



# Fact Sheet: Roundtable Comments on Zero Emissions Buildings (ZEB)

January 18, 2024

## Issue

On January 3, 2024, the Biden administration issued a draft definition for the term “**Zero Emissions Buildings**” (ZEB). This voluntary federal-level definition could bring much-needed consistency to help commercial real estate owners and investors establish long-term goals for buildings that align with varying climate programs across numerous jurisdictions and international frameworks.

**An eventual ZEB definition could influence local, national, and international climate policy.** A standard backed by the U.S. government can provide uniform metrics that measure progress to cut energy consumption and emissions in individual buildings and across portfolios.

The Department of Energy’s (DOE) [proposed ZEB definition draft](#) defines a zero emissions building with three criteria:

- **Highly Energy Efficient**
- **Free of On-Site Emissions from Energy Use**
- **Powered Solely from Clean Energy**

**The Real Estate Roundtable supports the direction of the ZEB criteria outlined in the Draft.** The Roundtable’s Sustainability Policy Advisory Committee (SPAC) is working on comments in response to the draft definition—due to DOE by February 5, 2024. The points below provide an initial direction of what the Roundtable intends to emphasize in the comments to DOE.

**The Roundtable and a coalition of real estate organizations** also sent a [Sept. 14 letter to the Environmental Protection Agency](#) supporting the development of standard methods and metrics for buildings and tenants to quantify their emissions.

## Roundtable Comments

### General Comments

- A ZEB *definition* from DOE will send a powerful signal to the real estate marketplace regarding a building’s zero emissions status — even though no agency has the authority to issue a ZEB *label* for federal brand certification.
  - ZEB’s acceptance and rigor will be enhanced by qualified third-party verifiers through diverse applications such as the definition’s incorporation into NGO rating systems; corporate





## Fact Sheet: Roundtable Comments on Zero Emissions Buildings (ZEB)

January 18, 2024

climate-related financial disclosures filed with government agencies; green building investment, lending, and incentive strategies; commercial leases for government tenants; and building performance mandates enacted by cities and states.

- The ZEB definition will need periodic updates.
  - The Roundtable recommends a five-year review cycle.
  - Building owners should denote the calendar years in which a qualified, independent professional has verified an asset as meeting the national definition.
  - Definitional updates and new ZEB verifications at this cadence should depend on 12 months of whole-building energy use and emissions data for a given asset.
- The ZEB definition should be modified at a pace reflecting EPA's improvements to Portfolio Manager.
  - Because Portfolio Manager does not yet capture metrics for refrigerants and embodied carbon, The Roundtable agrees with the Draft's approach to address such emissions in future versions.
  - Tracking clean power purchases, such as through renewable energy certificates (RECs), should be a priority for Portfolio Manager's ongoing enhancements.
- DOE should expressly recognize EPA's imminent *low* carbon "NextGen" label as the key intermediate step to show a building's progress toward *zero* emissions. (See RER's "[Next Gen" fact sheet](#), March 2023)

### Intended Comments on ZEB's Energy Efficiency Draft Criteria

- ZEB is restricted to existing assets that are "top of class" ENERGY STAR performers. The Roundtable supports this but emphasizes the need for parallel federal programs that recognize significant reductions in energy use by low-performing buildings.
  - The most climate benefits from the real estate sector can be achieved by improving efficiency in under-performing assets.
  - We strongly encourage the Biden-Harris administration to create further recognition and incentive programs that lift the floor for buildings with low ENERGY STAR scores — not just the ceiling for buildings already performing at high levels.
- ZEB's path for new buildings should track the section 179D standard for new construction passed by Congress in the *Inflation Reduction Act (IRA)*, and now permanent in the U.S. tax code.





## Fact Sheet: Roundtable Comments on Zero Emissions Buildings (ZEB)

January 18, 2024

- The ZEB definition for new construction should allow compliance based on 179D's standards for a minimum 25% modeled performance over the 2019 edition of the ASHRAE 90.1 reference standard.
- After a new build is five (5) years old, subsequent ZEB verifications for that asset should apply under "ZEB Existing Building" criteria.
- Regarding single and multifamily homes, DOE should clarify that ZEB eligibility reaches both DOE and EPA's multiple residential efficiency "labels" so all types of homes have optimal opportunities to participate.

### Intended Comments on ZEB's Draft Emissions Criteria

- A ZEB asset should aim to eliminate all building operational emissions.
- We strongly agree with the Draft definition's approach to exclude on-site emergency power generation from "zero" emissions calculations.
- "Zero emissions" in a building must reflect "whole building" operations and encompass leased-space emissions at the tenant level.
  - 12 months of third-party verified data should support ZEB claims.
  - The federal government should support ZEB's goals by designing policies that drive utilities and tenants to provide building owners with at least 12 months of whole-building emissions and energy use data.

### Intended Comments on ZEB's Clean Energy Use Criteria

- The final ZEB definition should clarify that a building's 100% renewable energy requirement pertains to all carbon-free power sources used to generate electricity in the U.S. that are reflected in EPA's commonly used "eGRID Power Profiler" tool — namely, nuclear, hydro, wind, biomass, solar, and geothermal.
- The Roundtable strongly agrees with the Draft's allowance for market-based clean power measures such as RECs and other energy attribute certificates, power purchase agreements, and green tariffs.
- The Roundtable offers the following considerations not just to enable the goal of decarbonized buildings, but also for a decarbonized power grid:
  - We support planned upgrades to Portfolio Manager to include REC recording and tracking functions that can support "Credible Claims" of ZEB status under EPA's current Green Power Partnership [guidelines](#), which are expressly referenced in the Draft.





## Fact Sheet: Roundtable Comments on Zero Emissions Buildings (ZEB)

January 18, 2024

- The Draft does not limit RECs or similar certificate purchases to a specific geographical reach within a building's radius. We agree that this is the right approach. Real estate owners and financiers need the flexibility to purchase RECs and credibly expand clean power supplies in locations that may be distant from their buildings.
- A geographic restriction on REC purchases would undermine the Biden-Harris administration's clean electricity ambitions.
- Buildings that rely on district heating and cooling must have opportunities to attain ZEB criteria through credible carbon offsets under guidelines in development by the U.S. Commodity Futures Trading Commission.

