BEYOND BENCHMARKING
NAVIGATING ENERGY PERFORMANCE

Sustainability at Scale: Portfolio Planning with LEED and PERFORM

Learning Objectives

1. Identify best practices and priorities in carbon, water, waste, and health to transforming real-estate portfolios.
2. Summarize the experiences of and sustainability & resilience strategies utilized by leading companies to drive scaled performance improvement across their existing building portfolio.
3. Recognize barriers and practical solutions to large-scale action in the rapidly evolving sustainability and climate reporting landscape.
4. Define the role and value of third-party verification of existing building portfolio-wide sustainability & resilience plans, actions, and performance.
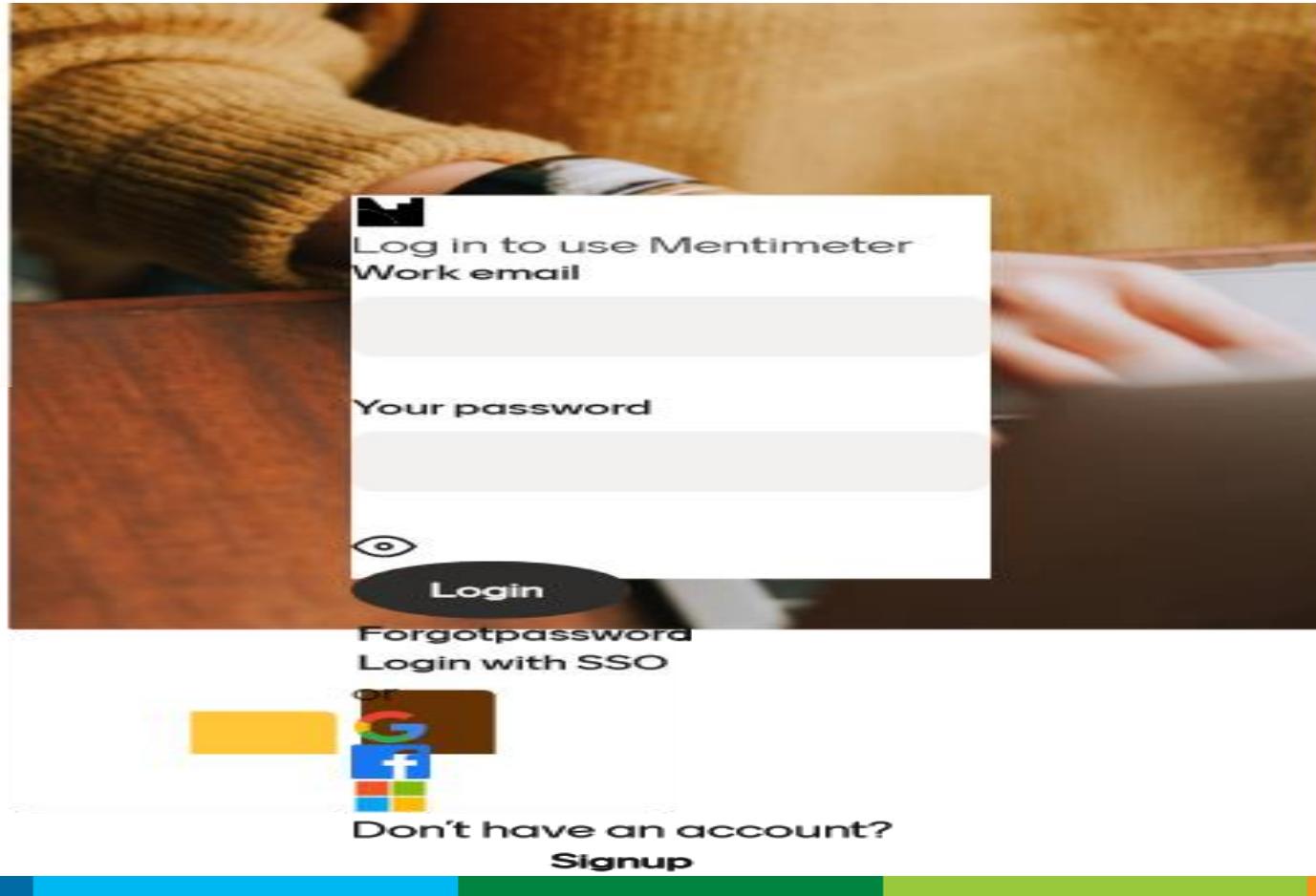
Sade Dennis
U.S. Green Building Council
Director, DC-MD-VA
Market Transformation & Development

Ryan Snow
U.S. Green Building Council
Regional Director, South
U.S. Market Transportation & Development

USGBC

Mentimeter: Who is in the room?

Accelerating green building to improve lives and livelihoods

USGBC accelerates and scales the transformation of the built environment to minimize climate impacts and enhance the well-being of people, the environment and communities worldwide.

Bay Area Metro Center | LEED Gold | Photo credit: © David Wakely Photography

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USGBC Strategic Imperatives

USGBC's & GBCI strategic imperatives are key organizational strategies to advance our mission. These imperatives will guide our 2024 to 2026 work.

EDITED AND UPDATED: JANUARY 2024

USGBC 2024-2026 Strategic Plan

1. **Expand** the global green building community of practice and its influence.

2. **Accelerate** the role of buildings in decarbonizing economies and promoting equitable, healthy, and resilient communities.

3. **Align** green building with frameworks and technologies driving equitable systems change and market transformation at scale.

4. **Ensure** access to green building for under-resourced populations and all communities.

5. **Achieve** organizational excellence and effectiveness.

Tools for Market Transformation

LEED was developed to drive transformation through leadership.
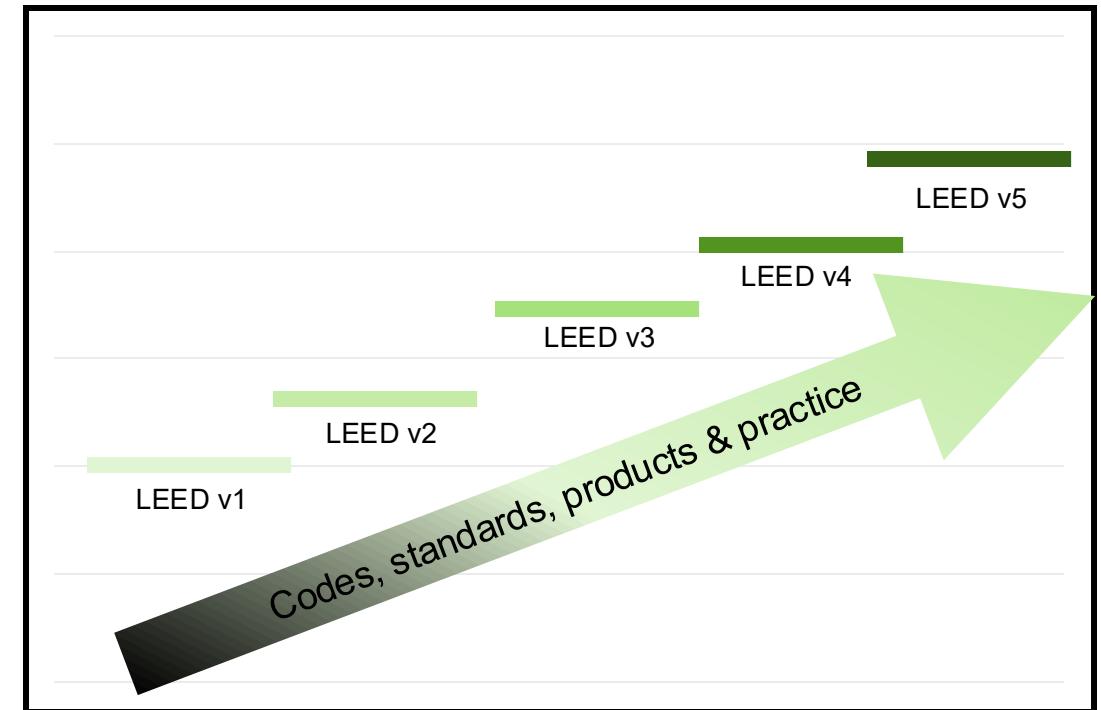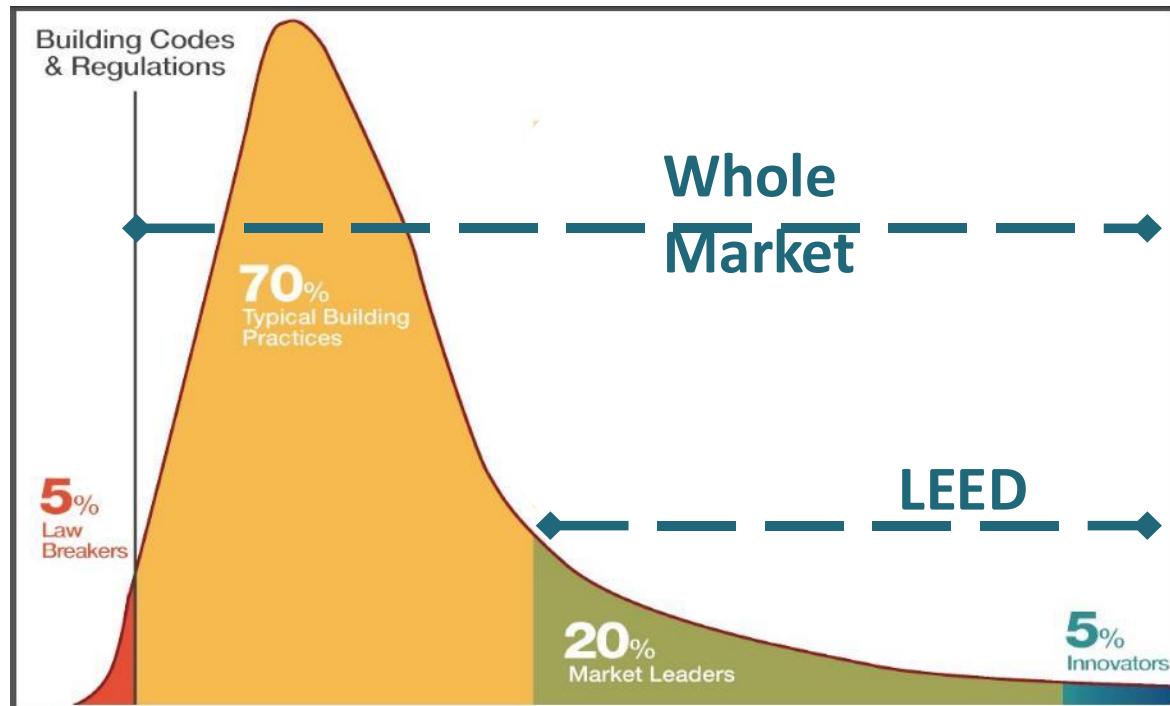
Boston Public Market | LEED Silver | Boston, Massachusetts
Photo credit: Architerra and Chuck Choi

More than

2,000,000

certified square feet
per day
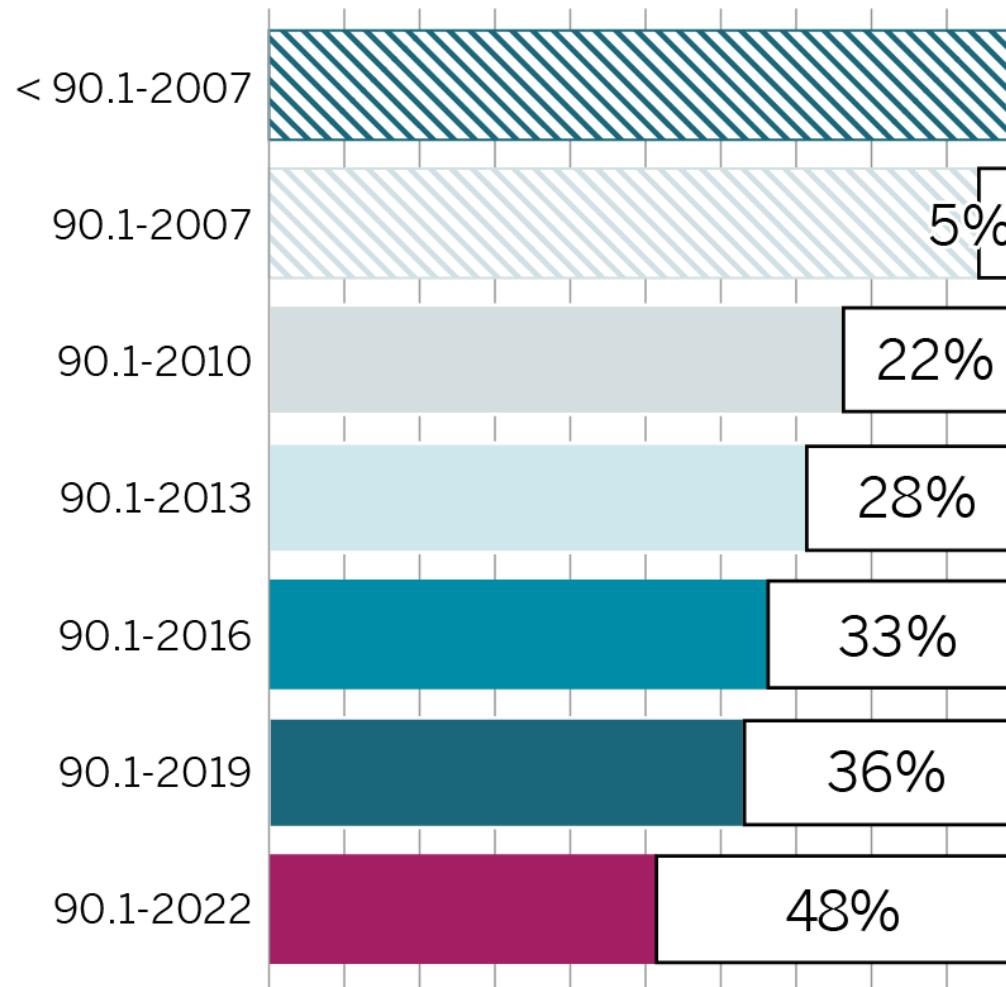
As of February 2024

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Nearly

197,000

total registered and
certified **LEED projects**
worldwide

Grupo Roble - Multiplaza Bogota | LEED Platinum
Bogota, Colombia | Photo credit: © Ricardo Canino

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Commercial Energy Improvements by ASHRAE 90.1 Version

ASHRAE 90.1 Version	Improvement
< 90.1-2007	
90.1-2007	5%
90.1-2010	22%
90.1-2013	28%
90.1-2016	33%
90.1-2019	36%
90.1-2022	48%

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Driving green building

Business benefits driving green building:

Decreased operating costs

Short payback periods

Asset value increases

Creating healthier indoor environments

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TOP TEN STATES FOR LEED IN 2024

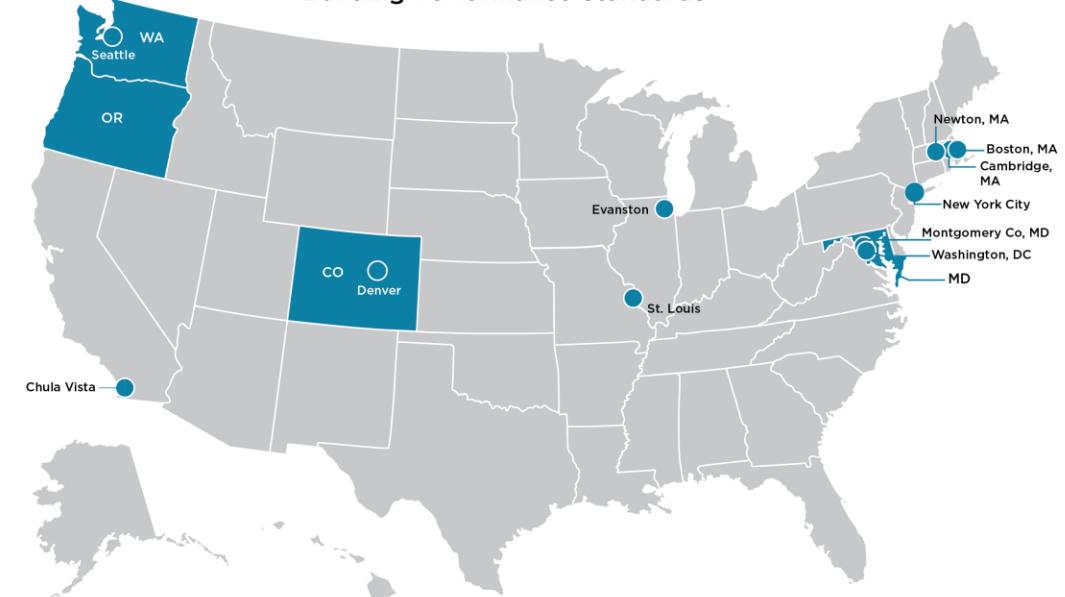| #1 MASSACHUSETTS | #6 CALIFORNIA |
#2 ILLINOIS	#7 TEXAS
#3 NEW YORK	#8 NEVADA
#4 WASHINGTON	#9 COLORADO
#5 MARYLAND	#10 VIRGINIA

State Energy Codes & BEPS

ASHRAE
- ▨ < 90.1 - 2007
- ░ 90.1 - 2007
- ▨ 90.1 - 2010
- ▨ 90.1 - 2013
- ▨ 90.1 - 2016
- ▨ 90.1 - 2019
- ▨ 90.1 - 2022
- ☐ No statewide code

GSF
- · 1,600 -120,000
- • 130,000 -240,000
- ● 250,000 -360,000
- ● 370,000 -480,000
- ● > 490,000
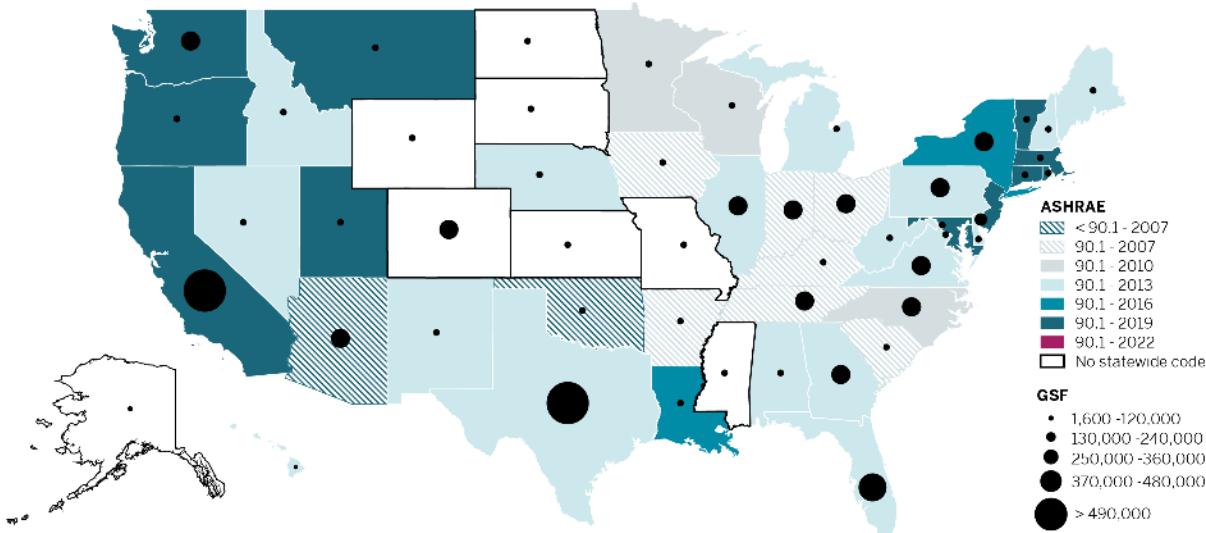
U.S. City and State Policies for Existing Buildings: Building Performance Standards

WA — Seattle
OR
CO — Denver
Evanston
St. Louis
Chula Vista
Newton, MA
Boston, MA
Cambridge, MA
New York City
Montgomery Co, MD
Washington, DC
MD

IMT
INSTITUTE FOR MARKET TRANSFORMATION

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Drawing on three decades of experience and the deep expertise of our members, we are leading a movement to create measurable improvements to enhance human, environmental, and community well-being worldwide.

Mentimeter: What are your priorities for sustainability?

What we're going to cover

LEED v5

Driving the market towards a near-zero carbon reality that is equitable, resilient, and promotes the wise, safe use of all resources

PERFORM

A program to plan, improve, and verify sustainability and resilience performance across portfolios.

Arc

A platform of tools to measure and score operational performance for any space or building.

LEED V5

A market ready rating system that will drive the built environment toward a near zero carbon future that is equitable, resilient, and promotes the wise, safe utilization of all resources.

State of Decarbonization

Progress in U.S. Commercial Buildings 2023

ACCESS THE REPORT

U.S. commercial buildings have significantly lowered their carbon and energy intensity over the past three decades.

The need for comprehensive benchmarking policies for commercial buildings is impeding decarbonization progress at scale.

*In the U.S.

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What we're going to cover

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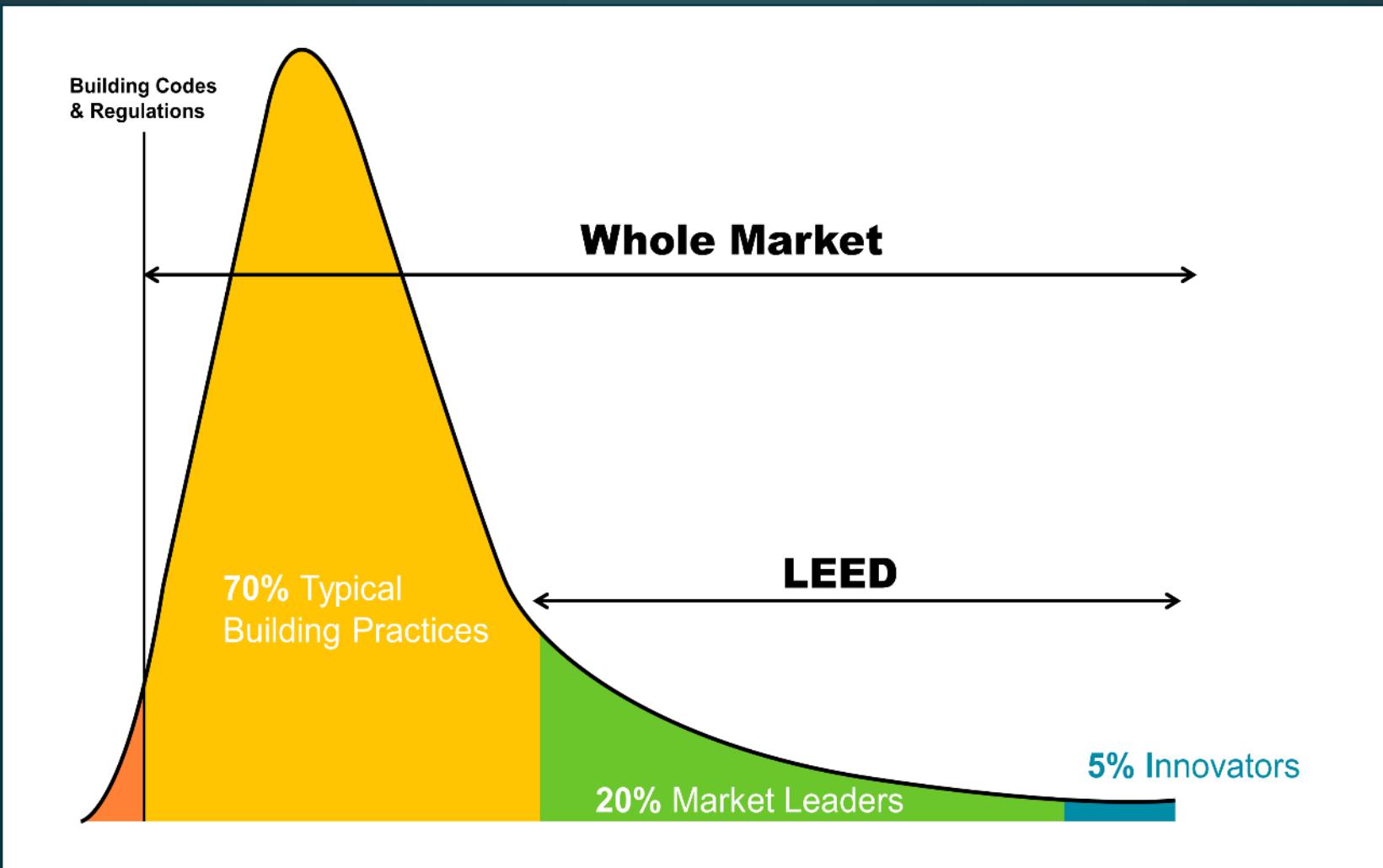
Arc

A platform of tools to measure and score operational performance for any space or building.
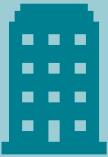
Imperative to engage
ALL EXISTING BUILDINGS

"**PERFORM helps organizations advance sustainability across their real estate portfolios, ensuring every building— regardless of type or starting point— contributes to achieving organizational performance goals.**"

Peter Templeton

PRESIDENT & CEO, USGBC AND GBCI

USGBC

LEED AND PERFORM

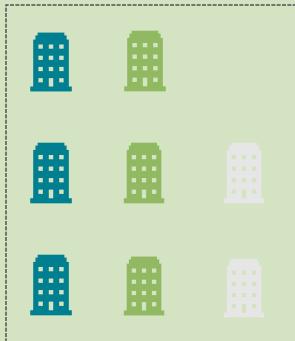## LEED Rating System

LEED

Credits and prerequisites with performance thresholds

Demonstrated achievement of defined performance

→ LEED Certification

→ **GBCI®** Achievement certified

PERFORM Performance Metrics

PERFORM

Performance metrics with no minimum thresholds

Demonstrated progress on user-defined performance targets

→ PERFORM Verification

→ **GBCI®** Outcomes verified

Portfolio Definition

- A portfolio is a collection of real estate assets (properties) owned, managed, or controlled by the participating organization.

- The defined portfolio must include all underlying properties associated with the performance goals/claims/targets being tracked, reported and/or verified.

Define portfolio by

- Whole Portfolio
- By Reporting frameworks
- By Region
- By Business unit
- By Type of property
- By Owned properties
- By Leased properties

Portfolio Scope

- Communicate scope of portfolio accurately
- Existing operational properties
- No new construction or major renovations

Why PERFORM?

Track and improve the sustainability performance of entire real-estate portfolios.

Set goals and measure progress on portfolio-wide performance

View guidance & access tools to improve performance

Receive third-party Verification of performance, if desired

Communicate progress to stakeholders & enhance credibility

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Performance Metrics

- All metrics considered optional

- Select one or more metrics

- User-defined targets and interim targets

- No minimum thresholds with each metric

- Past performance improvement can be entered and verified

- Align with referenced standards and requirements

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Metrics Structure

- **INTENT**
- **DEFINITION**
- **UNITS OF MEASURE**
- **VERIFICATION SCOPE**
- **REQUIREMENTS**
- **VERIFICATION EVIDENCE**
- **CALCULATION GUIDANCE**
- **REFERENCES**
- **TERMINOLOGY**

Metrics Snapshot

Category	Performance Metric	Performance Approach A (absolute performance)	Performance Approach B (performance change)
Emissions	Total GHG Emissions	Total GHGs	Total GHGs
	GHG Emissions Intensity	GHGs/unit area	GHGs/unit area
Energy	Total Energy Use	Total energy	Total energy
	Energy Use Intensity	Energy/unit area	Energy/unit area
	Renewable Energy Use	Ren Energy(RE) or % RE	Ren Energy (RE) or % RE
Water	Total Water Use	Total Water	Total Water
	Water Use Intensity	Water/ unit area	Water/ unit area
Waste	Total Waste Diversion	% waste diverted	% waste diverted
Health	Occupant Satisfaction	% or # of properties	% of properties
	Worker Health and Safety Plan	% or # of properties	% of properties
	Indoor Air Quality Monitoring	% or # of properties	% of properties
	Indoor Air Quality Testing	% or # of properties	% of properties
Resilience	Physical Climate Risk Screening	% or # of properties	% of properties
	Physical Climate Risk Assessment	% or # of properties	% of properties
	Climate Transition Risk Assessment	% or # of properties	% of properties
	Operational Planning for Resilience-Emergency Response Plan	% or # of properties	% of properties
	Operational Planning for Resilience-Business Continuity Plan	% or # of properties	% of properties
Biodiversity	Protected and/or Restored Biodiverse Habitat	Area or % Area	Area or % Area
Social Impact	Social and Community Impact Assessment	% or # of properties	% of properties
	Area Designated for Community Use	Area or % Area	Area or % Area
	Community Investment	% or # of properties	% of properties

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Performance Approaches

A

Absolute performance in reporting year

- Track and seek verification for a single absolute value.

- Depending on the metric, this value may be a number (e.g., total greenhouse gas (GHG) emissions) or a percentage (e.g., waste diversion rate).

B

Performance change/improvement from a baseline year

- Track and seek verification for the improvement in performance in the reporting year from a user-defined baseline year. (e.g., GHG emission reduction of 5% in reporting year compared to baseline year)

  - % change: (RY-BY/BY)*100

  - % point change: (RY%-BY%)*100

  RY= Reporting Year
  BY= Baseline Year

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Examples

A

Absolute performance in reporting year

- Target: Achieve a waste diversion rate of 75% in 2024

- Target: My portfolio's emissions for 2024 were 20,000 MTCO2e.

- Target: Implement the Resilience: Business Continuity Plan across 100% for all office locations by end of 2025.

- Target: Our organization completed occupant satisfaction surveys for 50% of our properties in 2024.

B

Performance change from a baseline year

- Target: Reduce energy use by 50% by 2030 from a 2020 baseline.

- Target: Demonstrate 40% improvement in waste diversion rate from 2023 to 2025.

Verification

- Global third-party verifier

- Third-party review procedures described in GBCI Verification Protocols published on GBCI website.

- Informed by ISO/IEC 17029:2019 Conformity assessment - General principles and requirements for validation and verification bodies

Verification Evidence

Portfolio-Level Documentation

- Policies
- Plans and Actions
- Portfolio-wide templates
- Methodology
- **Letters of Attestation,** *streamlined by using the GBCI template*

Property-Level Documentation

- **Property Level Data Form**: data for *every* single property in the portfolio

- **Property Level Sample Documents**: documents for a *sample* of properties
    - Sample size: SQRT(n) properties where 'n' is the number of properties in the portfolio.
    - Performance Metrics document includes requirements
    - Example: Physical Climate Risk Screening, risk identification, exposure analysis and mitigation strategies, or demonstrate the completion of any referenced tools or checklists.

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Property-Level Documentation

Property Level Data Form

Provide property level verification evidence with this form, or other items prepared for internal tracking or other reporting entities like GRESB, ENERGY STAR Portfolio Manager, etc

Property Level Data Form
This workbook supports your Portfolio's enrollment and is required to be completed.

INSTRUCTIONS

1. Navigate to tab of relevant metric(s), Select all combinations of Performance Metrics and Approachs being submitted for verification. If available, select relevant unit used within tab.
2. Provide the requested information for all properties in your defined portfolio. Copy over information from Multiple Property Upload Template into Grey Columns (A-H).
3. Provide additional data based on metric and approach being submitted for verification. Relevant additional fields will highlight based on choice in Step 1.
4. **Column B**, gross floor area must exclude area dedicated to parking.
5. Follow all instructions within cells throughout tabs.
6. When all information is complete, upload the template back to the platform.
7. Save a copy of this for your records to refer to as you pursue verification.

KEY TERMS TO KNOW

Portfolio: A collection of real estate assets owned, managed and/or controlled by the legal entity (organization) participating in the program The defined portfolio must include all underlying real estate assets associated with the performance goals/claims/targets being verified.

Properties: The Real-estate assets that the portfolio is comprised of, including both the buildings and any associated land.

Performance Category: Key impact areas to measure, track and verify sustainability performance of a portfolio.

Performance Metric: Key indicator to measure, track and verify performance outcomes of portfolio.

Target: User defined goal to achieve desired performance outcome by a user-defined date.

Interim Target: User defined goals to demonstrate incremental progress toward the defined target.

Percentage of Properties: Percentage of properties in the portfolio where a performance metric has been implemented, calculated by the formula:
(Number of properties where metric has been implemented/Total number of properties in portfolio) x 100

Percentage Change: Change in performance from a baseline year, calculated by the formula.
*((RY-BY)/BY)*100 = % Change*
RY = Reporting Year Value
BY = Basline Year Balue

Percentage Point Change: Change in performance from a baseline year, calculated by the formula:
RY% - BY% = % point change
RY = Reporting Year Value
BY = Baseline Year Value

Performance Approaches: Ways in which performance may be measured and verified.

Performance Approach A: Measures absolute performance of a metric.

Performance Approach B: Measures change in performance of a metric from a baseline or previous year.

Baseline Year: A specific year (12-month period) that is used to track changes and improvemnts in performance over time.

Reporting Year: The most recent or current year (12-month period) for which performance is being tracked and submitted for verification.

Gross Floor Area: Gross floor area is the sum of the floor areas within a building excluding floor area dedicated to parking and the circulation of motor vehicles, non-enclosed areas, non-enclosable areas and roofed areas.

Portfolio Gross Floor Area: Sum of total gross floor area across all properties within the portfolio.

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Contact us if you have any questions

Portfolio-Level Documentation

Letter of Attestation Template

From senior/executive leadership or the individual/entity calculating the metric confirming that the baseline year data was calculated in a similar manner as the reporting year OR third-party verification of baseline year data. *If baseline year data was previously verified by GBCI, this evidence is not required.*

Prepared for: GBCI Verification Team

Prepared by:
Organization Name:
Organization Address:
Email:
Date:
Portfolio ID and Name:

Subject: Letter of Attestation

I am providing this letter of attestation as supporting documentation for verification of the percentage change claim for the performance metric(s) selected below.

Performance Summary
Baseline Year Period: (mm/dd/yyyy) to (mm/dd/yyyy)
Reporting Year Period: (mm/dd/yyyy) to (mm/dd/yyyy)

Performance Metric	Baseline Year Value	Units	Reporting Year Value	Units	% change
☐ GHG Emissions	NA	NA	NA	NA	NA
☐ GHG Emissions Intensity	NA	NA	NA	NA	NA
☐ Energy Use	NA	NA	NA	NA	NA
☐ Energy Use Intensity	NA	NA	NA	NA	NA
☐ Water Use	NA	NA	NA	NA	NA
☐ Water Use Intensity	NA	NA	NA	NA	NA
☐ Waste Diversion	NA	NA	NA	NA	NA

Baseline Year Data Methodology:

[Provide a narrative detailing the data collection and internal review processes which include any referenced frameworks, standards, methodology, guides, or protocols used to determine the baseline year data]

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Verification

- Two rounds of review: Preliminary Review Report and Final Review Report

- Verification Letter with Portfolio Name, Performance Metrics and Dates

- Communicate with stakeholders, external organizations, disclosure frameworks with confidence

GBCI

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ABC Corporation
12 Downing Street
Washington, DC

Date: 11/08/2024

Subject: PERFORM Verification Letter for 10001 ABC Corp Retail Portfolio

Dear Mary Jane,

Congratulations on completing the PERFORM verification engagement with GBCI. This letter serves as a formal statement of verification for 10001 ABC Corp Retail Portfolio, owned and managed by ABC Corporation

Portfolio Information

Portfolio Name	ABC Corp Retail Portfolio
Portfolio Owner Organization	ABC Corporation
Scope of Portfolio	Office properties
Portfolio Gross Floor Area	1, 000,000 square feet
Number of Properties in Portfolio	200
Property Types in Portfolio	Offices

Responsibilities
The portfolio owner organization and its designated team members were responsible for gathering and providing the required evidence for verification and GBCI was responsible for completing a third-party review of the submitted evidence and issuing this statement of verification.

Verification Scope
The scope of verification included third-party review by GBCI of the verification evidence (documentation and measured and calculated data) provided by the organization in accordance with the requirements outlined in the PERFORM Performance Metrics defined and published by US Green Building Council (USGBC). The evidence was comprised of both portfolio level information (such as policies, data collection methodologies, etc.) and property level information (such as property level data and samples of property level documents). This information was collected and reviewed via a systematic and pre-defined engagement process as outlined in the PERFORM Program Guide.

Specifically, the scope of verification included the following:

1. GHG Emissions: Verification of total GHG emissions (scope 1 and scope 2) across the defined real estate portfolio for the reporting year.

Verification Protocols
GBCI provided a limited assurance[i] engagement informed by ISO/IEC 17029:2019 Conformity assessment - General principles and requirements for validation and verification bodies, and further described in GBCI Verification Protocols.

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GREEN BUSINESS CERTIFICATION INC.
2101 L Street NW, Suite 600
Washington, DC 20037

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Verification Outcome
Based on the review of the evidence provided by the portfolio owner organization, GBCI hereby verifies the following outcomes[ii] for the metrics noted below for 10001 ABC Corp Retail Portfolio.

Baseline Year Period: NA
Reporting Year Period: (01/01/2023) to (12/32/2023)

Performance Metric	Baseline Year Value	Reporting Year Value	% change	Status	Verification ID
GHG Emissions (absolute)	NA	40000 CO2e	NA	Verified	10000023

This verification is valid as of the date of issuance. Please see Appendix for the properties covered within this verification and the attached Review Report for additional details about the verification.

We appreciate your organization's commitment to achieving your sustainability goals across your real-estate portfolio. Please reach out to us at perform@gbci.org if you have any questions or feedback.

Peter Templeton
CEO, GBCI

GBCI.ORG
GREEN BUSINESS CERTIFICATION INC.
2101 L Street NW, Suite 600
Washington, DC 20037

VALUE & BENEFITS

arcPERFORM X **GRESB**

Verification supports GRESB participants: receive up to 5.5 points for "externally assured" with energy, GHG, water & waste indicators (MR 1, 2, 3 & 4)	Go above and beyond GRESB, add metrics that align with other reporting standards	For more on 2025 Assessments, see this USGBC article

QR Code Link: https://www.usgbc.org/articles/perform-now-approved-assurance-scheme-gresb-reporting

GRESB 2025 Indicator Crosswalks

GRESB Indicator	PERFORM Performance Metric
MR1 External review of energy data (max. score 1.75)	Total Energy Use and Energy Use Intensity *
MR2 External review of GHG data (max. score 1.25)	Total GHG Emissions and GHG Emissions Intensity *
MR3 External review of water data (max. score 1.25)	Total Water Use and Water Use Intensity *
MR4 External review of waste data (max. score 1.25)	Total Waste Diversion *

GRESB Indicator Asset Level	LEED
BC1.1 Building Certifications at the time of design/construction and for interior (score varies)	LEED BD+C, ID+C, CS Certification
BC1.2 Operational building certifications (score varies)	LEED O+M Certification

*For these four GRESB Indicators a verification letter from GBCI can be used to support GRESB's Data Monitoring & Review section (MR) and offers the maximum points available under **'externally assured'**.

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Eligibility

- Available to any organization with operational real-estate assets (properties)

- Requirements: Own, manage, or control the real-estate assets. Must have more than one property in the portfolio

Resources

- **The PERFORM Program Guide** details eligibility requirements and the engagement steps: enrolling the portfolio, setting performance goals, tracking progress, and submitting for verification.

- **The PERFORM Performance Metrics** describes the performance categories and metrics available for an organization to track, report, and verify across its portfolio.

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Start Today!

- Exclusive and $0 enrollment introductory verification fees through July 31, 2025!

- Enrollment for nonprofit and public agency will always be free

- A-la-carte review fees based on the portfolio's priorities and performance categories

- Attend monthly on-boarding session, first Thursday of each month

What we're going to cover

LEED v5

Driving the market towards a near-zero carbon reality that is equitable, resilient, and promotes the wise, safe use of all resources

PERFORM

A program to plan, improve, and verify sustainability and resilience performance across portfolios.

Arc

A platform of tools to measure and score operational performance for any space or building.

Arc™ is a building performance monitoring and scoring platform for LEED-certified projects, providing annual LEED recertification and global benchmarking. The plaque displays a LEED performance score, which reflects the measured performance of the building across five categories: energy, water, waste, transportation and human experience. Arc makes the invisible actionable and offers a means for interaction with the building on multiple levels.
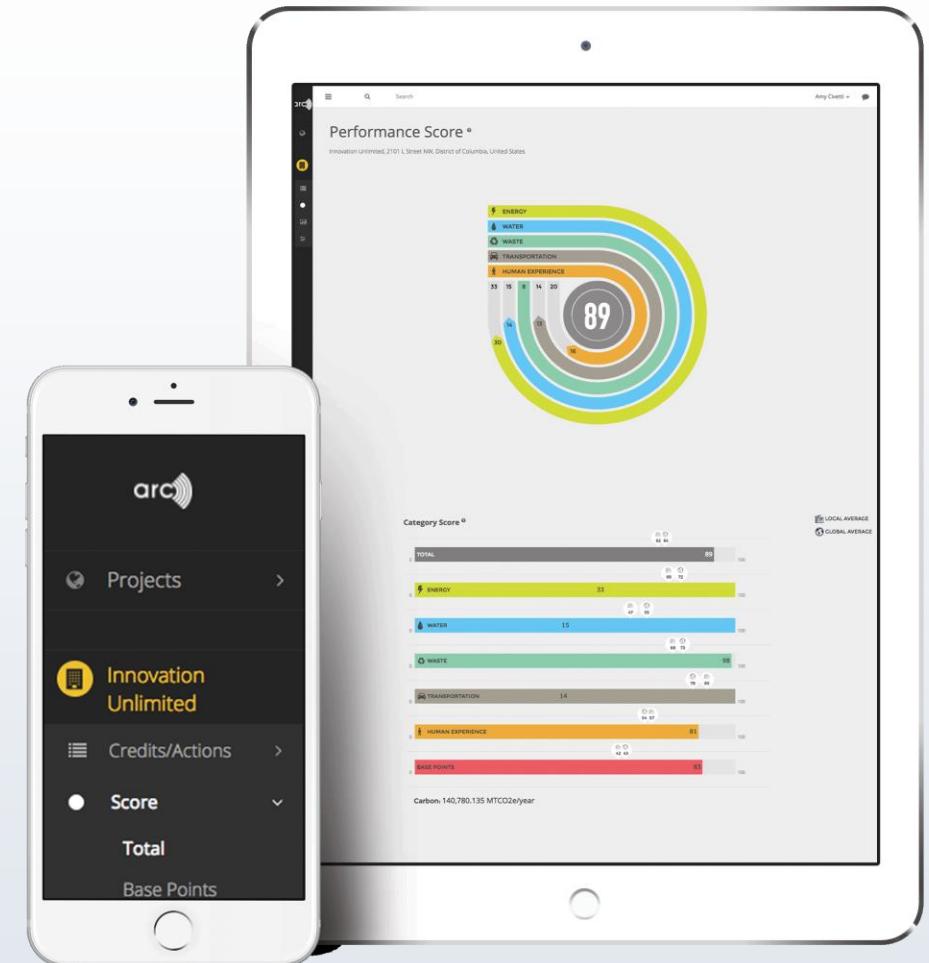
Asset Level Performance

Certificates in any of the five Arc categories

Performance-based, third-party recognition for leadership or improvement in energy, water, waste, transportation, or human experience.

- Choose **one or more** categories

- Certificates are valid for up to 1 year from the date they are issued.

- Three certificates can be used for **"Operational Certificates"** GRESB BC 1.1 Indicator up to 2.5 points

- One Energy certificate can be used for **"Energy Ratings"**

- Flexible pricing: single building, bulk, and portfolio-level pricing
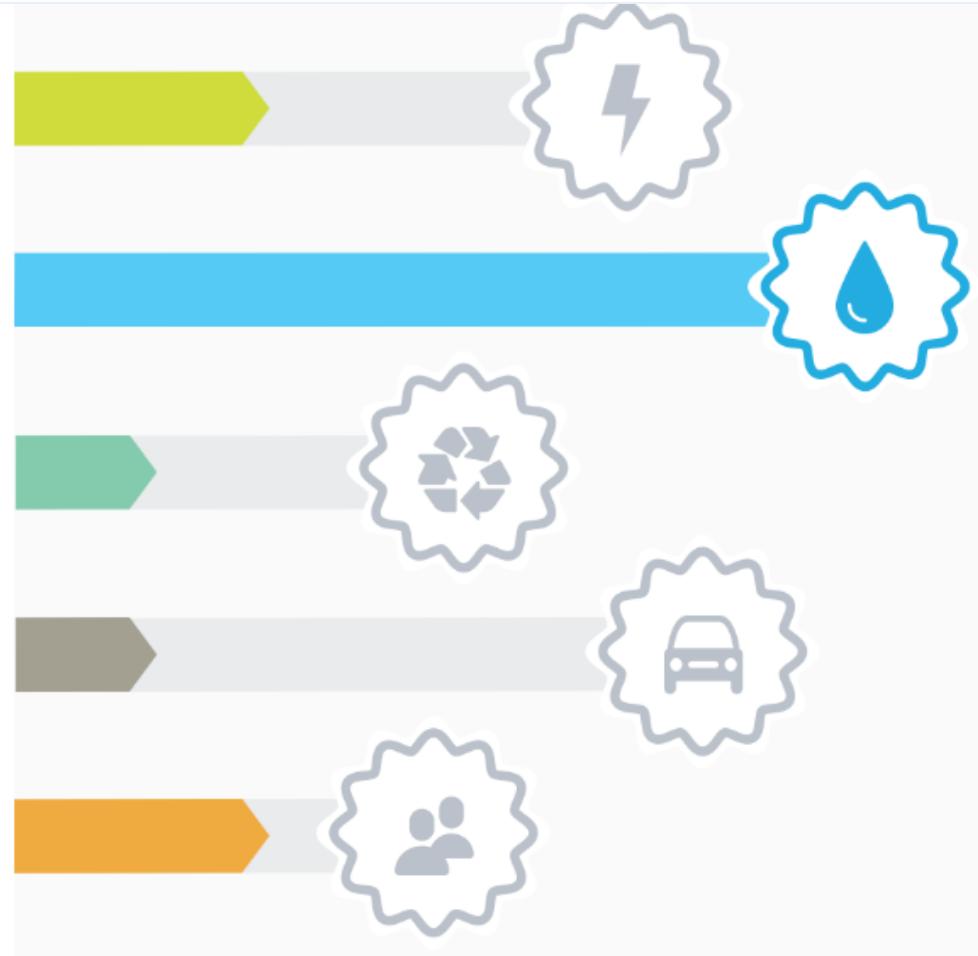
Arc's new workspace for portfolio-level sustainability & resilience.

Data Integrations .

Solution Partners

Contact perform@gbci.org if you intend to utilize one of our software partners for documentation.

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What are ways you can leverage these tools to meet your goals?

Questions & Disussion

THANK YOU

Ryan Snow, rsnow@usgbc.org

Sade Dennis, sdennis@usgbc.org

Greenbuild
INTERNATIONAL CONFERENCE + EXPO

Thank you for attending

Montgomery County Energy Summit 2025

BEYOND BENCHMARKING
NAVIGATING ENERGY PERFORMANCE

See You Again Next Year!

#MCEnergySummit