

Definitions for Building Energy Efficiency Terminology

NOTE: References to “buildings” encompass all building types – including private, commercial, industrial and public buildings – and homes, unless specified otherwise.

Audit

An audit is an assessment of a building’s energy performance, done to determine and prioritize energy-saving improvements. In a typical audit, a building is put through a series of tests to measure the insulating capabilities of walls, windows, floors, doors and ceilings, and the efficiency of its lighting, heating, ventilation and cooling systems. Audits may also examine past energy bills and the patterns of energy use by a building’s users to determine efficiencies.

Benchmarking

Benchmarking is a method for measuring the energy performance of a building. It is a process of tracking a building’s energy use then comparing it to the average for similar buildings. Benchmarking allows direct comparisons of building energy use by accounting for variables such as local climate, square footage, occupancy levels and operating hours.

Commissioning

Commissioning is a quality-assurance procedure in which a new building is assessed to ensure that its systems and structures perform to their intended design. To be most effective, building commissioning begins in the planning phase and continues throughout a building's life cycle.

Disclosure

Disclosure is the practice of making a building’s energy performance information available to either a prospective buyer, lessee or lender, a government agency or the general public. Disclosure policies around the nation vary as to how public the information is made and in what form, whether it be a rating, a label or raw energy-use data. Mandatory disclosure policies generally fall into two categories:

- **Point-of-transaction disclosure:** Energy performance information is released to counterparties prior to the completion of a real estate transaction, such as a sale, lease or financing. The information is not commonly made public.
- **Scheduled disclosure:** Energy performance information is reported according to a fixed schedule regardless of transaction activity. Once reported, the information is often made public.

Energy Star label

An Energy Star label signifies that a building has met or exceeded a threshold for energy efficiency, set by the U.S. Environmental Protection Agency. The label is awarded in a fashion similar to a pass/fail class, where no distinction is made between degrees of success or failure. To earn an Energy Star label, commercial, industrial, public and institutional buildings must score in the top 25 percent in comparisons to similar buildings nationwide.

Energy Star Portfolio Manager

Energy Star Portfolio Manager is a free, online tool developed and administered by the EPA for commercial, industrial, public and institutional building owners and managers to track and assess energy use across their entire portfolio of buildings. Using Portfolio Manager, the energy performance of buildings can be benchmarked and rated through comparisons to similar buildings nationwide.

Labeling

Labeling is the practice of representing the energy performance of a building with symbols denoting levels of performance, done in an effort to make such information easier to understand and more accessible. If buildings were students, labels would be the grades they achieve on tests. Similar to a rating in that it standardizes and gives meaning to raw data on building energy use, a label is different in that it typically implies increased transparency or visibility of energy performance information, in the context of policy discussions.

Rating

A rating is a score representing a building's energy performance, determined either by auditing, benchmarking or, in some cases, by building design and energy-use modeling. There are many rating systems, each with its own scoring scale, but all are intended to standardize and give meaning to raw data on building energy use. Common rating systems include the Home Energy Rating System and the National Energy Performance Rating System, both used by the EPA's Energy Star program.

Retrocommissioning

Retrocommissioning is a procedure in which an existing building's energy systems are restored to their optimal performance. Rather than replacing equipment, as in a retrofit, retrocommissioning typically involves fine-tuning of existing systems through testing, calibrating and monitoring.

Retrofitting

Retrofitting is the practice of making physical improvements to an existing building to increase its energy efficiency, such as replacing windows and lighting, upgrading heating and cooling systems, air-sealing windows, doors and duct work and adding insulation to attics and walls.