


LEED v5 – A whole new approach

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Learning Objectives




List the objectives of the USGBC in the development of the LEED v5 rating system.



Explain the new development process planned for the LEED rating system.




Identify the credits and prerequisites that make up the Materials & Resources category.




Describe the type of documentation needed from building product manufacturers to comply with LEED requirements.

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LEED v5 - Objectives



Decarbonization



Quality of life



Ecological conservation and restoration

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LEED v5 - Objectives



Resilience –
under 'Quality of Life'



Equitable Outcomes –
under 'Quality of Life'

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Objectives



Decarbonization

- Facilitating Market Transformation Towards Operational Decarbonization** +
- Addressing All Significant Sources of Carbon Emissions, Not Only Operational** +
- Anticipating and Addressing Future Challenges** +

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Objectives



Quality of life –
Health & Well-being


- Sustaining Quality Air During Regular Operation and Under Adverse Conditions** +
- Understanding and Accommodating Project Specific Occupant Needs** +
- Integrating Health/Well-being Benefits Alongside Environmental Considerations** +

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Objectives

Supporting Beneficial Systems Operation Towards Safeguarding of Ecosystems	+
Integrating Nature-Based Principles into Maintenance and Purchasing Practices	+
Protecting and Preserving Local Biodiversity and Ecosystems	+




Ecological conservation and restoration

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LEED v5 - Objectives



Resilience –
under 'Quality of Life'


Understanding Climate and the Risks Posed by Shocks and Stressors	+
Rewarding Strategic Preparedness for Resilience Events	+
Rewarding Operational Preparedness for Resilience Events	+

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LEED v5 - Objectives

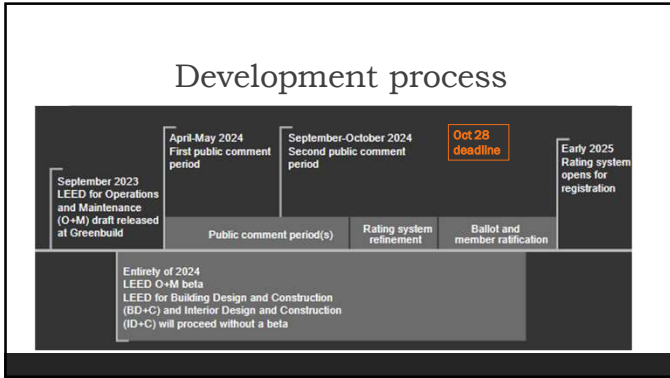
Cultivating Education, Awareness and Action	+
Addressing Systemic Inequalities in the Built Environment	+
Engaging the Community and Prioritizing Needs of Marginalized Populations	+



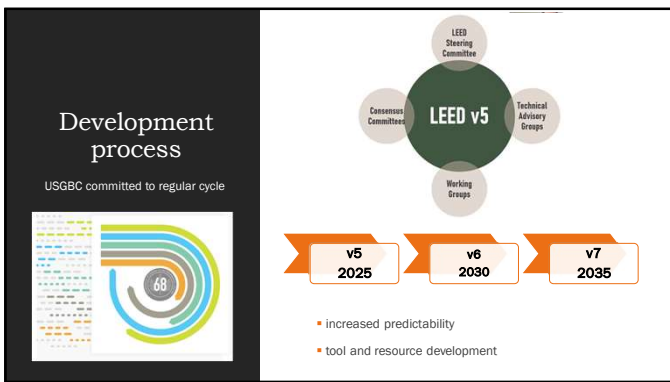
Equitable Outcomes –
under 'Quality of Life'

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Credits

Based on 1st public comment draft

LEED v5 for Design and Construction, New Construction		System Goals		
		Decarbonization	Quality of Life	Resilience, Conservation & Restoration
Energy, Process, Resources & Assessments 1				
Prereq	Climate Resilience Assessment		+	
Prereq	Social Equity Assessment		+	
Prereq	Carbon Assessment	+		
Credit	Integrative Design Process	+	+	+
Location & Transportation 13				
Credit	Sensitive Land Protection		+	+
Credit	Equitable Development		+	+
Credit	Compact and Connected Development	+	+	+
Credit	Active Travel Facilities	+		
Credit	Transportation Demand Management	+	+	
Credit	Electric Vehicles	+		
Sustainability Sites 11				
Prereq	Minimized Site Disturbance			+
Prereq	Resilient Site Design		+	
Credit	Protect and Restore Biodiverse Habitat			+
Credit	Accessible Open Space		+	+
Credit	Rainwater Management		+	+
Credit	Enhanced Resilient Site Design			+
Credit	Heat Island Reduction	+	+	+
Credit	Light Pollution and Bird Collision Reduction			+

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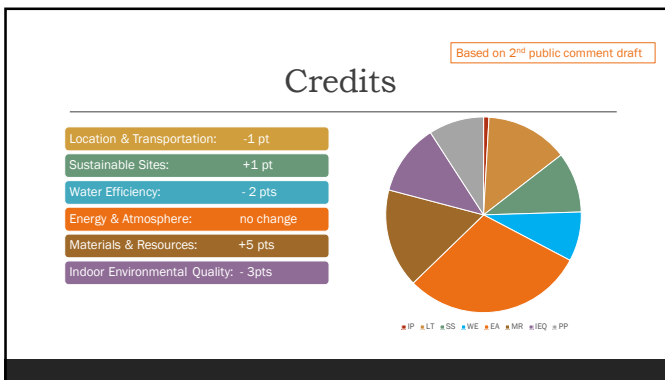
Based on 1st public comment draft

Credits

LEED v5 Building Design + Construction: New Construction

Decarbonization	Quality of Life	Ecosystem Preservation and Restoration
decarbonization 71 points	quality of life 33 points	ecosystem 37 points

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Changes from LEED v4.1


- new platinum requirements**
 - earn 8 pts under Enhanced Energy Efficiency
 - no on-site GHG emissions (Electrification)
 - 100% renewable energy
 - 20% reduction in embodied carbon
- adjustments to many credits**
- changes from LEED v4.1:
<https://www.usgbc.org/sites/default/files/2024-05/LEED-v5-summary-of-changes-LEED-v4-LEED-v41-BDC.pdf>

NEW PREREQUISITES

- climate resilience assessment (IP)
- human impact assessment (IP)
- carbon assessment (IP)
- operational carbon projection & decarbonization plan (EA)
- assess & quantify embodied carbon (MR)
- construction management plan (IEQ)

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Materials-related credits



- **Climate Resilience Assessment (IP)** – required
- **Carbon Assessment (IP)** – required; based on operational carbon, refrigerants, and embodied carbon
- **Rainwater Management (SS)**
- **Enhanced Resilient Site Design (SS)** – includes high wind and hail (FORTIFIED), wildfire (site-focused), green infrastructure, heat reduction measures
- **Heat Island Reduction (SS)**
- **Reduce Peak Thermal Loads (EA)** – includes thermal bridging per ASHRAE 90.1-2022, Sec. 5.5.5 in all climate zones and improved envelope options

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Materials-related credits




- **Assess & Quantify Embodied Carbon (MR)** – required
 - Quantify GWP for enclosure & hardscape including masonry to create a baseline
- **Building and Material Reuse (MR)**
- **Reduce Embodied Carbon (MR)**
 - Whole Building LCA or
 - Total embodied carbon for the project or
 - Procure low-carbon structure, enclosure & hardscape mats (as compared with industry averages from CLF or EPA)
 - Material categories not specifically identified
- **Low-Emitting Materials (MR)** – moved from IEQ; non-inherently emitting list is removed
- **Building Products Disclosure & Optimization (MR)** – only non-structural/interior products; HPD, recycled, etc.
- **Construction & Demolition Waste Diversion (MR)**

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Materials-related credits



- **Occupant Experience (IEQ)** – includes acoustics
- **Resilient Spaces (IEQ)** – includes management for power outages (extreme heat or cold) and building safety (safe rooms) for tornadoes, hurricanes, high-winds
- **Project Priorities and Innovations (IN)**



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Documentation

EMBODIED CARBON

- comparisons to 'industry benchmarks' and 'industry averages' from CLF and EPA
- comparisons with baseline project; baseline project not well defined
- relies on EPDs

EPD "Nutrition" Label

Your Building Product

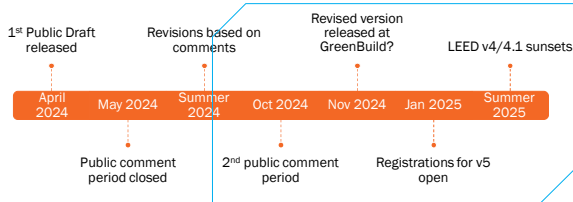
Amount per Unit	TOTAL
LCI IMPACT MEASURES	
Primary Energy (MJ)	32.4
Global Warming Potential (kg CO ₂ e)	0.86
Ozone Depletion (kg CFC-11 eq)	1.80E-06
Acidification Potential (kg H ⁺ eq)	0.93
Eutrophication Potential (kg N eq)	6.43E-04
Photo-Oxidant Creation Potential (kg O ₃ eq)	0.121

Your Product's Ingredients: Listed Here



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Next steps



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QUESTIONS?



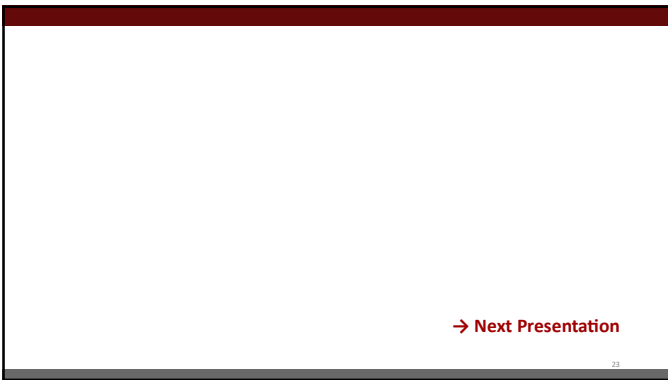
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THANK YOU!

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