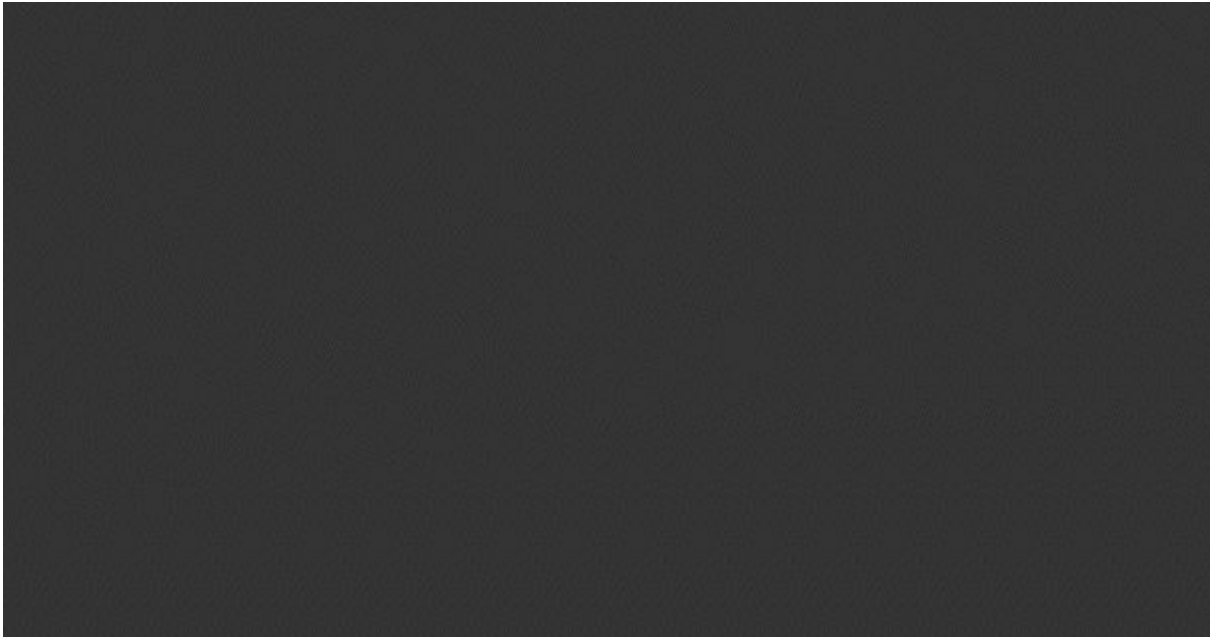


LEED v5 Energy Credits

March 12, 2026





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

LEED v5 for Building Design and Construction

ENERGY AND ATMOSPHERE



The Energy and Atmosphere (EA) credit category in LEED v5 aims to facilitate the design and construction of low-carbon buildings by increasing carbon literacy and providing a clear framework for reducing or eliminating emissions. It focuses on three critical steps for decarbonization: electrification, reduced peak thermal loads, and energy efficiency. The category introduces new credits for electrification and reduced peak thermal loads, while maintaining a strong emphasis on energy efficiency. Additional strategies include enhanced commissioning, renewable energy, grid-interactive systems, and refrigerant management. These approaches can lead to reduced operational costs, improved resilience, and enhanced value for building owners, occupants, and communities.

LEED v5 Platinum-certified projects are expected to achieve industry best practices in energy efficiency, eliminate on-site combustion (except for emergencies), use 100% renewable energy, and reduce embodied carbon. The EA category ultimately supports the goal of decarbonizing buildings by mid-century to combat global energy emissions.

Prerequisite	Fundamental Commissioning and Verification	• Replaced all previously referenced standards with ASHRAE/IES Standard 90.1 as the commissioning requirements without Section 4.2.5.2 exceptions. • Removed allowance for the CxP to be a qualified member of the design or construction team for projects smaller than 20,000 square feet or data center projects. • Modified requirement such that the CxP is to assist in the development, reviewing, and updating of the Owner's Project Requirements (OPR). • Added CxP attendance of one or more meetings with the design team focused on MEP and envelope review comments. • Added CxP review of submittals and substitutions for design deviations. • Added CxP attendance of 50% and 100% construction milestone meetings. • Added 10% sample review of completed contractor documentation. • Added requirement of envelope CxP to include testing in Cx documents and witness of sample of tests (not required by Core + Shell). • Moved ongoing commissioning plan requirement from enhanced commissioning credit to fundamental commissioning credit. • Removed current facilities requirements and operations and maintenance plan development.
Prerequisite	Minimum Energy Performance	• Prerequisite renamed to: EAp Minimum Energy Efficiency. • ASHRAE 90.1 standard updated from 2016 to 2019/2022. • Option 1: (before 2028 only) comply with ASHRAE 90.1-2019 via energy cost or future source energy. • Option 2: comply with ASHRAE 90.1-2022 via energy cost, future source energy, source energy, or site energy.

Prerequisite	Building-Level Energy Metering	- Prerequisite renamed to: EAp Energy Metering and Reporting. - Now includes all energy sources, onsite energy generation, and peak demand. 5-year commitment for reporting monthly uses to LEED remains.
Prerequisite	Fundamental Refrigerant Management	- Option 1 changes to no refrigerant. - Option 2 added; requires a refrigerant inventory, prohibits HCFC refrigerants, an evaluation of alternatives for any refrigerant with a GWP over 700, and requires checks for leaks and implementing repairs prior to substantial completion.
Prerequisite	Operational Carbon Projections and Decarbonization Plan	New prerequisite.
Credit	Enhanced Commissioning	- Added stipulation that CxP must be designated during predesign or very early in design phase. - Updated Enhanced Commissioning (Option 1, Path 1) title to Enhanced Commissioning for MEP systems (Option 1, Path 1) for new construction. - Replaced all enhanced commissioning (Option 1, Path 1) standards with ANSI/ASHRAE/IES Standard 202-2024. Added requirement of at least two coordination/design meetings to discuss review comments and commission. - Updated Envelope Commissioning title to be Enhanced Commissioning for Building Enclosure. Replaced envelope commissioning standards with ASTM E2947-21a. - Removed requirements for specialty enclosure systems with controls and automation. Added building air leakage, water penetration, and infrared imaging field-testing requirements to enhanced commissioning for building enclosure. - Removed pre-requisite of enhanced commissioning for monitoring-based commissioning option. - Added Monitoring-Based Commissioning path of Basic Software for new construction. - Increased MBCxP implementation duration to a minimum of three years. - Added annual MBCxP summary of trends, benchmarks, faults, energy saving opportunities, corrective actions taken and planned actions. - Added two MBCxP reviews of building systems, equipment and operational controls. - Added energy information system platform requirement with up to hourly visualization and reporting. - Added hourly monitoring and visualization of elevators, escalators, moving walkways, commercial kitchen equipment (if space exceeds 10kW of rated capacity), and process equipment (if space exceeds 10kW of rated capacity) for EIS system. - Added an Enhanced Software path for new construction.

Credit	Enhanced Commissioning (continued)	- Added Core + Shell specific options and paths including Enhanced Commissioning for Building Enclosure or Enhanced Commissioning for Building Enclosure and MEP systems, Monitoring-Based Commissioning Process and Communications or Energy Information Systems. - Removed separate data center requirements for enhanced commissioning.
Credit	Optimize Energy Performance	- Credit renamed to: EAc Enhanced Energy Efficiency. - ASHRAE 90.1 standard updated from 2016 to 2019/2022. - Several points reallocated to EAc Electrification Credit and EAc Reduced Peak Thermal Loads Credit. - ASHRAE Advanced Energy Design Guides 50% option removed. - Option 1: reduction of regulated loads per version of 90.1 used in Minimum Energy Efficiency Prerequisite AND/OR reduction of unregulated loads. - Option 2: whole building simulation to show improvement over 90.1 version used for EAp Minimum Energy Efficiency; option to include on-site renewable energy production.
Credit	Advanced Energy Metering	Credit removed and partially incorporated into: EAc Grid Interactive credit, Option 3.
Credit	Grid Harmonization	- Credit renamed to: EAc Grid Interactive. - Can use a combination of options 1 through 4. - Option 1: Energy Storage (Added). - Option 2: Demand Response Program. - Option 3: Automated Demand Side Management via System or BAS. - Option 4: Power Resilience for critical systems (Added).
Credit	Renewable Energy	- New calculation method based on Tier 1, Tier 2, and Tier 3 renewables. - Still subject to contract length, vintage, location, and EAC/REC ownership requirements. - Core + Shell projects have the option to incorporate renewable ready design.
Credit	Enhanced Refrigerant Management	- Option 1: no or low GWP refrigerant. - Option 2: design, installation, and operational measures to reduce refrigerant leakage. - Option 3: (food retailers only) Green Chill Certification.
Credit	Electrification	New credit.
Credit	Reduce Peak Thermal Loads	New credit.
Credit	Grid Interactive	New credit. Incorporates LEED v4.1 EAc Grid Harmonization credit and portions of EAc Advanced Energy Metering credit.

Energy and Atmosphere (EA)

		v5 Points	v4.1 Points		
EAp1	Operational Carbon Projection and Decarbonization Plan	Required			NA
EAp2	Minimum Energy Efficiency	Required		Fundamental Commissioning and Verification	EAp1
EAp3	Fundamental Commissioning	Required		Minimum Energy Performance	EAp2
EAp4	Energy Metering and Reporting	Required		Building-Level Energy Metering	EAp3
EAp5	Fundamental Refrigerant Management	Required		Fundamental Refrigerant Management	EAp4
EAc1	Electrification	5			NA
EAc2	Reduce Peak Thermal Loads	5			NA
EAc3	Enhanced Energy Efficiency	10	18	Optimize Energy Performance	EAc2 
EAc4	Renewable Energy	5	5	Renewable Energy	EAc5
EAc5	Enhanced Commissioning	4	6	Enhanced Commissioning	EAc1
EAc6	Grid Interactive	2	2	Grid Harmonization	EAc4
			1	Advanced Energy Metering	EAc3
EAc7	Enhanced Refrigerant Management	2	1	Enhanced Refrigerant Management	EAc6
		33	33		

LEED v5 Key Energy Strategies

- Electrification, electrification, electrification!
- Renewables - Net Zero is on the scale!
- Infiltration and Thermal Bridging
- Balanced Ventilation and Energy Recovery
- Reduce Peak Thermal Loads and Intensity
- Reduce Envelope Loads
- Energy Storage
- Demand Response
- Resiliency
- Refrigerant Leakage

LEED v5 EAc3: Enhanced Energy Efficiency

Option 1: Prescriptive Path (1-10 points)

Path 1: Regulated Loads (1-7 points)

- 90.1-2019 provisions + Section 11 credits (1-5 points)
- 90.1-2022 provisions + Section 11 credits (4-7 points)

Path 2: Plug and Process Loads (1-4 points)

- Plug load management (1 point)
- Efficient plug and process load equipment (such as ENERGY STAR®) (1-4 points)
- Plug and process load exceptional calculation (1-4 points)

Option 2: Energy Simulation (1-10 points)

- 90.1-2019 or 90.1-2022 Appendix G
- Future source energy metric

Points	Savings Excluding On-Site Renewables	Savings Including On-Site Renewables
1	3%	10%
2	6%	20%
3	9%	30%
4	12%	40%
5	15%	50%
6	18%	60%
7	21%	70%
8	24%	80%
9	27%	90%
10	30%	100%

LEED v5 EAc3 Option 2: Energy Simulation

- ASHRAE 90.1-2019 equivalency
- Stable Baseline - ASHRAE 90.1-2004
- Increasing stringency through **Building Performance Factor (BPF)** applied to **regulated energy**

Building Type	Climate Zone																		
	0A	0B	1A	1B	2A	2B	3A	3B	3C	4A	4B	4C	5A	5B	5C	6A	6B	7	8
Multifamily	0.74	0.69	0.73	0.70	0.73	0.70	0.71	0.70	0.63	0.60	0.71	0.69	0.68	0.70	0.70	0.68	0.68	0.68	0.74
Healthcare/Hospital	0.72	0.72	0.73	0.73	0.74	0.71	0.72	0.74	0.71	0.62	0.73	0.71	0.74	0.73	0.80	0.73	0.77	0.78	0.79
Hotel/Motel	0.72	0.71	0.72	0.71	0.71	0.70	0.71	0.73	0.72	0.61	0.73	0.73	0.71	0.73	0.74	0.70	0.72	0.70	0.70
Office	0.68	0.68	0.64	0.68	0.58	0.68	0.57	0.68	0.55	0.55	0.61	0.57	0.58	0.61	0.59	0.58	0.60	0.54	0.58
Restaurant	0.65	0.62	0.63	0.61	0.62	0.58	0.63	0.63	0.63	0.67	0.66	0.66	0.70	0.70	0.68	0.73	0.72	0.74	0.77
Retail	0.57	0.54	0.53	0.53	0.48	0.47	0.47	0.47	0.47	0.52	0.50	0.56	0.57	0.53	0.59	0.58	0.56	0.53	0.60
School	0.57	0.57	0.58	0.57	0.55	0.54	0.57	0.51	0.49	0.48	0.51	0.52	0.51	0.53	0.51	0.53	0.50	0.51	0.58
Warehouse	0.28	0.30	0.24	0.27	0.23	0.24	0.27	0.23	0.20	0.33	0.26	0.28	0.40	0.32	0.29	0.44	0.38	0.40	0.44
All Others	0.65	0.62	0.64	0.62	0.57	0.54	0.57	0.56	0.58	0.59	0.57	0.60	0.60	0.59	0.65	0.62	0.62	0.61	0.64

- ★ Example: an office in climate zone 4A would need to show 45% savings in regulated energy compared to 90.1-2004 to minimally comply

LEED v5 EAc3 Option 2: Energy Simulation

Future source energy metric

- Site-to-source conversion factor of **2.0 for electricity** vs. **~1.05 for gas**
- Gas Baseline heating for climate zones 3B, 3C, 4-8
- Climate zone 4A office example:

<u>Baseline (Gas Heat)</u>	<u>Proposed (Gas Heat)</u>	<u>Proposed (Inefficient Electric Heat)</u>	<u>Proposed (Efficient Electric Heat)</u>
Site EUI: • 50 kBtu/ft² total • 35 kBtu/ft² electric • 15 kBtu/ft² gas Future Source EUI: • 86 kBtu/ft² Performance Index Target: • 0.65	Site EUI: • 30 kBtu/ft² total • 21 kBtu/ft² electric • 9 kBtu/ft² gas Future Source EUI: • 52 kBtu/ft² Performance Index: • 0.60 Savings for future source energy metric: 8% Savings for energy cost metric: 8%	Site EUI: • 28 kBtu/ft² total • 28 kBtu/ft² electric • 0 kBtu/ft² gas Future Source EUI: • 56 kBtu/ft² Performance Index: • 0.65 Savings for future source energy metric: 0% Savings for energy cost metric: -7%	Site EUI: • 24 kBtu/ft² total • 24 kBtu/ft² electric • 0 kBtu/ft² gas Future Source EUI: • 48 kBtu/ft² Performance Index: • 0.56 Savings for future source energy metric: 15% Savings for energy cost metric: 9%

★ Incentivizes electrification while still penalizing inefficient electric heating

LEED v5 EAc3 Option 2: Energy Simulation

LEED Energy Performance Point Threshold Progression (New Construction)

LEED Version	v4	v4 (2024)	v4.1	v5
ASHRAE 90.1	2010	2010	2016	2019
Metric	Cost	Cost/Source + GHG	Cost + GHG	Future Source
Savings Thresholds Relative to 90.1 Version Referenced				
Prerequisite	5%	10%	0%	0%
6 Points	16%	30% + 30%	15% + 16%	18%
12 Points	29%	45% + 50%	30% + 40%	30% + 2 EAc 1/c2 points
18 Points	50%	60% + 85%	45% + 80%	30% + 8 EAc 1/c2 points
Approximate Savings Thresholds Relative to 90.1-2010				
Prerequisite	5%	10%	10%	20%
6 Points	16%	30% + 30%	30% + 30%	40%
12 Points	29%	45% + 50%	45% + 50%	50% + 2 EAc 1/c2 points
18 Points	50%	60% + 85%	60% + 85%	50% + 8 EAc 1/c2 points

Key Takeaways

- v4/v4.1 Optimize Energy Performance (18 points) separated into EAc1: Electrification (5 points), EAc2: Reduce Peak Thermal Loads (5 points), and EAc3: Enhanced Energy Efficiency (10 points)
- Focus on decarbonization
- Electrification (through efficient sources) incentivized through EAc1 points and EAc3 future source energy metric
- v5 Enhanced Energy Efficiency thresholds incrementally more stringent than v4/v4.1
- Stringency varies by building type, climate zone, and fuel sources
- Combine building energy efficiency, electrification, load reduction, and on-site renewables for maximum energy points

Q&A

-Do the Building Performance Factors (BPFs) affect the baseline model's annual energy use? Based on Table 1, our understanding is that for new projects, the baseline annual energy use for regulated loads is effectively reduced by approximately 20%–70%, depending on the building type and climate zone. Is this interpretation correct, or are we overlooking an important aspect of the methodology?

Additionally, is there a comparison between ASHRAE 90.1-2010 and ASHRAE 90.1-2019 that demonstrates how the newer standard has strengthened the baseline against which projects are evaluated?

More Q&A

- For multifamily four stories and above, can ENERGY STAR appliances (hot water and energy) contribute to the Minimum Energy Efficiency prerequisite (BD+C)?
- Can projects claim credit for district energy system (DES) efficiency, and does LEED v5 provide guidance for combined heat power (CHP) systems within a DES?

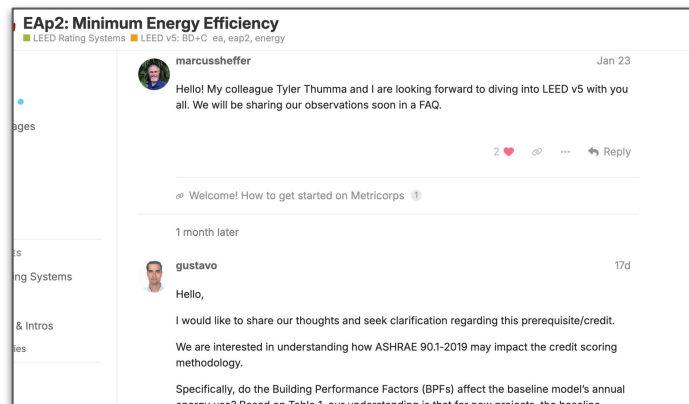
Got more LEED v5 Q&A?

- “My gap analysis from v4 to v5 is showing my client’s project going from Platinum to Silver. What are others seeing?”
- “How are the new prerequisites affecting project schedules and eligibility?”
- “How are others selling the added ‘soft costs’ for v5? (WBLCA, impact assessments)

Where will you turn for LEED project support?

Metricorps = LEED v5 Forum and Credit Guidance

- Credit-by-credit LEED v5 forum discussions
- Expert community – there when you need it
- Cost guides and templates



☰ Topic		Replies	Views
EAp2: Minimum Energy Efficiency LEED v5: BD+C ea, eap2, energy		2	21
EAp3: Fundamental Commissioning LEED v5: BD+C leed-v5, ea, prerequisite, commissioning, eap3		4	22
EAc5: Enhanced Commissioning LEED v5: BD+C leed-v5, ea, commissioning, eac5		1	4
EAc2: Reduce Peak Thermal Loads LEED v5: BD+C leed-v5, ea, resilience, eac2		1	6
Mrc4: Building Product Selection and Procurement LEED v5: BD+C leed-v5, circularity, transparency, mrc4		2	8
Mrc3: Low-Emitting Materials LEED v5: BD+C mrc3, low-emitting		2	7

Thank you! Please feel free to reach out:

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