Tools for a smart digital market transformation SmartScore, LEED and Arc

Introduction

Sustainability and smart in the built environment are inherently closely connected and, increasingly, interdependent. The built environment is responsible for 40% of global carbon emissions and, and, as such, the industry has a moral imperative to take a lead in combating climate change. Technology is now at a point where it can - and should - play a significant part in this, enabling buildings to meet high standards of sustainability, all while delivering an exceptional user experience, driving cost efficiency, and supporting future-proofing.

A new generation of user-friendly technology creates new ways in which to create and manage sustainable, environmental and wellbeing performance across the lifecycle of buildings and places. This includes:

- Analytics to optimize building systems in real-time, reducing energy consumption.
- Information to building users to allow them to make informed sustainable choices.
- Increasingly ubiquitous sensors, controls, and data connections help realize and sustain performance in operations.
- Faster, easier design and engineering tools allow to plan for high performance.
- The ability to gather and process data and digital building models to understand and improve the performance of buildings.

Delivering outcomes that can withstand future technological development, mitigate risks and that are associated with smart technology will require unprecedented interdisciplinary collaboration. In response, this document describes synergies and complementary benefits from the coordinated use of LEED and SmartScore. Together, they give landlords, tenants, brokers and many other stakeholders the basis on which to make a credible case for the advantages of their smart, green and safe buildings and spaces.

SmartScore certification, LEED, and Arc power the next generation of green buildings. This inspired a partnership to define leadership and recognize superior performance. The partnership is based on three essential components:

- SmartScore certification: Best-in-class smart buildings that deliver inspirational user experiences, drive operational

- effectiveness, meet high standards of sustainability, and are resilient in an everchanging world.
- LEED: Green, sustainable buildings meeting global standards for leadership in energy, water, waste, transportation, and occupant experience.
- Arc: A global platform to measure and score real world, delivered performance, providing accountability and a gateway to performance based recognilon.

These three elements combine to encourage, engage, and recognize superior assets that meet the highest standards for design and operational performance.

SmartScore is the global certification for smart buildings, helping landlords understand, implement and communicate the user functionality and technological foundations of their buildings. SmartScore certification is developed and operated by WiredScore. The certification focuses on the application of smart technology within the operations of a building.

LEED is a third-party, green building certification. It is used by property and owners in more than 110,000+ buildings across 183 countries to inspire and recognize leadership in energy and environmental design. LEED is developed and maintained by the U.S. Green Building Council. LEED certification is administered by Green Business Certification Inc., the world's leading sustainability and health certification and credentialing body.

Arc is USGBC's digital platform, scoring the real-world performance of more than 21,000+ spaces, buildings, and places in >130 countries. Arc provides a performance-based pathway to LEED certification for projects and portolios.



SmartScore certification.



SmartScore CERTIFIED

A SmartScore Certified building

is a smart-ready asset with a solid foundation to build future smart functionality, such as a digitally-enabled core & shell building that has an established foundation for operational efficiencies. Alternatively, a SmartScore Certified building could be an older asset with some digital applications that make it stand out from the crowd.



A SmartScore Silver building

is an advanced digitallyenabled building with an exceptional foundation to build future smart functionality. Alternatively, a SmartScore Silver building could be an older asset with many smart features to enhance the asset's capability to deliver a truly efficient, inspirational, sustainable and resilient building.



A SmartScore Gold building

demonstrates a high level of innovation with an outstanding use of technology and processes to deliver excellent outcomes to the users and creating a truly efficient, inspirational, sustainable and resilient building.



A SmartScore Platinum building

demonstrates cutting-edge innovation with the use of market leading technology, processes and automation to deliver world-class outcomes to all users of the building and creating the most efficient, inspirational, sustainable and resilient building.

LEED certification.

LEED is a comprehensive family of green building ratings systems. LEED rating systems span the lifecycle of the built environment, from new construction through operations and cities through spaces. LEED projects must document a set of mandatory prerequisites, and they earn additional points based on optional criteria called, 'credits'. LEED recognizes four levels of performance: Certified, Silver, Gold, and Platinum.

LEED criteria are aligned with high-level systems goals and expressed as combinations of intents, compliance options, and documentation requirements. Criteria are typically organized into nine, interrelated credit categories.

Arc is USGBC's digital platform, scoring the real-world performance of spaces, buildings, and places. Arc powers LEED with scores and key performance indicators for energy, water, waste, transportation, and human experience. Arc provides a digital gateway to performance-based certification for individual projects and portfolios. This gives smart, connected buildings new, more scalable opportuniles to use real world data to receive recognition for leadership.

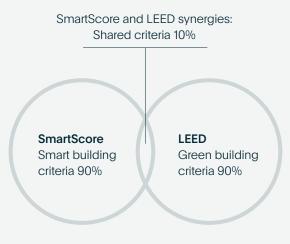




Arc platform users enter data and receive a performance score in five categories: energy, water, waste, transportation and human experience." If you want, you can also add the following sentence to connect it back to LEED: "LEED certification can be earned by meeting a minimum set of requirements listed in Arc, and achieving a performance score of 40 for Certified, 50 for Silver, 60 for Gold and 80 for Platinum.

LEED, SmartScore and Arc synergies

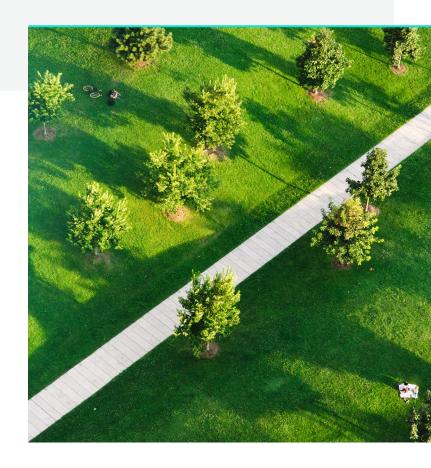
LEED, SmartScore, and Arc work together to help landlords and developers improve performance and increase asset value. They share approximately 14% of core criteria at the intent level. The remaining 86% of criteria are complementary and synergistic. For example, LEED credits recognize air quality performance and monitoring indoor environmental quality. SmartScore criteria recognize technological foundations, including cybersecurity best practices, that make monitoring safe and secure. Arc can provide a gateway to receive measured data and turn it into scores that power LEED. Together, SmartScore and LEED cover the broad set of opportunities and challenges facing asset managers.



Data enablement:
Arc performance metrics & data connections

Synergies

The SmartScore and LEED alignment is at intent-level. This means that shared criteria do not result in criteria-by-criteria compliance or, in other words, 'equivalency'. Landlords who pursue both SmartScore and LEED certifications will be required to submit evidence to both WiredScore and the U.S. Green Building Council, however both scorecards provide many optional ways in which to achieve and document these intentions.



Complementary criteria

SmartScore and LEED are certifications that address complementary criteria, while Arc provides a digital platform for performance related data. The table below illustrates the scope of SmartScore certification, LEED, and Arc - each addressing a wide-range of important issues. Blue dots illustrate points of intersection - instances where both systems address similar issues. Red circles highlight instances where Arc measures operational performance. Gray dots illustrate intents distinct to each system.

SmartScore categories

LEED categories	Access and Navigation	Health and wellbeing	Sustainability	Communities and services	Maintenance and operations	Safety and security	Building Systems Interoperability	Cybersecurity	Building Data Management	Innovation credits
Integrative process	•	•	•	•	•	•	•	•	•	•
Location and transportation	•	•	•	•	•	•	•	•	•	•
Sustainable sites	•	•	•	•	•	•	•	•	•	•
Water efficiency	•	•	•	•	•	•	•	•	•	•
Energy and atmosphere	•	•	•	•	•	•	•	•	•	•
Materials and resources	•	•	•	•	•	•	•	•	•	•
Indoor environmental quality	•	•	•	•	•	•	•	•	•	•
Innovation	•	•	•	•	•	•	•	•	•	•



Arc

Synergy details

This table outlines the criteria of both certifications that are shared and where developers and landlords should be able to utilize technology and methodology used in one certification to positively impact the other.

SmartScore criteria

LEED criteria • Arc performance metrics	Air quality	Occupier Comfort Control	Energy Management	Water Management	Feedback collection
Water efficiency Indoor water use reduction Building-level water metering Water metering				•	
Energy and atmosphere Energy efficiency best management practices Minimum energy performance Building-level energy metering Ongoing commissioning Optimize energy performance Advanced energy metering Demand response Renewable energy and carbon offsets			•		
Indoor environmental quality Minimum indoor air quality performance Indoor air quality management program Enhanced indoor air quality strategies Thermal comfort Interior lighting Occupant comfort survey	•	•	•		•

Learn more about SmartScore certification: SmartScore: www.wiredscore.com LEED: www.usgbc.org/leed/v41 Arc: www.arcskoru.com/arc-for-leed

