistic, there are many trends, both across markets and across certification schemes. The fourth release of the annual Green Building Adoption Index shows some noteworthy findings:

- Measured by square footage, the amount of certified commercial space slightly increased from 37 percent in 2015 to 38 percent at the end of 2016;
- The ENERGY STAR program expanded slightly in 2016, with 10.3 percent of all commercial office buildings in the largest markets now certified, up from 9.9 percent. This represents 31.7 percent of total commercial office space, up from 29.9 percent;
- At the end of 2016, LEED certifications represented 4.7 percent of the total number of commercial office buildings across the 30 largest U.S. office markets, up from 4.6 percent the year before;
- Large geographic variation in the adoption of LEED and ENERGY STAR certification remains. For both LEED and ENERGY STAR certification, the top-3 markets in terms of green building adoption by percentage of square footage are 1) Chicago, 2) San Francisco and 3) Atlanta, with Chicago taking the top position for the first time.

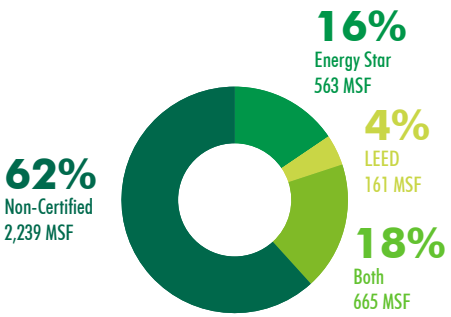
To expand this year's research approach and attempt to understand the impact benchmarking laws have on the adoption of green building certification programs. an analysis was conducted in partnership with Institute for Market Transformation relating the adoption levels of ENERGY STAR and LEED to the enactment and implementation of energy benchmarking and transparency laws.

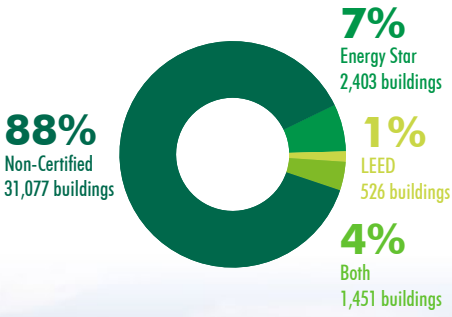
Since 2008, the adoption of energy benchmarking laws has rapidly advanced across U.S. cities, counties and states. In total, 23 cities, Montgomery County, Md., and the state of California have now enacted laws requiring large privately owned commercial buildings to annually measure and benchmark their energy consumption, as well as to publish the resulting scores.

Evidence from the 30 largest U.S. commercial real estate markets suggests that these benchmarking and transparency laws may contribute to increased adoption of environmental building certification. Nine out of the top 10 markets ranked in this year's Green Building Adoption Index (GBAI) have implemented benchmarking ordinances, and some cities have collected multiple years of benchmarking data.

Specifically, a city having enacted a benchmarking ordinance is correlated with a 9 percent increase in ENERGY STAR and LEED-certified buildings, and a 21 percent increase in ENERGY STAR and LEED-certified square footage. Also several cities experienced an increase in the adoption of environmental building certification after the passage of benchmarking and transparency laws.

For future research, we are closely monitoring the development of certification and rating schemes that reflect emerging trends in the commercial real estate sector. Those trends include health and well-being, certified by WELL and FitWel, but also digital connectedness, certified by WiredScore. We aim to incorporate these and other schemes in future editions of the Green Building Adoption Index.





VIEW THE FULL GREEN BUILDING ADOPTION INDEX REPORT AND 2016 MARKET RANKINGS

Use of Google Chrome or Firefox web browsers is required to access the report: http://arcg.is/2thFfGU

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