



Sustainability, Resilience and Wellness: A Pulse of the Industry

Last spring, Structure Tone conducted an anonymous survey of a select group of clients— influencers in charge of billions of square feet of facilities across the globe—to take the pulse of sustainability in the real estate and construction industry. This survey measures what really matters to real estate decision-makers when it comes to green building. Is it truly a market expectation to have a third-party certification like LEED? How challenging is sustainability to the bottom line? Are companies preparing for climate change? Where do they see green building headed next? This is your study; these are your findings.

THE CLIENTS

We asked leaders across our organization to send us their list of top, long-standing, key clients. These contacts were primarily at the director level or equivalent senior position in corporate real estate or facilities management.

THE FINDINGS: A SNAPSHOT

The responses illuminated several key points:



66%

focus on sustainable features and amenities to lower real estate operating costs



36%

will eliminate "red list" building materials over the next one to two years



8%

plan to do a Living Building Challenge project in the next two years

Sustainability is certainly more common but **still seen as cost prohibitive: 66%** incorporate green features to lower operating costs and **36%** are looking to eliminate red list building materials, but upfront costs are still seen as the #1 hindrance to true sustainability.

LEED is still the most prevalent program but others are growing. **8%** of respondents plan to do a **Living Building Challenge** within the next two years.



59%

reported they are seeking outside expertise in resilient building.



95%

consider wellness an essential, expected or emerging need in the built environment



44% & 40%

respectively, name executive leadership and millennials as the key drivers of their company's wellness amenities

Resiliency is a growing concern. **59%** reported they are **seeking outside expertise** in resilient building.

Employee wellness is also a rising factor. **95%** consider **wellness essential, expected or emerging** in the built environment. Leadership (**44%**) and the millennial generation (**40%**) are seen as driving this new focus, which makes sense since the #1 reason given for it is attracting and retaining employees.

THE ANALYSIS: WHAT'S NEXT?

The following pages describe the methodology in collecting this data, detail the questions and results and offer continued discussion of what these results tell us about the state of sustainability, resilience and wellness in our industry — plus what changes are expected in the near future.



Findings and Analysis

If you look at ENR's top 10 Green contractors as reported in 2015, all their organizations are reporting their green contracting revenue to be in excess of 25% of their total revenue. And that trend doesn't appear to be declining in the near future. The 2015 Green Building Economic Impact Study prepared by Booz Allen Hamilton for the U.S. Green Building council states that "annual green construction spending is expected to grow 15.1% year over year for 2015–2018, with annual spending projected to increase from \$150.6 billion in 2015 to \$224.4 billion in 2018."

Wellness in the workplace now dovetails with LEED in the WELL Building Standard, which was released in 2014. We're seeing real ROI with health insurance incentives given to employers that have wellness amenities and programs in place, to say nothing of the increase in productivity and reduced absenteeism in the workforce, any company's greatest investment.

On a large scale, municipalities are planning to address rising sea levels and more extreme weather events. This cue resounds in the sustainable built environment with more clients beginning to ask the question, "What happens if...?" when it comes to the building they are looking to lease,

build or own. In today's world of growing climate uncertainty, our clients want to explore all their options for business continuity and protection of life.

With sustainability in the built environment taking a more prominent place in the everyday work that our clients do, it was necessary to gain a better understanding of their goals, drivers and concerns related to green topics.

SUSTAINABILITY

Sustainability is not defined, with respect to this survey, by a specific certification, but by features and amenities in the absence of any third-party rating systems. It allows for a building or space that may have high performing attributes, but not necessarily have pursued a certification. When responding to these questions, we asked clients to consider their entire real estate portfolio in order to rate their company's approach to and investment in various aspects of sustainability, from goals and policies to amenities and employee awareness. Questions also addressed facilities management issues such as commissioning and energy modeling, as well as which people and factors drive and/or inhibit sustainable building.

We learned that more than half (**55%**) of our clients have sustainability goals for their real estate portfolios. Though having established goals would seemingly make it easier for teams to reach such targets, when it comes to adhering to those goals, there is some drop off as only **51%** always do—resulting in about **4%** attrition.

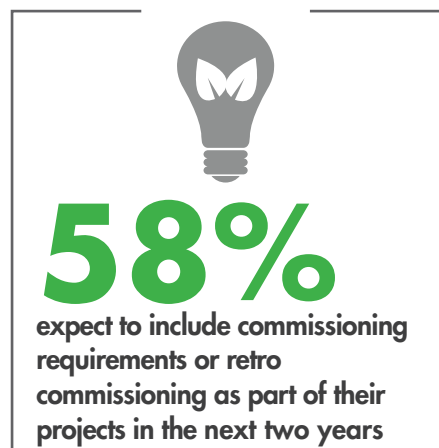
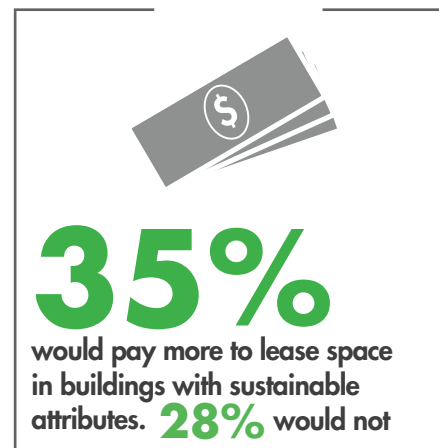
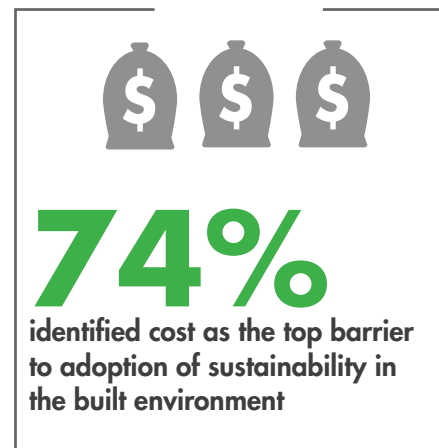
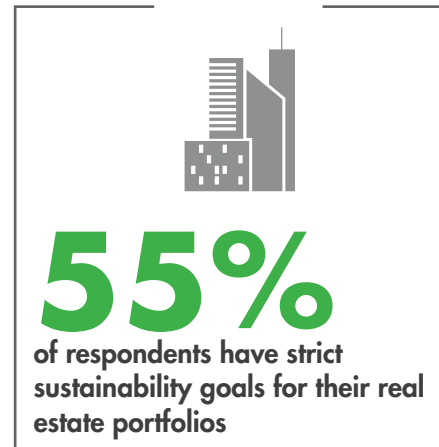
Two-thirds of our clients focus on sustainable features and amenities in order to lower operational costs, however, **74%** of our clients identified cost as the top barrier to adoption of sustainability in the built environment. Here lies a dramatic disconnect between rectifying first costs and operational costs. There is a need for more robust systems to be put in place, like life-cycle cost analysis (LCCA) and payback period calculations, in order to help clients make more informed decisions and allow them to champion sustainability initiatives with ROIs in hand. However, project teams are still often siloed, and the capital budget is not as intimately intertwined with the operating budget as it could be.

When it comes to leasing space in buildings, **35%** of our clients would agree to pay more for a building with sustainable attributes, while **28%** would not and the remainder is neutral to the concept.

Furthermore, with more strict energy efficiency measures and pursuit of incentives in some locations, there are alternative services that we think clients will start to consider with greater frequency on their projects, such as commissioning, energy modeling and materials transparency. A significant number of end-users (**58%**) expect to include commissioning, or retro-commissioning, in their projects over the next two years. To keep in line with the idea that you can't manage what you don't measure, 54% of our clients also expect to require energy modeling on projects in the next two years. The industry buzz about material transparency and toxins in our building materials has **36%** of our clients looking to eliminate "red list" chemicals from their building materials in the next one to two years.

Finally, we wanted to identify which stakeholder population is driving sustainability. The popular narrative may point toward millennials, but our findings don't necessarily bear that out. **Fifty-six percent** of respondents to our survey named executive leadership as the leaders of this charge. Executive leadership is the vanguard of sustainability in organizations throughout the world. This means that even though the tradeoffs of how first costs are tied to ROI might get lost at the project level, executives appear to understand that there are financial benefits to sustainable efforts, and this enables them to make the decisions to pursue those goals.

Overall, the trends show that green building is now mainstream in project delivery for many of our respondents. The question becomes, how far will the industry continue to push? A variety of other concerns are at play that the industry has not really begun to address related to public energy disclosure and clients' concerns related to where the buildings, either leased or owned, will rank as well as looking to set Zero Net Energy (ZNE) goals for the building sector. These are among the many tangible insights we hope to collect from end users so that we can continue to learn about the market trends that drive their decisions over time.





66%

agree that passive survivability—a building's ability to maintain critical life-support conditions if services such as power, heating or water are lost—is an essential requirement.



54%

will require energy modeling on key projects in the next two years



56%

named executive leadership as the key drivers of sustainability needs



64%

consider a building designed to withstand extreme weather and climate change as essential

RESILIENCY

As it relates to the sustainable built environment, resilience can refer to both natural and man-made disasters. The National Research Council defines resilience as “the ability to prepare and plan for, absorb, recover from or more successfully adapt to actual or potential adverse effects” (*Disaster Resilience: A National Imperative*, NRC, 2012, p16.) As a growing focus for coastal cities, resilience has become a related focus area of sustainable building. Questions focused on participants’ concerns about climate change and resilient buildings as well as intent to seek out professional expertise.

Our clients have faced hurricanes, droughts, flooding, wildfires, hail storms and terrorism, to name a few. It’s no wonder that **64%** of respondents consider a building designed to withstand extreme weather and climate change as an essential requirement. Furthermore, **66%** also agree that passive sustainability, a building’s ability to maintain critical life-support conditions such as power, heating and water supply, is a necessity.

WELLNESS

Wellness in the workplace is taking center stage in more conversations. With the release of the WELL Building Standard in 2014, there has been an ever-growing interest related to implementing wellness strategies in the built environment. This survey looked at how pervasive these sustainability-related themes are for the end users in their company cultures and how they shape the future of the built environment. Participants were asked to rank the importance of wellness initiatives to their business, who and what factors are driving those initiatives, and what factors pose the most challenging barriers. Participants were also asked to rate the understanding or value of the WELL Building Standard and their current or future interest in pursuing certification.

The stakeholders that are driving the wellness initiatives are the executive leadership and the millennials at **44%** and **40%**, respectively. With the “war on talent” in full force, **37%** say that attraction and retention of employees is the key wellness driver. And more than fitness and nutrition, **48%** ranked comfort and indoor air quality as the most important attributes of building wellness. Though **74%** name cost as the biggest barrier to the inclusion of wellness amenities, **95%** percent resoundingly agree that wellness features and amenities, such as easy access to a gym, healthy foods, ergonomics and active design, is essential, expected or an emerging need in the built environment.

THIRD-PARTY RATING SYSTEMS

Third-party rating systems are part of the fabric of our built environment and cannot be ignored. Based on this we inquired about Green Globes, LEED and the Living Building Challenge, the rating systems seen as having the deepest market penetration. Participants were asked to rate the value and reputation of these programs along with existing or future plans to pursue certification.

We learned that **14%** of our respondents think that Green Globes is a highly respected third-party verification system and, furthermore, that **4%** of them intend to do a Green Globes project in the next two years. Green Globes is a tool primarily used in Canada and the USA; it was developed in Canada around 2000 and adapted for the United States in 2004.

More surprising was that **19%** of the survey takers consider the Living Building Challenge a respected third-party verification system, and that **8%** plan to do a Living Building Challenge project in the next two years. The Living Building Challenge entered the scene in 2006 and is widely considered to produce the most sustainably advanced buildings in the world.

LEED is still the dominant rating system, flaws and all. LEED certification still holds merit as **56%** of the end-users see the rating system as a valuable market differentiator, though **64%** say they would consider leasing space that isn't LEED certified. A little more than one-third of our clients (**36%**) have discontinued seeking formal LEED certification though they continue to build to LEED standards. With a growing concern toward the complexity of attaining certification under LEEDv4 and the requirements, especially around materials, **14%** of the respondents will discontinue the pursuit of certification under this revision of the standard, which is slated to be the only version available for new project registration after October 31, 2016. Resoundingly, **51%** cite time and cost as the most important factors in deciding if they will certify their projects under LEEDv4.

NEXT STEPS

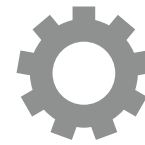
Structure Tone's sustainability team plans to conduct this survey on an annual basis. The hope is that as building practices and contextual circumstances change over time, we can detect and analyze the resulting trends and what impact they may have on the present and future state of sustainable building.

If you are an end user interested in participating in future surveys, please contact jennifer.taranto@structuretone.com.



4%

are looking to do a Green Globes project within the next two years



36%

have discontinued seeking formal LEED certification and build instead to LEED standards



14%

will discontinue pursuing LEED certification once v4 is the only version available



51%

rank time and cost as the most important factors in deciding whether to pursue LEED version 4



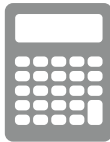
37%

say attracting and retaining employees is the most important driver for adding wellness amenities to a building



48%

ranked comfort and indoor air quality as the most important attributes of building wellness



74%

name cost as the main barrier to inclusion of wellness amenities



56%

see LEED certification as a valuable market differentiator

Methodology

The survey was sent to long-standing, key clients across the multiple geographic locations where Structure Tone performs work. All participants were director level or higher and our most senior contacts in corporate real estate and facilities management. All participants in this survey were volunteers. The survey is not a scientific sampling but rather offers a snapshot of what our clients are doing when it comes to sustainability. The survey was conducted from March 22, 2016 to April 10, 2016.