# Tools for 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, 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, 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: Best in class smart buildings that deliver an exceptional user experience, drive cost efficiency, meet

high standards of sustainability and are fully future-proof.

- 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 is developed and operated by WiredScore. SmartScore focuses on the application of information 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

innovates beyond the typical legacy building, with some technology in place to begin to improve the outcomes delivered to users, improving efficiency, experience and sustainability.



SmartScore

### A SmartScore Silver building

demonstrates a good level of innovation, using technology to improve the outcomes delivered to the users and creating an efficient, inspirational, sustainable and futureproof 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 future-proof building.



#### SmartScore PLATINUM

### A SmartScore Platinum building

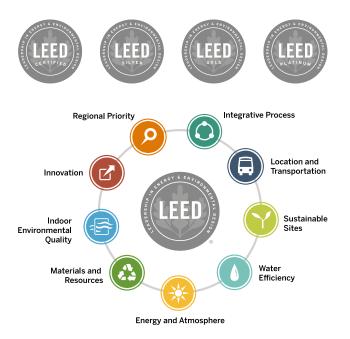
demonstrates cutting edge innovation with the use of market-leading technology, processes and automation to deliver world class outcomes to all users of the building and creating the most efficient, inspirational, sustainable and futureproof building.

### 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.



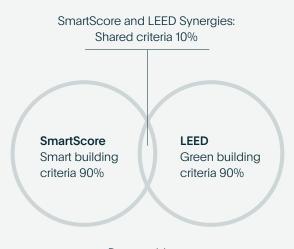


Arc platform users enter data and receive a performance score in five categories: energy, water, waste, transportation and human experience." If you want, you can also add the following sentence to connect it back to LEED: "LEED certification can be earned by meeting a minimum set of requirements listed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

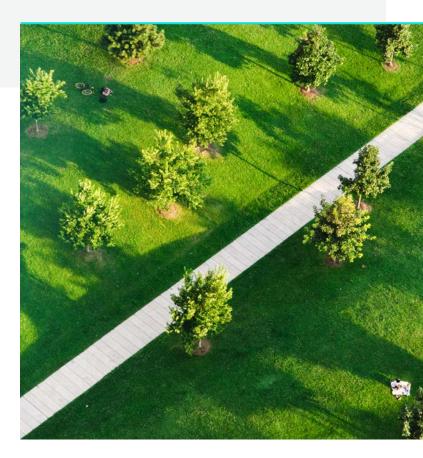
LEED, SmartScore, and Arc work together to help landlords and developers improve performance and increase asset value. They share approximately 10% of core criteria at the intent level. The remaining 90% of criteria are complementary and synergistic. For example, LEED credits recognize air quality performance and monitoring indoor environmental quality. SmartScore criteria recognize technological foundations, including cyber security 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 crosswalk 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, 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.

LEED categories	Individual and collaborative productivity	Health and wellbeing	Sustainability	Communities and services	Maintenance and operations	Safety and security	Tenant digital connectivity	Building systems	Landlord integration network	Governance	Cybersecurity	Data sharing	Innovation credits
Integrative process	•	٠	•	٠	•	٠	٠	•	٠	•	•	•	٠
Location and transportation	•	•	•	٠	•	٠	•	•	•	•	•	•	•
Sustainable sites	•	٠	•	٠	•	٠	•	•	٠	•	•	•	•
Water efficiency	•	•		٠	•	٠	٠	•	٠	٠	•		•
Energy and atmosphere	•	•		•	٠	٠	٠	•	٠	٠	•		•
Materials and resources	•	•		٠	٠	٠	٠	•	٠	٠	•		•
Indoor environmental quality	•		•	•	•	•	•	•	٠	•	•		•
Innovation	•	•	•	٠	•	•	•	•	•	•	•	•	•
LEED					1		I		1		1	1	

### SmartScore categories

O 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  O	Air quality	Comfort Control	Energy Reporting	Water reporting	Energy optimisation	Feedback collection	Smart functionality effectiveness
Water efficiency Indoor water use reduction Building-level water metering Water metering				<ul><li>•</li><li>•</li></ul>			
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	•	•			•	۲	•

Learn More about: SmartScore: www.wirescore.com LEED: www.usgbc.org/leed/v41 Arc: www.arcskoru.com/arc-for-leed

