

Comparison of LEEDv4 vs LEED v5: A Case Study

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DESCRIPTION



This session reviews the changes from LEED v4 to LEED v5 through the lens of a hotel project that was certified under LEED v4 BD+C.

We will review the updates to credit requirements, metrics, and pathways between the two rating system versions, and look at how the case study project would perform if it were to pursue LEED v5 certification. Participants will leave with a deeper understanding of the updates incorporated into LEED v5, and how these changes will affect real-world commercial projects.



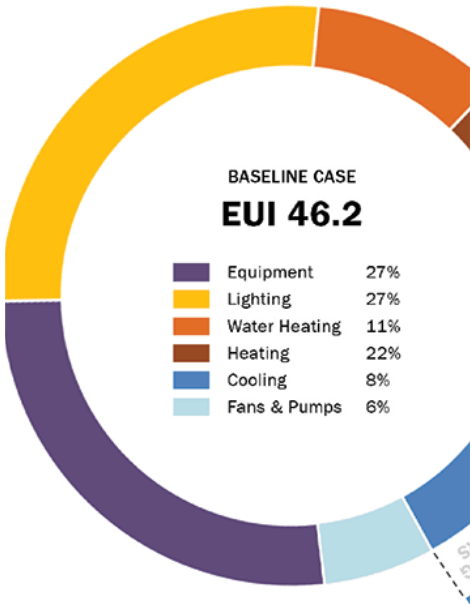
LEARNING OBJECTIVES



1. Understand the **major updates to the LEED v5 BD+C rating systems**, including revised credit requirements, metrics, and documentation pathways.
2. Understand the **rationale for the changes** from LEED v4 to LEED v5, including increased focus on carbon, health, resilience, and equity, and how these affected credit weighting.
3. Identify **key challenges and opportunities** when considering LEED v5 vs LEED v4 for commercial projects.
4. Understand **how to apply LEED v5 requirements and workflows** to real-world projects.



ABOUT US



Green Building
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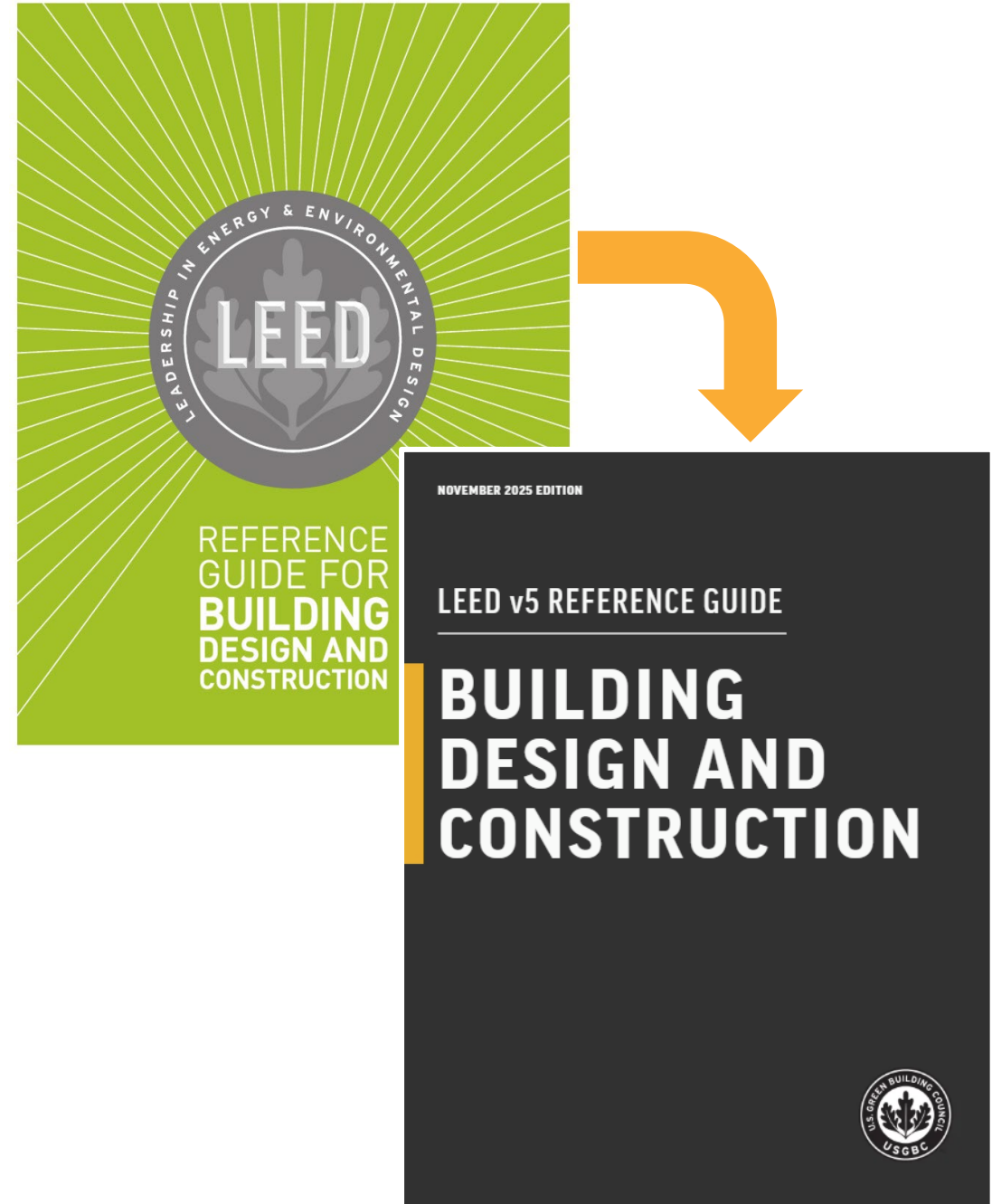
Commissioning &
Performance
Testing

Education &
Training



Agenda: LEED v4 vs LEED v5

- 1. Overview:** What are the major changes?
- 2. Case study:** Home2Suites
- 3. For each credit category:**
 - What are the major changes?
 - How would our case study project perform in v5?
 - Highlight 1-3 credits with significant changes



Overview: LEED v5 Rating System Goals

LEED v4 SYSTEM GOALS

-  Reduce contribution to **global climate change**
-  Enhance individual **human health**
-  Protect and restore **water resources**
-  Protect and enhance **biodiversity and ecosystem services**
-  Promote **sustainable and regenerative** material cycles
-  Build a **green economy**
-  Enhance **community quality of life**

LEED v5 SYSTEM GOALS



Overview: LEED v5 Rating System Goals → BD+C Credits

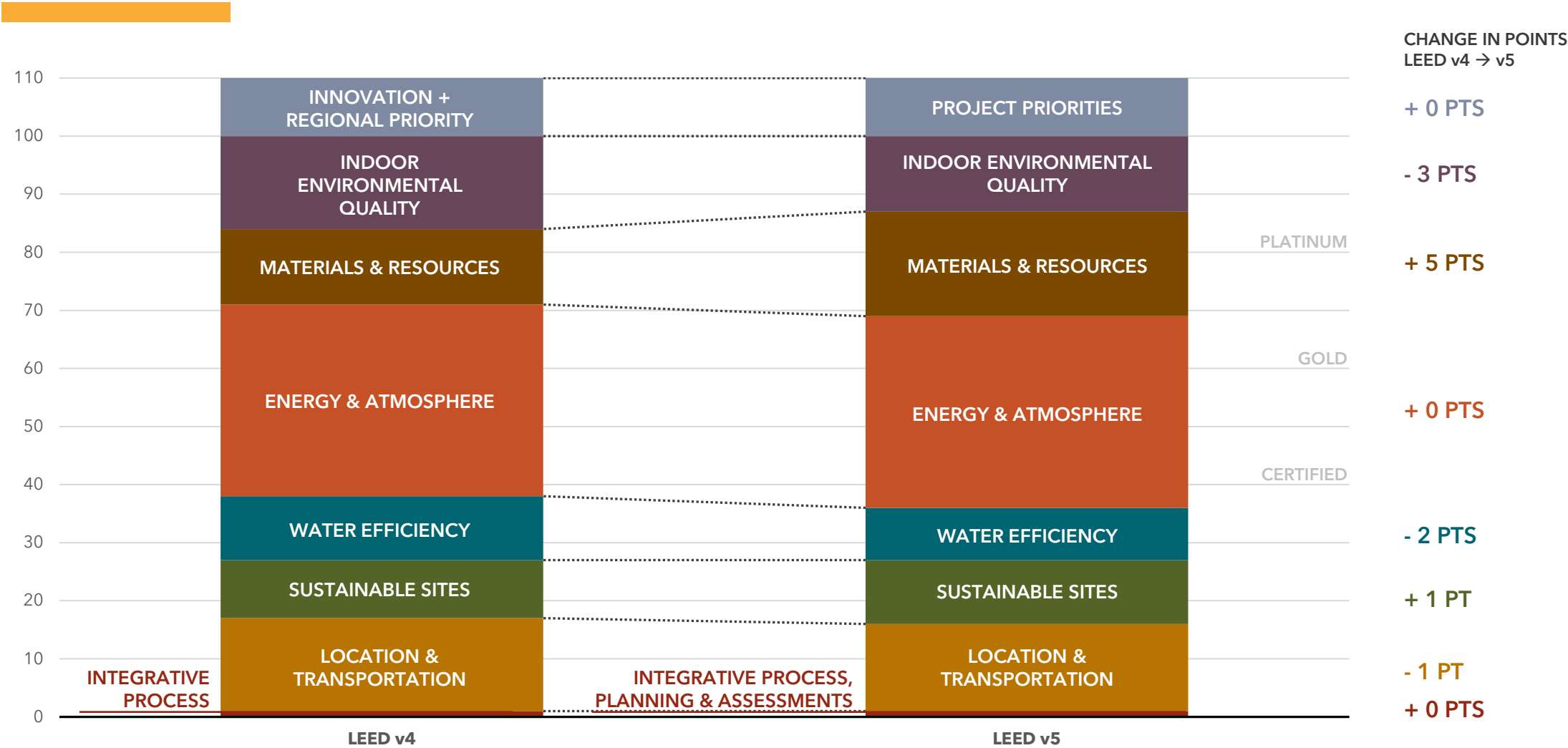
Decarbonization			
		NEW CONSTRUCTION	CORE AND SHELL
IP Prereq	Carbon Assessment	Required	Required
IP Prereq	Tenant Guidelines	-	Required
IP Credit	Integrative Design Process	1	1
IP Credit	Green Leases	-	6
LT Credit	Compact and Connected Development	6	6
LT Credit	Transportation Demand Management	4	4
LT Credit	Electric Vehicles	2	2
SS Credit	Heat Island Reduction	2	2
WE Prereq	Minimum Water Efficiency	Required	Required
WE Credit	Water Metering and Leak Detection	1	1
WE Credit	Enhanced Water Efficiency	8	7
EA Prereq	Operational Carbon Projection and Decar-	Required	Required
EA Prereq	Minimum Energy Efficiency	Required	Required
EA Prereq	Fundamental Commissioning	Required	Required
EA Prereq	Energy Metering and Reporting	Required	Required
EA Prereq	Fundamental Refrigerant Management	Required	Required
EA Credit	Electrification	5	4
EA Credit	Reduce Peak Thermal Loads	5	5
EA Credit	Enhanced Energy Efficiency	10	7
EA Credit	Renewable Energy	5	4
EA Credit	Enhanced Commissioning	4	3
EA Credit	Grid Interactive	2	2
EA Credit	Enhanced Refrigerant Management	2	2
MR Prereq	Planning for Zero Waste Operations	Required	Required
MR Prereq	Quantify and Assess Embodied Carbon	Required	Required
MR Credit	Building and Materials Reuse	3	5
MR Credit	Reduce Embodied Carbon	6	8
MR Credit	Building Product Selection and Procure-	5	5
MR Credit	Construction and Demolition Waste Diver-	2	2

Quality of Life			
		NEW CONSTRUCTION	CORE AND SHELL
IP Prereq	Climate Resilience Assessment	Required	Required
IP Prereq	Tenant Guidelines	-	Required
IP Prereq	Human Impact Assessment	Required	Required
IP Credit	Integrative Design Process	1	1
IP Credit	Green Leases	-	6
LT Credit	Equitable Development	2	2
LT Credit	Compact and Connected Development	6	6
LT Credit	Transportation Demand Management	4	4
SS Credit	Accessible Outdoor Space	1	1
SS Credit	Enhanced Resilient Site Design	2	2
SS Credit	Heat Island Reduction	2	2
WE Credit	Water Metering and Leak Detection	1	1
MR Credit	Low Emitting Materials	2	1
MR Credit	Building Product Selection and Procurement	5	5
EQ Prereq	Construction Management	Required	Required
EQ Prereq	Fundamental Air Quality	Required	Required
EQ Prereq	No Smoking or Vehicle Idling	Required	Required
EQ Credit	Enhanced Air Quality	1	1
EQ Credit	Occupant Experience	7	7
EQ Credit	Accessibility and Inclusion	1	1
EQ Credit	Resilient Spaces	2	2
EQ Credit	Air Quality Testing and Monitoring	2	-

Ecological Conservation and Restoration			
		NEW CONSTRUCTION	CORE AND SHELL
IP Prereq	Tenant Guidelines	-	Required
IP Credit	Integrative Design Process	1	1
IP Credit	Green Leases	-	6
LT Credit	Sensitive Land Protection	1	1
LT Credit	Compact and Connected Development	6	6
SS Prereq	Minimized Site Disturbance	Required	Required
SS Credit	Biodiverse Habitat	2	2
SS Credit	Accessible Outdoor Space	1	1
SS Credit	Rainwater Management	3	3
SS Credit	Enhanced Resilient Site Design	2	2
SS Credit	Heat Island Reduction	2	2
SS Credit	Light Pollution Reduction	1	1
WE Prereq	Water Metering and Reporting	Required	Required
WE Prereq	Minimum Water Efficiency	Required	Required
WE Credit	Water Metering and Leak Detection	1	1
WE Credit	Enhanced Water Efficiency	8	7
MR Prereq	Planning for Zero Waste Operations	Required	Required
MR Credit	Building and Materials Reuse	3	5
MR Credit	Building Product Selection and Procurement	5	5
MR Credit	Construction and Demolition Waste Diversion	2	2
EQ Prereq	No Smoking or Vehicle Idling	Required	Required



Overview: LEED v4 vs v5 Point Allocations



Overview: Certification Tiers



CERTIFIED

40 - 49 POINTS

SILVER

50 - 59 POINTS

GOLD

60 - 79 POINTS

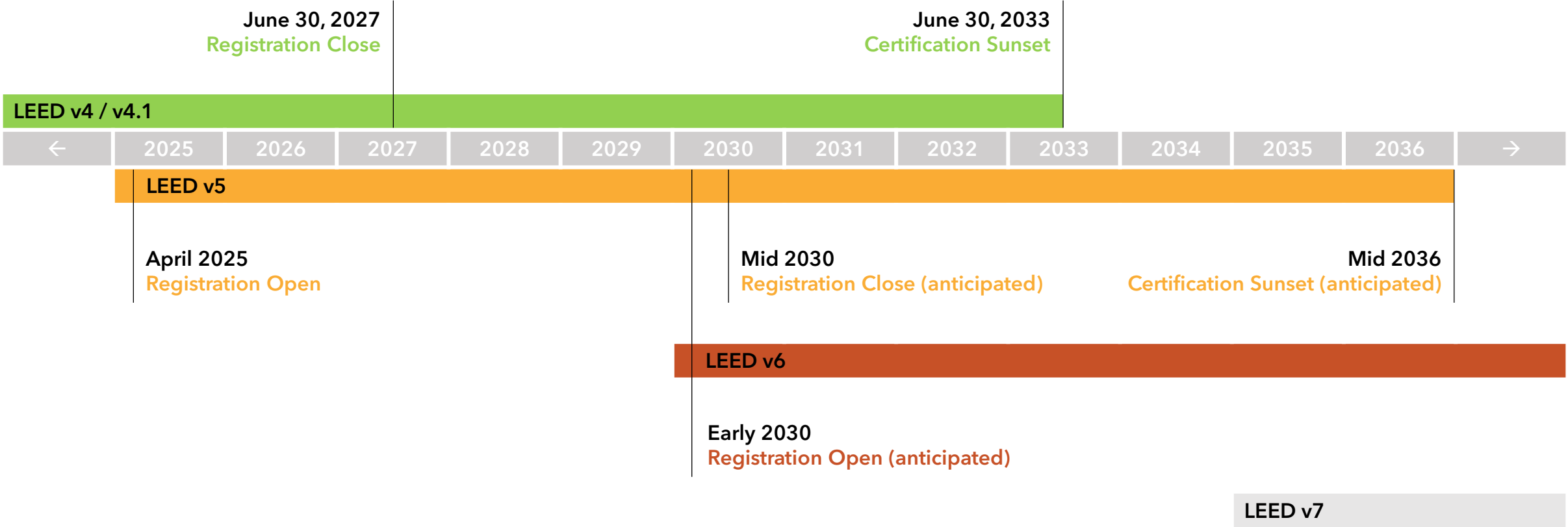
PLATINUM

80+ POINTS

LEED v5 additional requirements for Platinum:

- Be fully electric
- Use 100% renewable energy
- Maximize energy efficiency
- Reduce embodied carbon by at least 20%

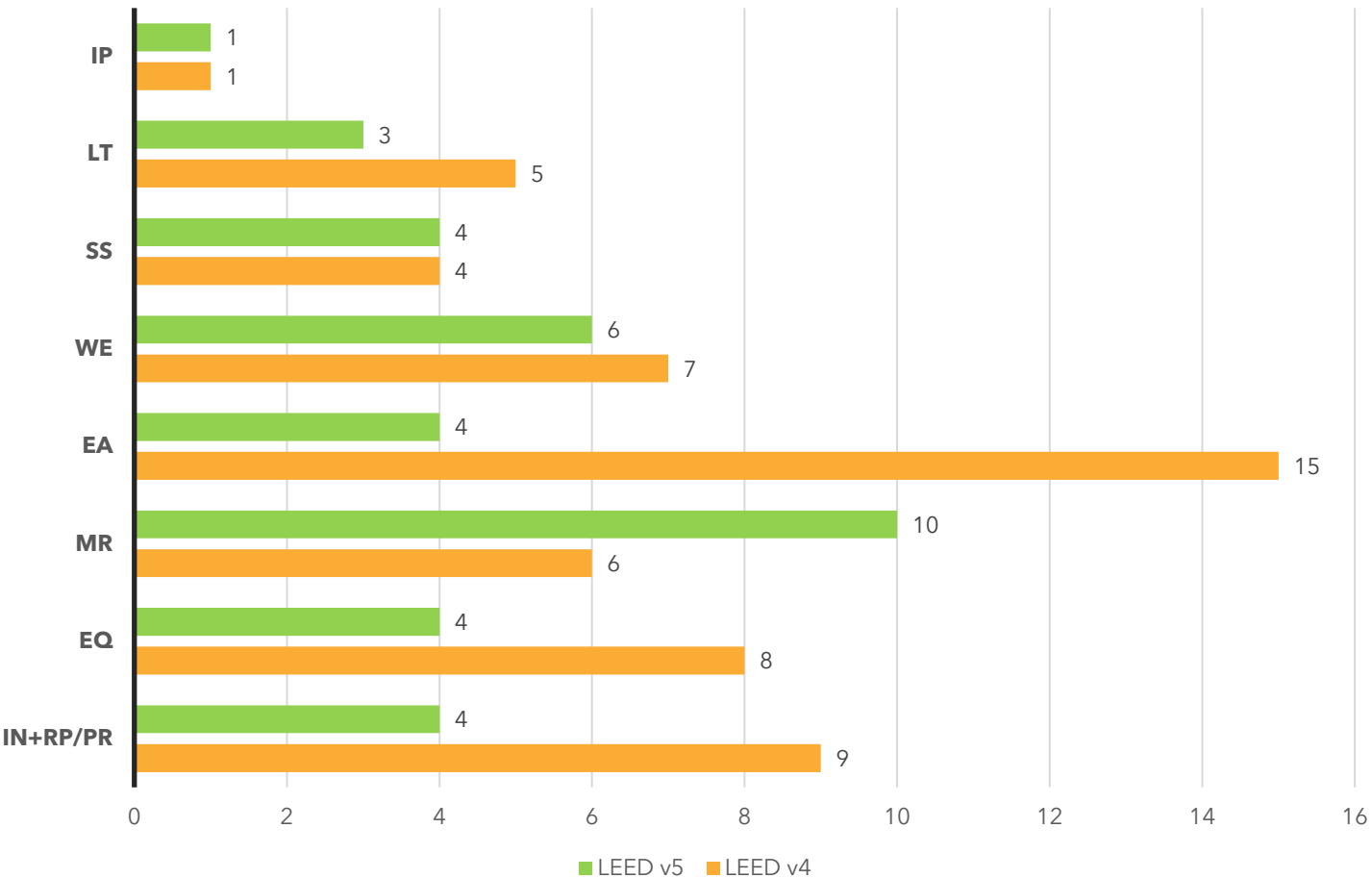
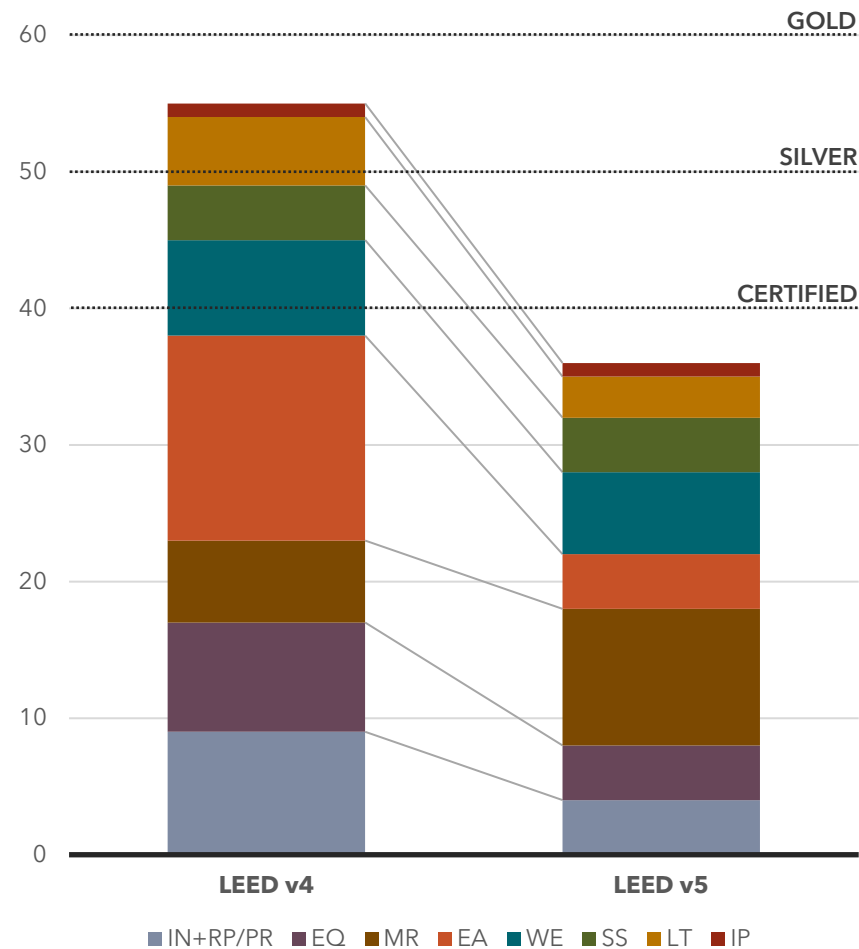
Overview: LEED Rollout & Sunset Timeline



Case Study: Home2 Suites, LEED v4 BD+C Hospitality, Silver



Case Study: LEED v4 vs v5 Overall Comparison





LEED v5 BD+C



Integrative Process, Planning & Assessments

Integrative Process, Planning & Assessments



LEED v4

- No prerequisites
- 1 credit: Integrative Design Process:
Focused on early-stage energy & water analysis

LEED v5

- 3 New Prerequisites:
 - **Climate Resilience Assessment**
 - **Human Impact Assessment**
 - **Carbon Assessment**
- 1 credit: Integrative Design Process:
Focus on design charrette; energy modelling not required



Integrative Process, Planning & Assessments: Case Study

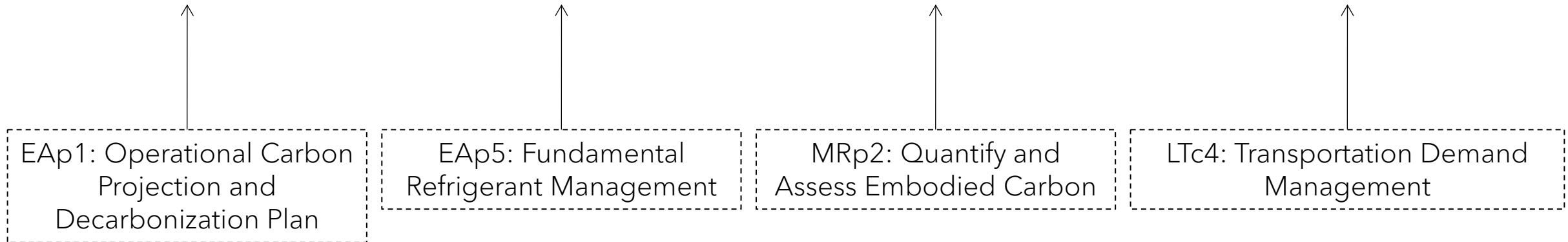
LEED v4	Points	LEED v5	Points
-	-	IPp1: Climate Resilience Assessment	N
-	-	IPp2: Human Impact Assessment	N
-	-	IPp3: Carbon Assessment	N
Integrative Process	1 / 1	IPc1: Integrative Design Process	1 / 1
Total	1 / 1	Total	1 / 1



IPp3: Carbon Assessment

Intent: To understand and reduce long-term direct and indirect carbon emissions, including on-site combustion, grid-supplied electricity, refrigerants, and embodied carbon.

Operational + Embodied + Refrigerant + Transportation



LEED v5 BD+C



Location and Transportation

Location & Transportation



LEED v4

- **8 credits, 16 points;** no prerequisites

LEED v5

- **5 credits, 15 points** (1 fewer point); LEED ND Location path removed
- **Compact & Connected Development:** combines v4 Surrounding Density & Diverse Uses + Access to Quality Transit
- **Transportation Demand Management:** combines v4 Reduced Parking Footprint + Bicycle Facilities; VMT & carbon emissions assessment required
- **Equitable Development:** replaces High Priority Site; adds local hiring, affordable housing & apprenticeship options
- **Electric Vehicles:** replaces Green Vehicles; EV charging / EV-ready only

Location & Transportation: Case Study



LEED v4	Points	LEED v5	Points
LEED for Neighborhood Development Location	0 / 16	-	-
Sensitive Land Protection	1 / 1	LTc1: Sensitive Land Protection	1 / 1
High Priority Site	0 / 2	LTc2: Equitable Development	0 / 2
Surrounding Density & Diverse Uses	2 / 5	LTc3: Compact & Connected Development	2 / 6
Access to Quality Transit	0 / 5		
Bicycle Facilities	1 / 1	LTc4: Transportation Demand Management	0 / 4
Reduced Parking Footprint	0 / 1		
Green Vehicles	1 / 1	LTc5: Electric Vehicles	0 / 2
Total	5 / 16	Total	3 / 15

LTc2: Equitable Development



v5: Equitable Development (1-2 pts)

Option	Pts	Requirement
Opt. 1: Priority Sites	1-2	Brownfield remediation (2) · historic district (1)
Opt. 2: Housing & Jobs	1	Path 1: $\geq 15\%$ of construction jobs filled by residents of the project's administrative district
	2	Path 2: $\geq 10\%$ affordable residential floor area ($\leq 60\%$ AMI rental / $\leq 80\%$ AMI for-sale) + transit, walkability or jobs-housing ratio
Opt. 3: Equitable Construction	2	Registered apprentices perform $\geq 15\%$ of construction hours; life-skills training offered
Schools / data centers	1-2	Project-type options: public-use spaces, community partnerships; 300 ft buffer from sensitive receptors

LTc4: Transportation Demand Management



Required: TDM Assessment

All projects must first:

- Estimate annual vehicle miles traveled (VMT)
- Calculate baseline annual carbon emissions
- Evaluate TDM strategies & low-carbon options
- Project proposed emissions & total reduction

Exempt: government-mandated TDM programs, affordable residential infill, and certain uses within ½ mi of major transit

Earn up to 4 pts (combine options)

Strategy	Pts	Requirement
Reduce parking	1-3	30% / 60% / 100% below ITE Parking Generation rates
Parking fee	2	Charge at or above local market rate
Bicycle network & storage	1	Storage near a ≥3-mile bike network (within 600 ft)
Showers & changing	1	Showers for 1% of regular occupants
Bike repair station	1	Permanent tools + air pump near storage



LEED v5 BD+C



Sustainable Sites



Sustainable Sites



LEED v4

- 1 prerequisite
- 6 credits
- Focus on development patterns, rainwater management, heat island reduction & light pollution

LEED v5

- New Prerequisite: **Minimized Site Disturbance** – Combines erosion & sedimentation with some Site Assessment requirements
- New Credit: **Enhanced Resilient Site Design** – mitigate risks from natural & climate disasters
- **Biodiverse Habitat** – evolution of Protect & Restore Habitat; incorporates option for Bird-Friendly Glass
- **Heat Island Reduction** – fewer points for the same strategies; added “tree equity” option
- **Light Pollution Reduction** – BUG rating pathway required (calculation method removed)

Sustainable Sites: Case Study



LEED v4	Points	LEED v5	Points
Prereq. Construction Activity Pollution Prevention	Y	SSp1: Minimize Site Disturbance	N
Site Assessment	1 / 1	-	-
Site Development – Protect or Restore Habitat	0 / 2	SSc1: Biodiverse Habitat	0 / 2
Open Space	0 / 1	SSc2: Accessible Outdoor Space	0 / 1
Rainwater Management	0 / 3	SSc3: Rainwater Management	0 / 3
-	-	SSc4: Enhanced Resilient Site Design	2 / 2
Heat Island Reduction	2 / 2	SSc5: Heat Island Reduction	1 / 2
Light Pollution Reduction	1 / 1	SSc6: Light Pollution Reduction	1 / 1
Total	4 / 10	Total	4 / 11

SSc1: Biodiverse Habitat



- Largely similar to v4.1 "Protect or Restore Habitat"
- Revised soil & vegetation restoration requirements
- Removed previous Opt. 2: Financial Support
- Added new Opt. 2: **Bird-Friendly Glass**
 - Previously a Pilot credit
 - Requires max. American Bird Conservancy Threat Factor of 30

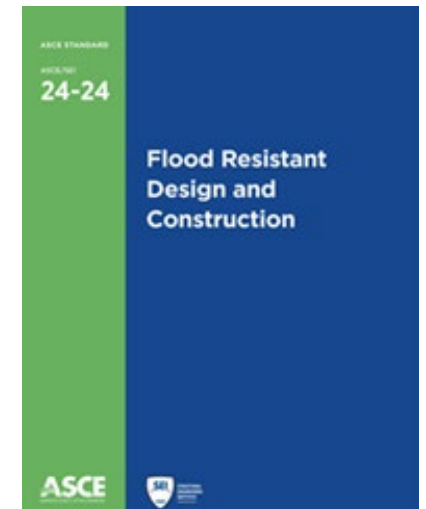
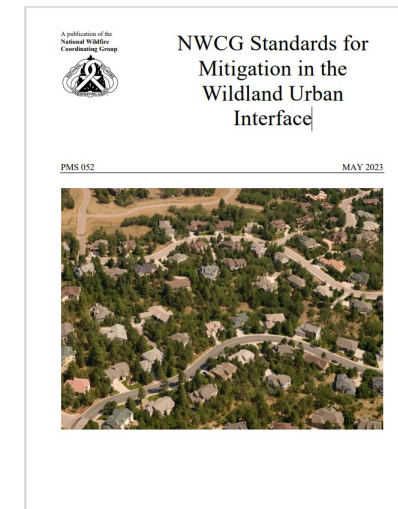
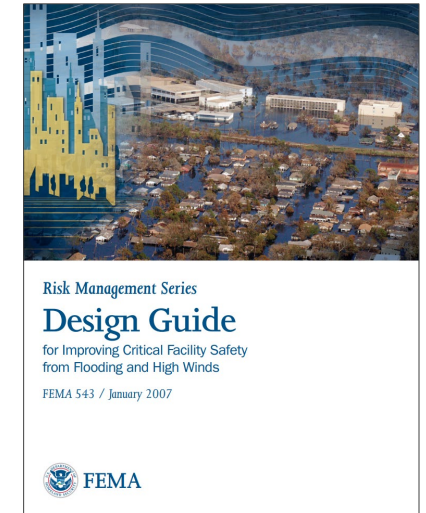


SSc4: Enhanced Resilient Site Design



Incorporate strategies for at least two of the following:

- **Drought** - comply w/ WEc2; spec native/drought-tolerant plants
- **Extreme Heat** - incorporate 2+ items from list
- **Flooding** - incorporate 2+ items from list
- **Hail** - meet FORTIFIED Commercial requirements
- **Hurricanes & High Winds** - meet FORTIFIED Commercial requirements
- **Sea Level Rise** - incorporate 2+ items from list
- **Tsunamis** - "Designing for Tsunamis" guideline
- **Wildfires** - follow several other guidelines
- **Winter Storms** - incorporate 2+ items from list





LEED v5 BD+C



Water Efficiency

Water Efficiency



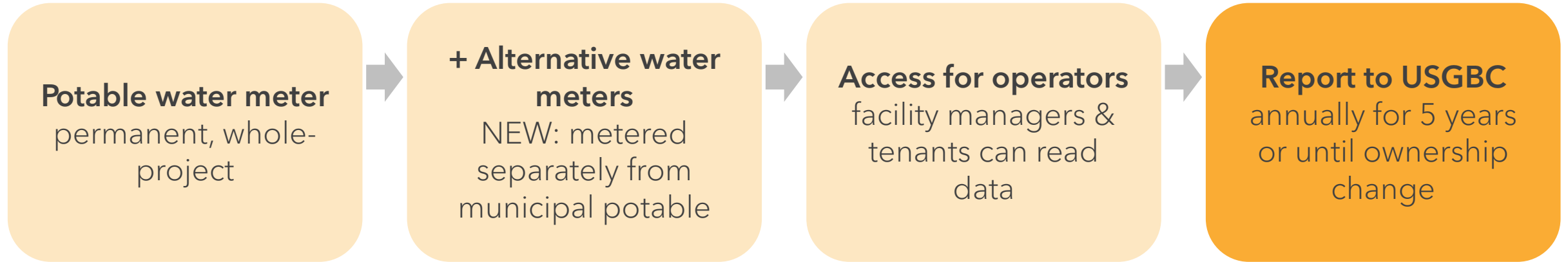
LEED v4

- 3 prerequisites, 4 credits, 11 points

LEED v5

- 2 prerequisites, 2 credits, 9 points
- **WEp1 Metering & Reporting:** alternative water sources metered separately
- **WEp2 Minimum Water Efficiency:** indoor + outdoor prereqs combined; new prescriptive fixture path
- **WEc1 Metering & Leak Detection:** all applicable subsystems (incl. laundry & kitchen) or leak detection
- **WEc2 Enhanced Water Efficiency:** indoor, outdoor & process combined; whole-project or by end use
- **Fixtures alone worth less:** max 3 pts at 40% (v4: 6 pts at 50%)

WEp1: Water Metering & Reporting



	LEED v4: Building-Level Water Metering	LEED v5: Water Metering & Reporting
What's metered	Total potable water for the building & grounds	Total potable AND alternative water sources (each separately)
Data sharing	Commit to share with USGBC for 5 years	Share whole-project data at least annually for 5 years
Status	Prerequisite	Prerequisite (largely unchanged)



WEc1: Water Metering & Leak Detection

v5: Metering & Leak Detection (1 pt) - choose one

Opt. 1: Submeters - ALL that apply

- Indoor fixtures ($\geq 80\%$ of fixtures)
- Irrigation
- Makeup water: DHW, pools, chilled water, process
- Commercial kitchen (≥ 100 meals/day)
- Laundry ($\geq 120,000$ lb/yr)

Real-time access, hourly data

Opt. 2: Leak Detection

- Flow meters / sensors on irrigation, $\geq 50\%$ of flush fixtures & each makeup water system
- Alarm on abnormal flow or physical leak
- Real-time access + leak response action plan





LEED v5 BD+C



Energy and Atmosphere

Energy & Atmosphere



LEED v4

- 4 prerequisites
- 7 credits
- 33 points total; 18 from "Optimize Energy Performance"
- Ability to "double dip" for on-site renewable energy via points in both "Optimize Energy Performance" and "Renewable Energy"

LEED v5

- Focus on decarbonization, electrification, and refrigerants
- Fewer points available for energy model, AND harder to get = no longer a reliable base for pts
- New Prerequisite: **Operational Carbon Projection and Decarbonization Plan** → requires 25-yr decarbonization plan
- 2 New Credits: **Electrification, Reduce Peak Thermal Loads**
- Additional Commissioning requirements (both Fundamental and Enhanced)

Energy & Atmosphere



LEED v4	Points	LEED v5	Points
-	-	EAp1: Operational Carbon Projection & Decarbonization Plan	N
Prereq. Minimum Energy Performance	Y	EAp2: Minimum Energy Efficiency	Y
Prereq. Fundamental Commissioning & Verification	Y	EAp3: Fundamental Commissioning	Y
Prereq. Building-Level Energy Metering	Y	EAp4: Energy Metering & Reporting	N
Prereq. Fundamental Refrigerant Management	Y	EAp5: Fundamental Refrigerant Management	N
-	-	EAc1: Electrification	0 / 5
-	-	EAc2: Reduce Peak Thermal Loads	0 / 5
Optimize Energy Performance	10 / 18	EAc3: Enhanced Energy Efficiency	1 / 10
Renewable Energy Production	0 / 3	EAc4: Renewable Energy	1 / 5
Green Power and Carbon Offsets	2 / 2		
Enhanced Commissioning	3 / 6	EAc5: Enhanced Commissioning	2 / 4
Advanced Energy Metering	0 / 1	-	-
Demand Response	0 / 1	EAc6: Grid Interactive	0 / 2
Enhanced Refrigerant Management	0 / 1	EAc7: Enhanced Refrigerant Management	0 / 2
Total	15 / 33	Total	4 / 33

EAp3/c5: Fundamental & Enhanced Commissioning



- **Fundamental Commissioning:** Envelope commissioning is now required, including:
 - Building envelope design review
 - Air leakage testing or air barrier inspection
- **Enhanced Commissioning:** 2 options, max. 4 pts.
 - **Opt. 1:** MEP Systems (2 pts) + Building Enclosure (1 pt) – envelope testing required
 - **Opt. 2:** Monitoring-based commissioning for Basic Software (1 pt) or Enhanced Software (2 pts)





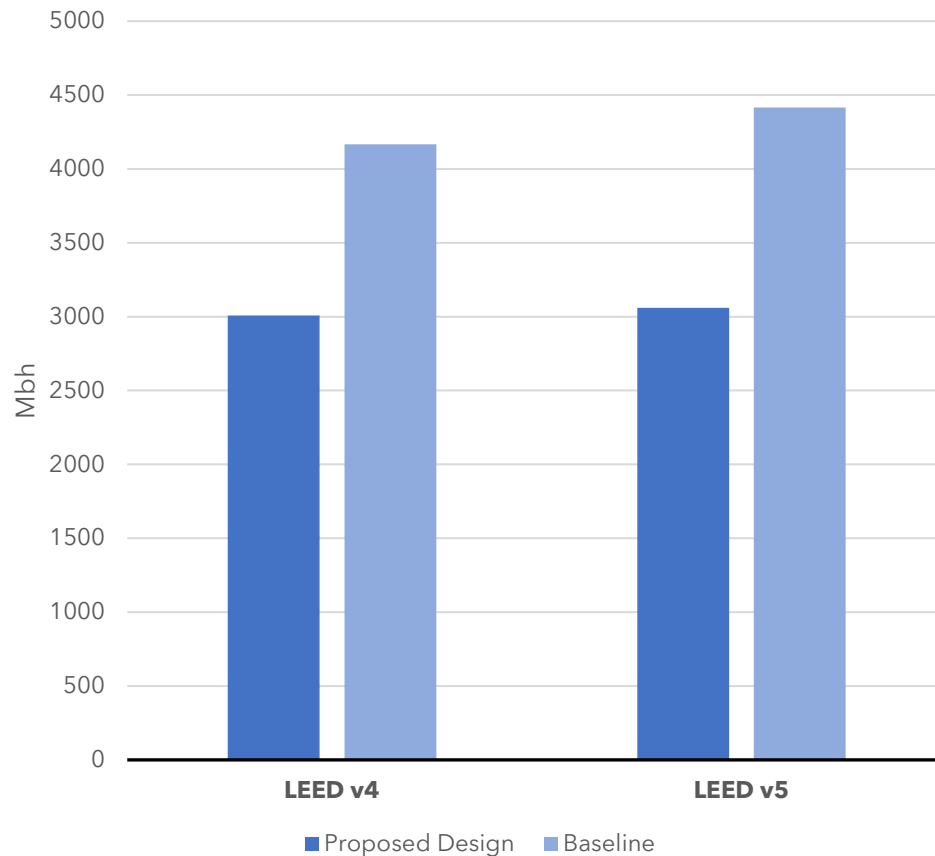
EAc3: Enhanced Energy Efficiency

- **Opt. 1: Prescriptive Path** (1-10 pts)
 - Path 1: Regulated Loads (1-7 pts)
 - Path 2: Plug & Process Loads (1-4 pts)
- **Opt. 2: Energy Simulation** (1-10 pts)
 - **Significant changes to how points are calculated!**
 - Replace "cost" with "future source energy" (2.0 site-to-source energy conversion factor)
 - Points based on "Performance Index" (PI) – complex calculation

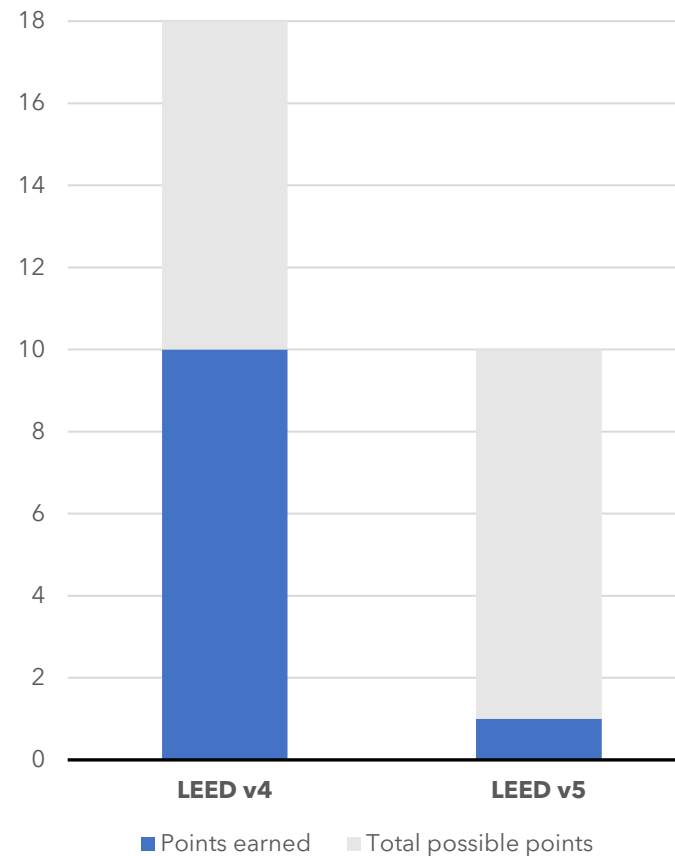


EAc3: Enhanced Energy Efficiency: Case Study

Modeled Energy Use Comparison



Points Comparison



- Similar modeled energy performance between v4 and v5 (both ~28% reduction)
- BUT: Significant different in points earned



EAc3: Enhanced Energy Efficiency: Case Study

BPF (Building Performance Factor)	(Per EAc3 Table 5)	0.71
PI (Performance Index)	$PI = BPF / BBP$	0.7332
PI _t (Performance Index Target)	$PI_t = (BBUP + (BPF * BBRP)) / BBP$	0.770
Savings for LEED v5	100% - PI/PI _t	4.73%
Points for LEED v5		1

Where:

BBP = Baseline Building Performance

BPF = Building Performance Factor

BBUP = Baseline Unregulated Building Performance

BBRP = Baseline Regulated Building Performance

→ <https://energysimulation.usgbc.org/>

USGBC LEED v5 Energy Simulation Documentation Tool

Continue From Saved Project File

Drag and drop file here
Limit 200MB per file • ZIP

Browse files

General Information

Project Name

Project Country

United States

Rating System

BD+C: New Construction

Energy Modeling Protocol

ASHRAE 90.1-2019 Appendix G + Addendum cr

Unit System

IP

Climate Zone

0A

Gross Floor Area (ft²)

Number of Above Grade Stories

Number of Below Grade Stories

Building Type

Building Type information is used to determine area-weighted average Building Performance Factors and the resultant building performance target. Add a row and floor area for each unique combination of building type and major renovation status. If the project has less than 100% conditioned gross floor area, indicate the percent semi-heated and percent unconditioned for each building type.

Building Type	Major Renovation?	Floor Area (ft ²)	Percent Semi-heated (%)	Percent Unconditioned (%)

District Energy Systems

Not applicable

Energy Consumption and Generation

Energy Consumption

Energy Consumption information is used to check credit performance. Enter rows manually, copy data from CSV or check "Add standard end uses" to prepopulate the table with standard end uses. For ASHRAE 90.1 Energy Cost Budget Method, report "budget building design" values as "baseline values".

Baseline Model Rotations

Averaged baseline results will be provided

Add standard end uses

End Use	Unregulated?	Energy Type	Baseline Annual Energy Usage (kBtu)	Proposed Annual Energy Usage (kBtu)





LEED v5 BD+C



Materials and Resources

Materials and Resources



LEED v4

- **2 prerequisites, 5 credits, 13 points**

LEED v5

- **2 new prerequisites:** Planning for Zero Waste Operations; Quantify & Assess Embodied Carbon (structure, enclosure, hardscape - A1-A3)
- **Reduce Embodied Carbon (up to 6 pts):** largest credit in the category
- **Building Product Selection & Procurement (1-5):** replaces the 3 BPDO credits; based on weighted "product value" (cost, area or volume)
- **Low-Emitting Materials** moves to MR; max. 2 pts (was 3)
- **C&D Waste Diversion:** 10-25% of diverted material must also be salvaged or source-separated



Materials and Resources

LEED v4	Points	LEED v5	Points
Prereq. Storage & Collection of Recyclables	Y	MRp1: Planning for Zero Waste Operations	N
Prereq. C&D Waste Management Planning	Y	-	-
Building Life-Cycle Impact Reduction	3 / 5	MRp2: Quantify & Assess Embodied Carbon	Y
		MRc1: Building & Material Reuse	0 / 3
		MRc2: Reduce Embodied Carbon	5 / 6
PD&O – Environmental Product Declarations	1 / 2	MRc3: Low-Emitting Materials	2 / 2
-	-	MRc4: Building Product Selection & Procurement	2 / 5
PD&O – Sourcing of Raw Materials	0 / 2	MRc5: Construction & Demolition Waste Diversion	1 / 2
PD&O – Material Ingredients	1 / 2		
Construction & Demolition Waste Management	1 / 2		
Total	6 / 13	Total	10 / 18

MRp1: Planning for Zero Waste Operations



LEED v5: 1 combined prerequisite

Storage & Collection - expanded

- **NEW: organics / food waste** stream added
- Paper, cardboard, glass, plastics, metals; batteries, lamps & e-waste

Zero Waste Operations Planning - NEW

- Design docs + maintenance guidance so operators can hit waste goals after opening
- Core & Shell: tenant guidelines (haulers, schedules, training)

C&D planning prereq removed (diversion handled in MRc5)



MRp2 / MRc2: Embodied Carbon



MRp2: Quantify & Assess (prereq.)

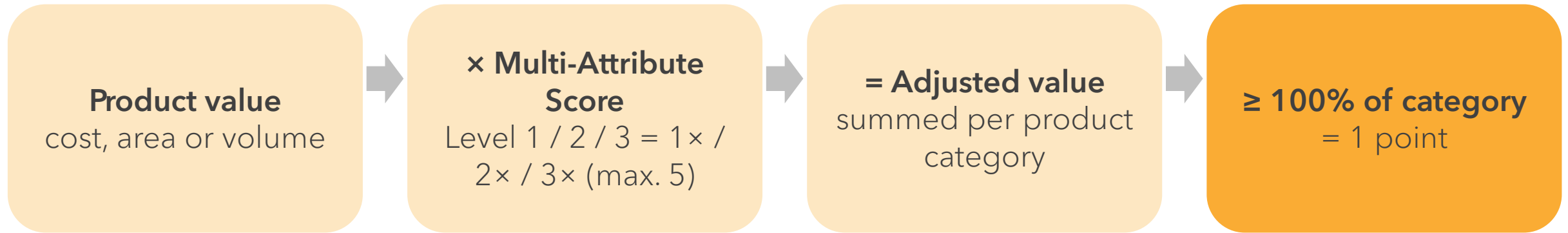
- **Scope:** structure, enclosure & hardscape – incl. parking structures & outbuildings
- **Metric:** cradle-to-gate GWP (A1–A3) = material quantity × EPD GWP, or LCA tool results
- **Identify top 3 hot spots** and describe reduction strategies considered
- **v4:** no equivalent – WBLCA was optional

MRc2: Reduce Embodied Carbon (1–6 pts)

- **Opt. 1 WBLCA:** cradle-to-grave (A–C) vs. baseline; points scale with % GWP reduction – max. 6 pts at 40%
- **Opt. 2 EPD analysis:** project-average or material-type comparison to industry baselines
- **Opt. 3 Construction emissions (A5):** track jobsite fuel & utilities – contractor (1) + subs (2)
- **Platinum:** ≥ 20% embodied carbon reduction required



MRc4: Building Product Selection & Procurement



Criteria (5 areas):

- Climate health · Human health · Ecosystem health
- Social health & equity · Circular economy

9 product categories: paints, adhesives, flooring, walls, ceilings, insulation, furniture, composite wood, plumbing fixtures



LEED v5 BD+C



Indoor Environmental Quality

Indoor Environmental Quality



LEED v4

- 2 prerequisites
- 9 credits
- “Grab bag” of strategies focus on human health & wellbeing
- Included Low Emitting Materials credit

LEED v5

- 1 new prerequisite: **Construction Management**
- 2 new credits: **Accessibility and Inclusion** and **Resilient Spaces**.
- Significant changes to **Fundamental Air Quality** prerequisite & **Enhanced Air Quality** credit
- New **Occupant Experience** credit combines Thermal Comfort + Interior Lighting + Daylight + Quality Views + Acoustic Performance. Thermal and lighting control options removed.
- **Air Quality Testing and Monitoring** credit: flush-out option removed.



Indoor Environmental Quality

LEED v4	Points	LEED v5	Points
-	-	EQp1: Construction Management	Y
Prereq. Minimum IAQ Performance	Y	EQp2: Fundamental Air Quality	Y
Prereq. Environmental Tobacco Smoke Control	Y	EQp3: No Smoking or Vehicle Idling	Y
Enhanced IAQ Strategies	1 / 2	EQc1: Enhanced Air Quality	0 / 1
Low-Emitting Materials	3 / 3	-	-
Construction IAQ Management Plan	1 / 1	-	-
Thermal Comfort	1 / 1	EQc2: Occupant Experience	4 / 7
Interior Lighting	1 / 2		
Daylight	0 / 3		
Quality Views	1 / 1		
Acoustic Performance	0 / 1		
-	-	EQc3: Accessibility & Inclusion	1 / 1
-	-	EQc4: Resilient Spaces	0 / 2
IAQ Assessment	0 / 2	EQc5: Air Quality Testing & Monitoring	0 / 2
Total	8 / 16	Total	5 / 13

EQp1: Construction Management



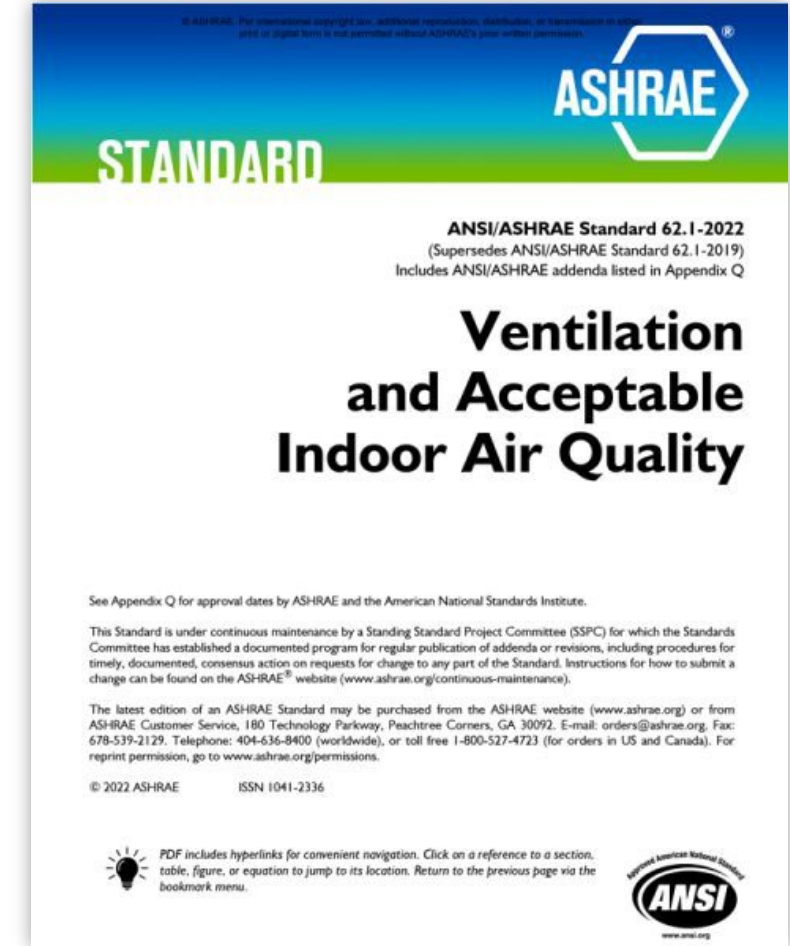
- **Construction IAQ Management** is now a prerequisite → follow SMACNA guidelines:
 - Keep absorptive materials dry
 - Cover HVAC ductwork
 - Track filter changes if operating HVAC
 - No smoking within 25ft
- New: **Extreme Heat Protection**
 - Written Heat Illness Prevention Plan adapted from OSHA



EQp2: Fundamental Air Quality



- References **ASHRAE 62.1-2022**
 - Sect. 6 includes **contaminant limits** (e.g. formaldehyde, PM2.5) and requires monitoring or calculation
- **New IAQ calculator**, reorganizes into “systems” and “zones”
- **Outdoor airflow monitoring** now only for spaces with >1000 CFM
- **Filtration required**: MERV 13 or other compliant filtration
- **Entryway systems required** for all primary entrances (previously part of “Enhanced Indoor Air Quality Strategies”)





EQc1: Enhanced Air Quality

- **Opt. 1: Increased Ventilation** (1 pt)
 - Identical to v4.1 Enhanced IAQ Strategies
 - 15% increase for 1pt
 - 30% increase for Exemplary Performance seems achievable
- **Opt. 2: Enhanced IAQ Design** (1 pt) – design contaminants to lower limits than ASHRAE 61.2-2022 requirements:
 - PM2.5, formaldehyde, ozone
- **Many previous options removed**
 - Entryway systems → moved to prerequisite
 - CO₂ monitors → moved to Air Quality Testing & Monitoring (alongside other requirements)



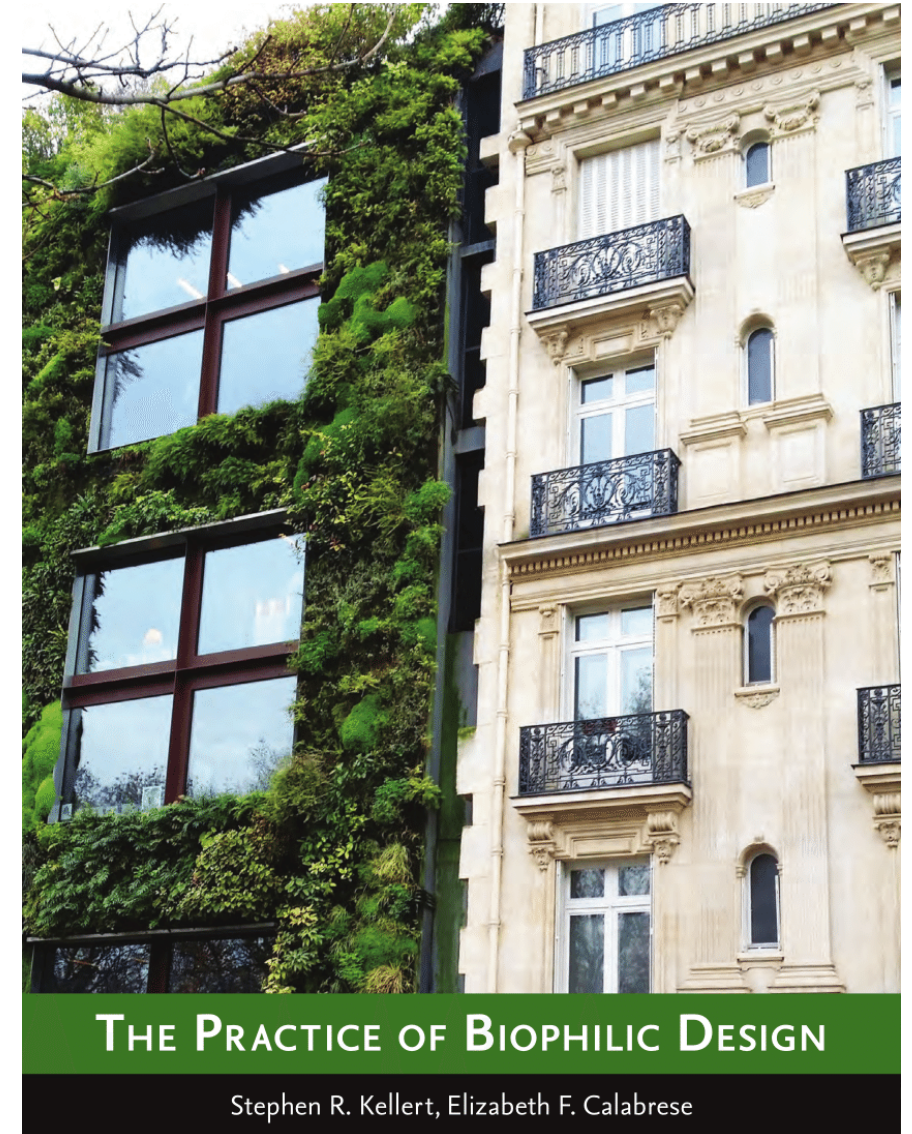
Design Compound or PM2.5	Enhanced IAQP Design Limit*
PM2.5	10 µg/m ³
Formaldehyde	20 µg/m ³
Ozone	10 ppb

EQc2: Occupant Experience



7 points total, many options:

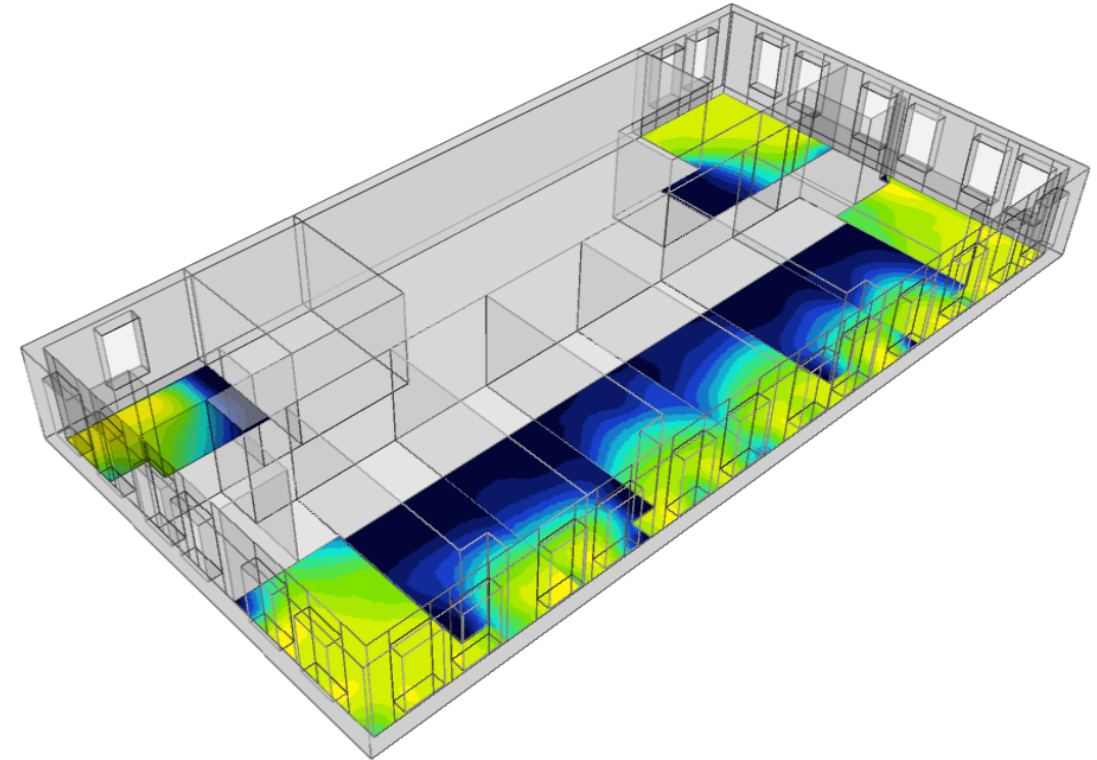
- **Opt. 1: Biophilic Environment** (1-4 pts)
 - Path 1: Integrative Biophilic Design (1 pt)
 - Path 2: Quality Views (2-3 pts)
- **Opt. 2: Adaptable Environment** (1 pt) – replaces “controls” options from prior Thermal Comfort & Lighting credits
- **Opt. 3: Thermal Environment** (1 pt): ASHRAE Std. 55-2023
- **Opt. 4: Sound Environment** (1-2 pts)
 - Path 1: Mapping Acoustic Expectations for Indoor & Outdoor Spaces
 - Path 2: Acoustic Criteria for Indoor & Outdoor Spaces



EQc2: Occupant Experience (continued)



- **Opt. 5: Lighting Environment** (1-6 pts)
 - Path 1: Solar Glare (1 pt)
 - Path 2: Quality Electric Lighting (1 pt): electric light glare control AND CRI requirements
 - Path 3: Proximity to Windows for Daylight (1 pt): within 20ft of glazing
 - Path 4: Daylight Simulation (1-4 pts): Spatial Daylight Autonomy (sDA) analysis

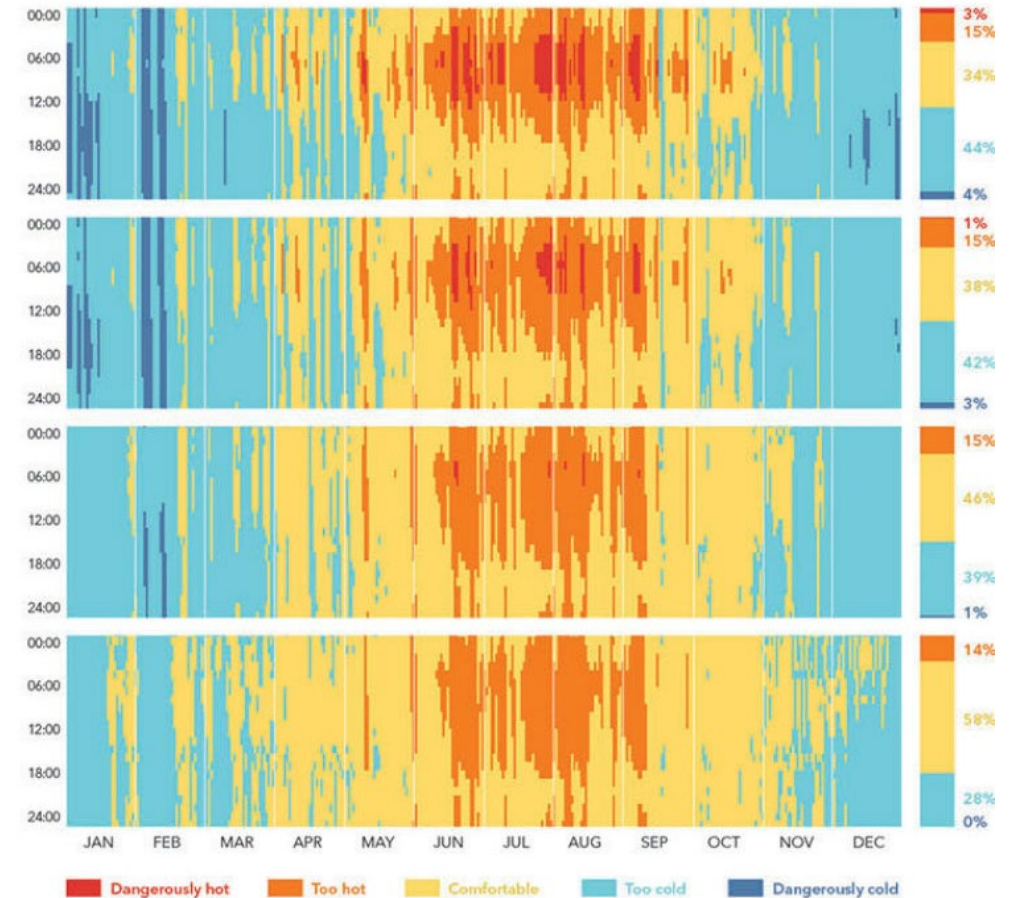


EQc4: Resilient Spaces



2 points total, several options:

- **Opt. 1: Management Mode for Episodic Outdoor Ambient Conditions** (i.e. wildfire smoke) (1 pt)
- **Opt. 2: Management Mode for Respiratory Diseases** (1 pt)
- **Opt. 3: Design for Occupant Thermal Safety During Power Outages** – adapted from Passive Survivability resilience credit
 - Path 1: Extreme Heat (1 pt)
 - Path 2: Extreme Cold (1 pt)
- **Opt. 4: Operable Windows** (1-2 pts) – 50% or 75% of regularly-occupied spaces w/ operable windows per ASHRAE 62.1-2022





LEED v5 BD+C



Project Priorities and Innovation



Project Priorities and Innovation



LEED v4

- **Innovation (1–5 pts):** innovation strategies, pilot credits, exemplary performance (EP max. 2 pts)
- **LEED AP (1 pt)**
- **Regional Priority (1–4 pts):** bonus point for earning up to 4 of 6 pre-selected base credits for the project's location
- **10 points total**

LEED v5

- **PRc1 Project Priorities (up to 9 pts):** Innovation + Regional Priority merged; any combination of:
 - Regional priority credits
 - Project-type credits
 - Exemplary performance
 - Pilot credits
 - Innovative strategies
- **No caps** on individual strategy types
- **PRc2 LEED AP (1 pt):** unchanged



Project Priorities and Innovation

LEED v4	Points	LEED v5	Points
Innovation: Exemplary Performance - EPDs	5 / 5	Exemplary Performance: BPS&P	1
Innovation: Pilot - All-Gender Restrooms		-	-
Innovation: Purchasing Lamps		-	-
Innovation: Occupant Comfort Survey		-	-
Innovation: WELL Feature 87: Beauty & Design		-	-
Innovation: LEED Accredited Professional	1 / 1	LEED AP	1 / 1
Regional Priority: Indoor Water Use Reduction	3 / 4	Regional Priority: Indoor Water Use Reduction	1
Regional Priority: Building Life-Cycle Impact Reduction		-	-
Regional Priority: Material Ingredients		Regional Priority: BPS&P	1
Total	9 / 10	Total	4 / 10

Overview: Big Takeaways



1. Focus on 3 impact areas: Decarbonization, Quality of Life and Ecological Conservation and Restoration (also Resilience)
2. Seven new prerequisites = potential watch-outs & new analyses required
3. Many credits are still largely similar to LEED v4.1
4. Mandatory requirements for Platinum certification for BD+C, ID+C and O+M
5. Optimize Energy Performance no longer provides a reliable base for points
6. New Innovation & Pilot strategies will be needed



Questions?

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IMPROVING OUR WORLD, ONE BUILDING AT A TIME

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