

# ZeroNetReady™

## ZeroNetReady™ Defined

**ZeroNetReady™ (ZNR)** is a state of “readiness” that a building is in as it prepares for the conversion and path towards becoming a Zero Net Energy (ZNE) operation.

**CEES-Advisors & The Executive Institute for Energy Efficiency (EIEE)** have developed this Market Preparedness Strategy in using the *technologies*, systems and operational best practices which are necessary in obtaining a **ZeroNetReady™** status. It is proven that these prerequisites are “fundamental” in all High Performance Buildings as well as ZNE buildings.

Let’s first start by defining what a ZNE building is; as defined in 2015 by the U.S. Department of Energy (DOE), they reached a significant milestone in bringing the building community together by releasing a common definition for a zero energy building, or what is also referred to as a “net zero energy” or “zero net energy” building. After leading an extensive stakeholder engagement process over the past year and a half, the Energy Department released its findings in the recently published “*A Common Definition for Zero Energy Buildings*,” which states that a Zero Energy Building is “an energy-efficient building where, on a source energy basis, the actual annual delivered energy is less than or equal to the on-site renewable exported energy.”

This definition also applies to campuses, portfolios, and communities. In addition to providing clarity across the industry, this new DOE publication provides important guidelines for measurement and implementation, specifically explaining how to utilize this definition for building projects.

Thus, as energy use loads in a building’s operation are identified, several first steps are necessary in the path to becoming a Zero Net Energy (ZNE) building.

These first steps are those strategies, technologies and operational best practices that define how a building becomes ZNE. As defined by the Rocky Mountain Institute and the NewBuildings Institute, High Performance Buildings require specific technologies and operational best practices with transitioning into High Performance Buildings and ultimately becoming a ZNE operation.

Below are the prerequisites for a building to be recognized as **ZeroNetReady™**:

- Required to be base-lined and benchmarked in ENERGY STAR Portfolio Manager.
- Required to have access to “real time energy” data on main electrical meter(s).
- Required to identify its energy use load breakdown in the following five areas:
  1. Main Building Energy Usage
  2. Base Building Energy Usage, i.e. HVAC Equipment
  3. Lighting Usage
  4. Plug Load Usage
  5. Garage, Parking Lot or Outside Lighting Usage
- Must have completed an Energy Audit within the last twelve months.
- Lastly, Building(s) must have an Energy Management Program Plan in place identifying Energy Cost Measures (ECM’s) and implementation plan on when ECM’s are to be completed.