

OREGON DEPARTMENT OF ENERGY

DIVISION 63

VOLUNTARY BUILDING ENERGY RATING SYSTEMS

330-063-0000

Purpose and Scope

- (1) These rules establish a voluntary building energy rating system.
- (2) The building energy rating system shall be available for voluntary evaluation of energy use in new and existing commercial and residential buildings in Oregon and shall follow the standards established in these rules.

330-063-0010

Definitions

For the purposes of these rules, unless otherwise specified, the following definitions shall apply unless the context requires otherwise:

- (1) “Asset rating” means the building energy use rating generated by modeling under standardized weather and occupancy conditions, adjusted to account for variances in energy consumption.
- (2) “Building” means any enclosed structure created for permanent use as a residence, a place of business, or any other activities whether commercial or noncommercial in character.
- (3) “Building envelope” is that element of a building which encloses conditioned spaces through which thermal energy may be transmitted to or from the exterior or to or from unconditioned spaces.
- (4) “Commercial building” means a structure of which more than 50 percent of usable square footage is used or intended for use in connection with:
 - (a) The exchange, sale, or storage of goods; or
 - (b) The provision of services.
 - (c) A residential building with more than five dwelling units is a commercial building for the purposes of these rules.
- (5) “Energy audit” means an assessment of a building’s energy use and efficiency in order to determine the building’s energy performance.
- (6) “Operational rating” means a building energy use rating generated by measuring actual energy consumption taking into consideration all physical systems and their operation.

- (7) “Physical systems” means any energy consuming equipment integrated in the building design, function or operation.
- (8) “Residential building” as defined in ORS 701.005.

330-063-0020

Evaluation of Energy Performance

- (1) Persons producing energy performance scores shall have training in the software program used to produce the rating.
- (2) Building energy ratings must meet the following requirements:
 - (a) Building energy audit software used to produce building energy ratings shall be approved by the U.S. Department of Energy.
 - (b) The rating for new buildings shall be an asset rating based upon the projected energy consumption of the building and may include a physical inspection of the building.
 - (c) Ratings shall be readily available and understandable to an actual or potential building purchaser, lessee, renter or other occupant and shall include an explanation of the rating, the assumptions, the baseline, the date of the rating, and the name of the rater or rating organization.
- (3) Building energy rating systems shall include the following:
 - (a) The estimated total annual energy consumption by fuel type.
 - (b) Acceptable benchmarks include, but are not limited to:
 - (A) A similar building built to state building code standards
 - (B) Oregon or national averages
 - (C) A comparable-sized building in square footage
- (4) Building ratings may include the estimated amount of carbon dioxide emissions per housing unit, as a calculation of the carbon intensity for each fuel source used in the unit. The score should be calculated by aggregating the following estimates:
 - (a) The number of lbs CO₂ / kWh of electricity consumed annually should be based on the eGRID sub-region NWPP data and adjusted annually. This is currently 0.902 lbs CO₂ /kWh.
 - (b) 11.64 lbs CO₂ / therm of natural gas consumed annually.
 - (c) 22.29 lbs CO₂ / gallon of fuel oil consumed annually.
 - (d) 12.76 lbs CO₂ / gallon of propane consumed annually.

330-063-0030

Specific Energy Performance Scoring Standards for Residential Buildings

- (1) Building energy ratings systems for residential buildings shall meet the following additional requirements:
 - (a) Include the estimated total annual energy cost.
 - (b) The rating for existing residential buildings shall be an asset rating based upon the projected energy performance of the building and may include a physical inspection of the building.
- (2) Residential energy use shall be displayed in annual Mbtu as determined by approved energy modeling methods, using standard inputs to represent a typical household. The annual energy consumption of each fuel (electricity, natural gas, oil, propane, etc) shall be displayed in retail units (kWh, therms, gallons, etc) and estimated annual customer cost based on an Oregon average. Local labeling strategies are encouraged to add local pricing data.

330-063-0040

Specific Energy Performance Scoring Standards for Commercial Buildings

- (1) Building energy ratings systems for existing commercial buildings shall be an operational rating based upon the actual energy usage of the building and shall utilize utility data.
- (2) Commercial energy use shall be displayed in annual btu per square foot as determined by approved energy modeling methods, using standard occupancy profiles for the building type. The annual energy consumption of each fuel (electricity, natural gas, oil, propane, etc) shall be displayed in retail units.