



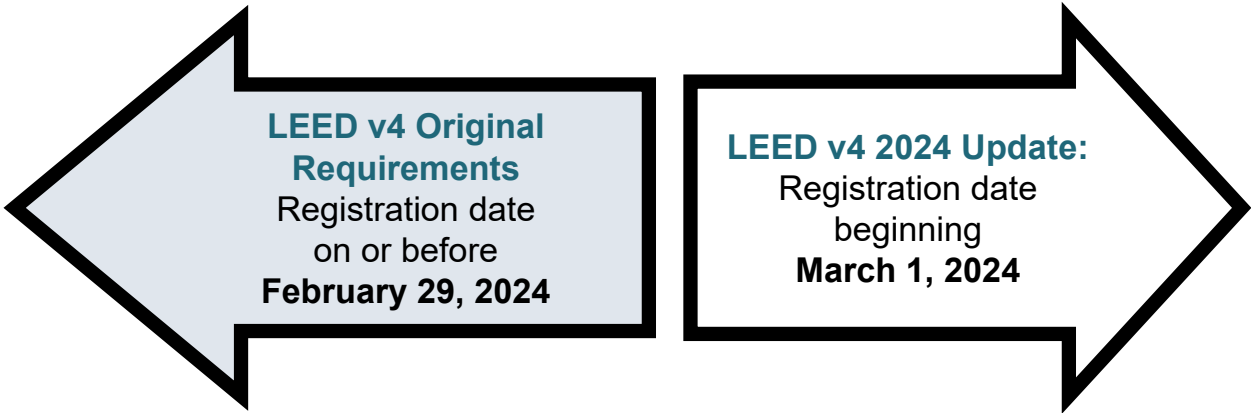
LEED v4 2024 Energy Update

WHY?

Meeting the
urgency of climate
imperatives.




WHEN?



APPLICABILITY:

v4 Rating System Family	Prerequisite: Minimum Energy Performance	Credit
BD+C Building Design + Construction	x	Optimize Energy Performance
ID+C Interior Design + Construction	x	Optimize Energy Performance
BD+C: Multifamily Residential	x	Annual Energy Use
BD+C: Homes		Annual Energy Use (HSA only)



WHAT CHANGES?

1

Raises thresholds for energy performance and GHG emissions reductions

2

Dual metric for GHG Emissions and energy efficiency

3

Home Size Adjustment (HSA)
(Multifamily / Homes)

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Prerequisite: Minimum Energy Performance
Percent Improvement beyond ASHRAE 90.1-2010

COST	OR	SOURCE ENERGY	OR	GHG Emissions
Building Design + Construction (BD+C)			Interior Design + Construction (ID+C)	
Most rating systems	Core + Shell, Data Center, High Process	Healthcare		
10%	8%	5%	6% / 8%	

Includes onsite renewable contribution; excludes off-site renewable contribution

CREDIT: DUAL METRIC

Table 1 (BD+C: New Construction)
ASHRAE 90.1-2010 % Improvement
COST OR SOURCE ENERGY

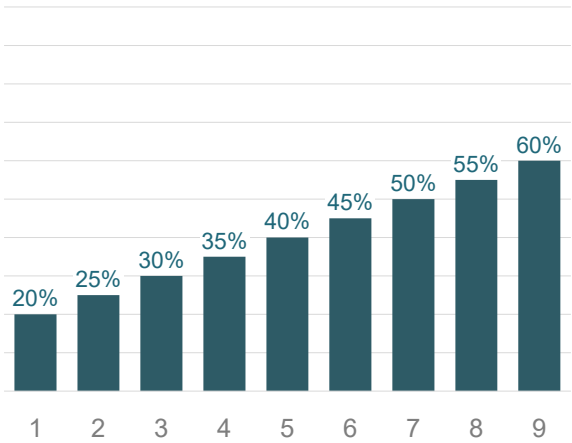
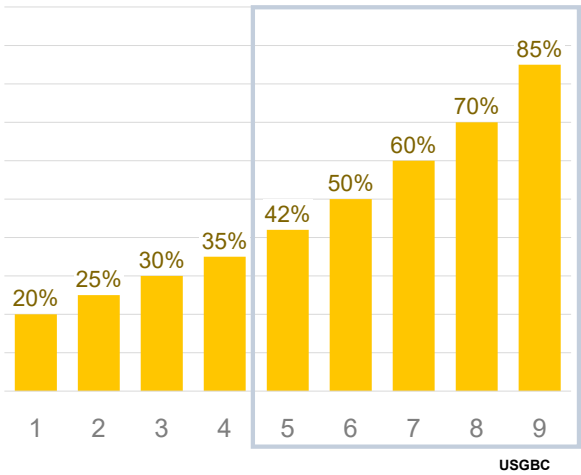
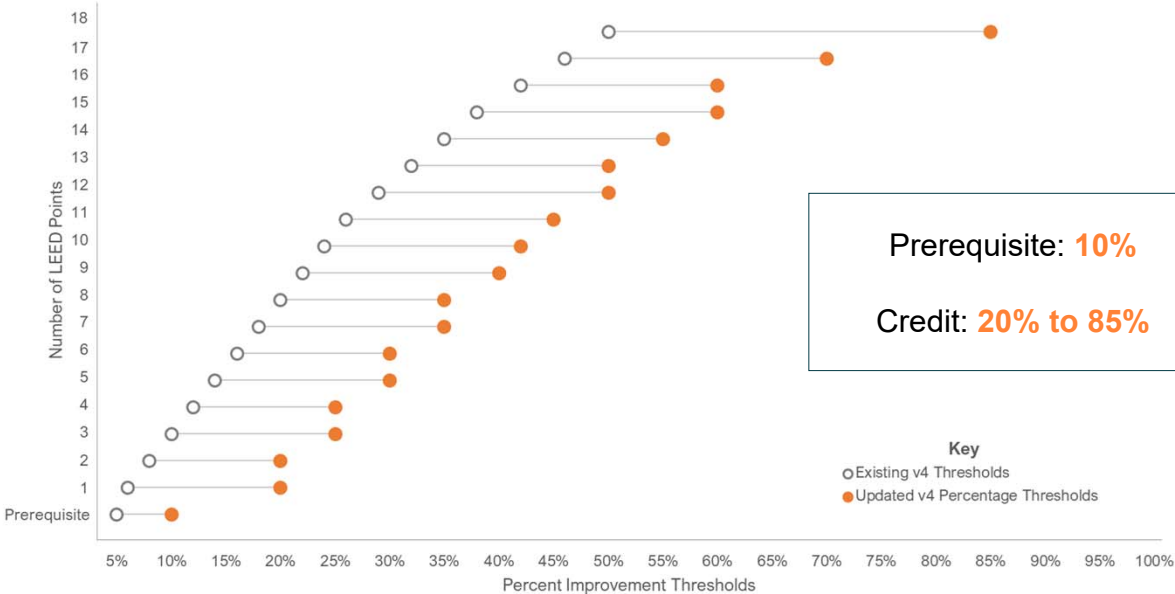


Table 2 (BD+C: New Construction)
ASHRAE 90.1-2010 % Improvement
GHG EMISSIONS

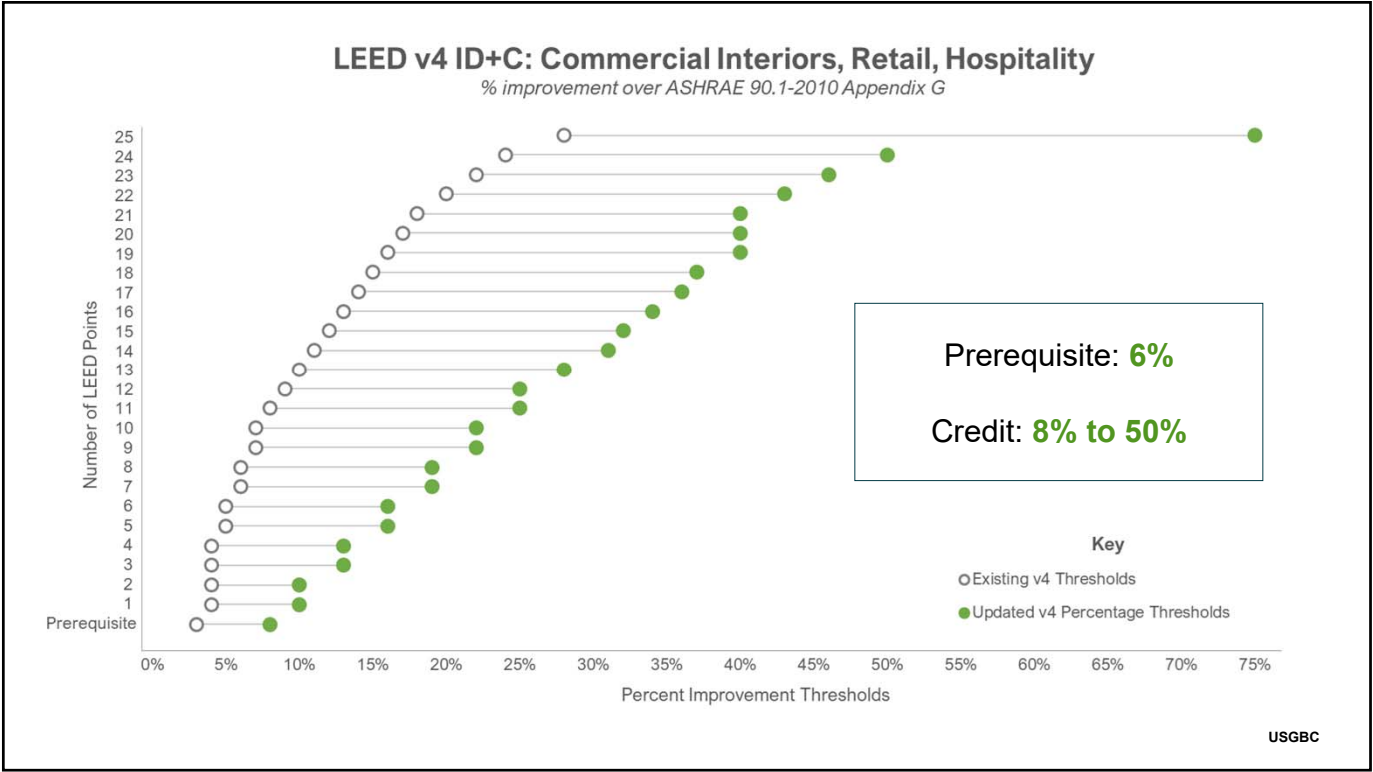
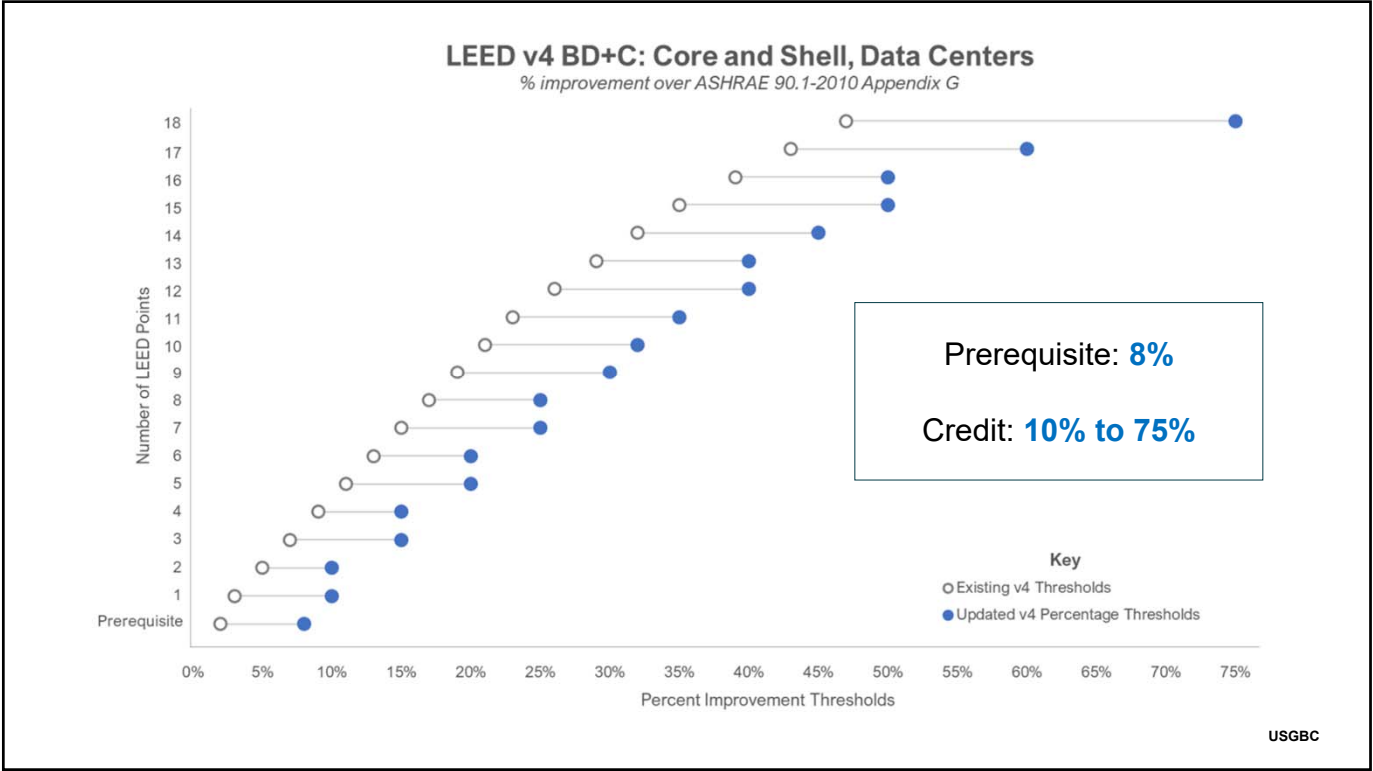


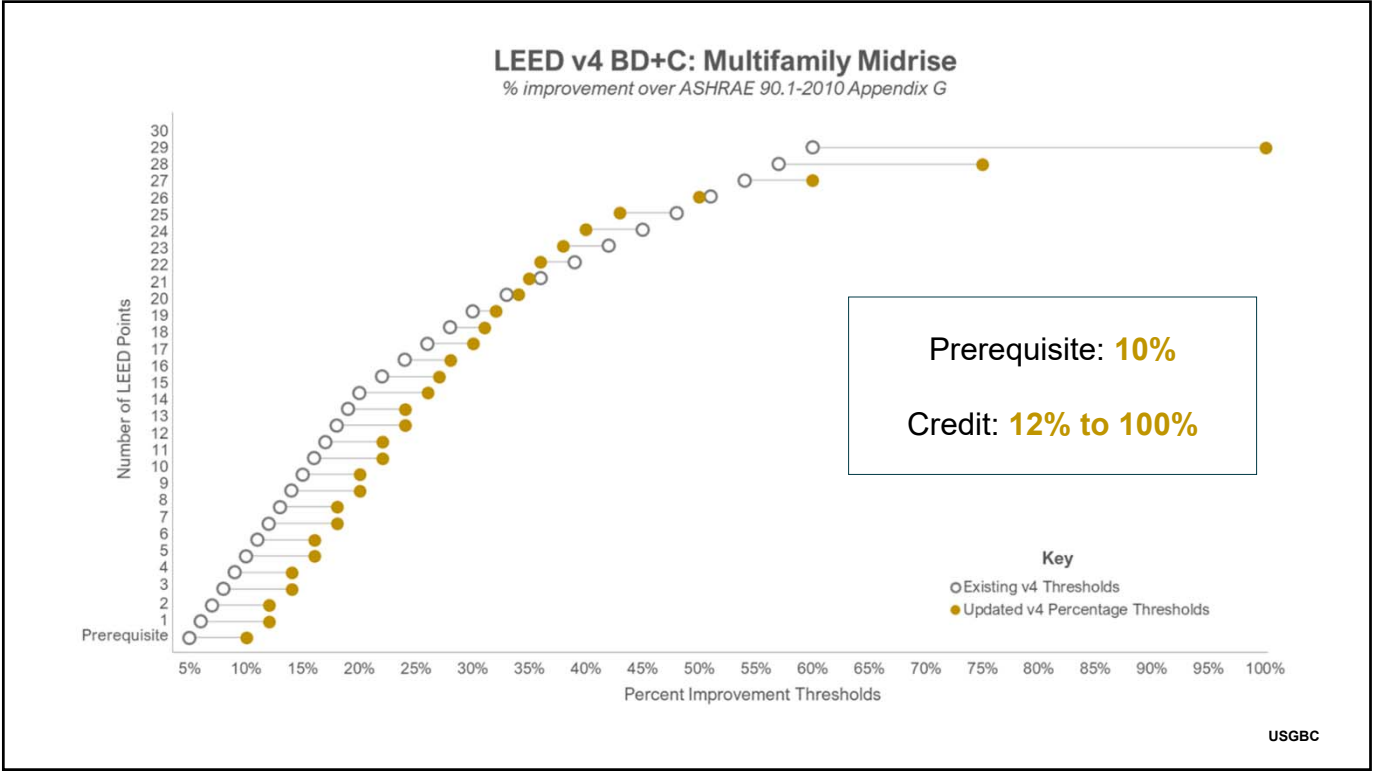
LEED v4 BD+C: New Construction, Warehouses and Distribution Centers, Hospitality, Retail

% improvement over ASHRAE 90.1-2010 Appendix G



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Renewable Contribution



Onsite Renewable Energy (or on-campus)

Contribution recognized for all referenced metrics for Prerequisite: Minimum Energy Efficiency and Credit: Optimize Energy Performance (Annual Energy Use)



New Offsite Renewable Energy

(LEED v4 EAc Renewable Energy Production: Community Renewable Energy Tier 2 New Offsite renewable Energy from LEED v4.1 EAc Renewable Energy)

Contribution recognized for GHG Emissions Metric for EA Credit Optimize Energy Performance. (Renewable grid region typically needed)

≥ 1 for all electric and combustion sources

SOURCE ENERGY

Site energy plus estimated energy consumed or lost in the extraction, processing, and transportation of primary energy forms

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V4 RESIDENTIAL RATING SYSTEMS

Home Size Adjustment (HSA)
Credit: Annual Energy Use

1 point per
4%
decrease in
Home Size

→

1 point per
7%
decrease in
Home Size


v4 Original

V4 2024 Update

Multifamily Midrise
**Prerequisite: Minimum
Energy Performance**

- Commissioning:**
Reference updated to current ENERGY STAR Multifamily New Construction (MFNC)
- Energy Performance:**
Same as BD+C

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LEED v4.1 Credit Substitution

1

Available for all BD+C / ID+C projects.
(Multifamily Midrise: similar paths available through Addenda)

2

Prescriptive options

3

ASHRAE 90.1-2016
(or later)


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EAp161 Electrification ACP

Energy Simulation Performance Path

Alternative Metrics:
Demand Adjusted Energy + Future Hourly GHG Emissions:

- Electrification
- Peak electric demand reduction
- Energy Efficiency
- Renewable Energy



EAp160 Electrification ACP:

Prescriptive Path

PREREQUISITE

- ASHRAE 90.1-2016 or equivalent
- Analyze efficiency in early design

A. Reduce emissions from on-site combustion (4 to 7 points *)

B. Reduce heating and cooling peaks (6 points)

C. Energy efficiency (5 to 8 points*)

*Depends on building type and climate zone

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Cold dark shell
v4.1 Prescriptive

ID+C in efficient
base building
v4.1 Performance

90.1-2010 code
v4

Major
Renovation
v4

OPTIONS

LEED v4 Energy Update FAQ

www.usgbc.org/resources/leed-v4-energy-update-faq

BD+C (Commercial)

ID+C

ID+C
minimal scope
v4.1 prescriptive

Electrification
Pilot ACP 160 or 161

All-electric baseline
better (CZ3B to 8)
v4

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Questions?

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