

3.1 General

Agricultural structure: A structure designed and constructed to house farm implements, hay, grain, poultry, livestock, or other horticultural products, and is not a place used by the public or a place of human habitation or employment where agricultural products are processed, treated, or packaged.

Applicable building codes: The Washington state building codes as adopted by the Washington state building code council, and as modified by local government amendments.

Authority having jurisdiction (AHJ): Washington state department of commerce.

Benchmarking: The practice of comparing the measured performance of a device, process, facility, or organization to itself, its peers, or established norms, with the goal of informing and motivating performance improvement. When applied to *building* energy use, *benchmarking* serves as a mechanism to measure energy performance over time, relative to other similar *buildings*.

Building owner: An individual or entity possessing title to a *building*. In the event of a land lease, the *building owner* is the entity possessing title to the *building* on leased land. Where condominium structures are subject to the standard, "*building owner*" means the owners' association.

Building tenant: A person or entity occupying or holding possession of a *building* or premises pursuant to a rental agreement.

Campus: A collection of *buildings* served by a district heating, cooling, water reuse or power system.

Campus district energy system: A *district energy system* that provides heating, cooling, or heating and cooling to a *campus* through a distributed system providing steam, hot water, or cool water to three or more *buildings* with more than 100,000 square feet of combined *conditioned space*, where the system and all *buildings* connected to the system are owned by:

- (a) A single entity;
- (b) A public-private partnership in which a private entity owns the systems providing heating, cooling, or heating and cooling to *buildings* owned by one public entity; or
- (c) Two private entities in which one private entity owns the *buildings* connected to the system and another private entity owns the system providing heating, cooling, or heating and cooling to the *buildings*.

Certified commissioning professional: A person who is certified by an ANSI/ISO/IEC 17024:2012 accredited organization to lead, plan, coordinate, and manage commissioning teams and implement the commissioning process and with experience commissioning at least two projects of similar size and of similar equipment to the current project, and at least one in the last three years. This experience includes the writing and execution of verification checks and functional test plans.

Complex: A group of *buildings* interconnected by *conditioned spaces* on *contiguous property*.

Conditional compliance: A temporary compliance method:

(a) For *Tier 1 covered buildings* used by *building owners* that demonstrates the owner has implemented energy use reduction strategies required by the standard, but has not demonstrated full compliance with the *energy use intensity target*.

(b) For *Tier 2 covered buildings* used by *building owners* that demonstrates the owner has benchmarked the *building* energy use in accordance with the standard, and provides an additional 180 days for *building owner* to demonstrate full compliance with the energy management plan (*EMP*) and operations and maintenance (*O&M*) program documentation.

Conditioned space: An area, room or space that is enclosed within the *building's* thermal envelope and is directly heated or cooled or is indirectly heated or cooled. Spaces are indirectly heated or cooled where they communicate through openings with *conditioned spaces*, where they are separated from *conditioned spaces* by uninsulated walls, floors or ceilings, or where they contain uninsulated ducts, piping or other sources of heating or cooling. (also see, *semi-heated space*).

Connected buildings: A collection of *buildings* with shared energy meter(s) on *contiguous property*.

Contiguous property: Adjoining property under sole ownership.

Covered building: Includes *Tier 1 covered buildings* and *Tier 2 covered buildings*.

Decarbonization plan: A plan to comply with clean building performance standard in accordance with Normative Annex W.

Director: The *director* of the department of commerce or the *director's* designee.

Discounted payback: The time when the accumulated savings achieved by an investment, discounted by the appropriate discount rate, equals the initial cost of the investment.

District energy system: A system that provides heating, cooling, or heating and cooling to a *campus* through a distributed system providing steam, hot water, or cool water to *buildings*.

District energy system, campus: See *campus district energy system*.

District energy system, state campus: See *state campus district energy system*.

Energy target (EUI_t): Not adopted. See *energy use intensity target (EUI_t)*.

Energy use intensity (*EUI*): A measurement that normalizes a *building's* site energy use relative to its size. A *building's* energy use intensity is calculated by dividing the total net energy consumed in one year by the *gross floor area* of the *building*, excluding the parking garage. "Energy use intensity" is reported as a value of a thousand British thermal units per square foot per year.

Energy use intensity target (EUI_t): The target for *net energy use intensity* of a *covered building*.

Gross floor area: The total number of square feet measured between the exterior surfaces of the enclosing fixed walls of a *building*, including all supporting functions such as offices, lobbies, restrooms,

equipment, storage areas, mechanical rooms, break rooms, and elevator shafts. *Gross floor area* does not include outside bays or docks.

Gross floor area for nonresidential buildings: Not adopted.

Gross floor area for residential buildings: Not adopted.

Grouped buildings: *Buildings* that comply at the campus-level as noted in Tables 7-2a and 7-4, Footnote #9, *campuses*, and *connected buildings*.

Lighting schedule: A list that provides a count of all *luminaires* in the *building*, lighting controls, fixture types, and product information.

More recently built buildings: *Buildings* or additions greater than 50,000 square feet in conditioned floor area permitted for construction based on the application permit date of July 1, 2016, or later. For example, *buildings* permitted to the 2015 edition of the Washington State Building Code, chapter 51-50 WAC.

Multifamily residential building: A covered multifamily *building* containing sleeping units or more than five dwelling units where occupants are primarily permanent in nature.

Net energy use: The sum of the metered and bulk fuel energy entering the *building*, minus the sum of metered energy leaving the *building* or campus. Renewable energy produced on a campus that is not attached to a *covered building* may be included. The same applies to portions of *buildings* with submetering. Bulk fuels are included using the equation in Section 5.2.2.1.

Nontarget buildings: *Buildings* with building activity type(s) without an energy target or not listed in Table 7-1 in more than 50 percent of the *gross floor area*.

Nontarget space: Space within a *building* with a building activity type without an energy target or not listed in Table 7-1.

Participating campus: A *campus* pursuing compliance through a *decarbonization plan* in accordance with Normative Annex W.

Physical occupancy: Space that is used by an owner or tenant regardless of occupant density and frequency of use. A *building* does not have *physical occupancy* and is considered unoccupied when 50 percent or more of the conditioned floor area is not leased or is otherwise vacant.

Qualified commissioning authority: Not adopted.

Qualified energy auditor: A person acting as the auditor of record having training, expertise and three years professional experience in *building energy auditing* and any one of the following:

- (a) A licensed professional architect or engineer;
- (b) A building energy assessment professional (BEAP) certified by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE);
- (c) A certified energy auditor (CEA) certified by the Association of Energy Engineers (AEE).
- (d) A certified energy manager (CEM) in current standing, certified by the Association of Energy Engineers (AEE).
- (e) An energy management professional (EMP) certified by the Energy Management Association (EMA).

The *AHJ* may prescribe additional certifications and training to meet the minimum qualifications of a *qualified energy auditor*. When the *AHJ* prescribes such additional qualifications, it will provide notice of the determination on the agency website and will periodically update these rules to reflect additional qualifications of *qualified energy auditors*.

Qualified energy manager (QEM): An individual designated by the *building owner* who:

- (a) Has two years of experience, including educational and/or professional experience, with commercial *building* operations and/or *building* energy management in addition to successful completion of clean buildings tier 2 training program as specified by the *AHJ*; or
- (b) Meets the definition of a *qualified person*.

Qualified person: A person having training, expertise and three years professional experience in *building* energy use analysis and any of the following:

- (a) A licensed professional architect or engineer in the state of Washington;
- (b) A person with Building Operator Certification (BOC) Level II by Building Potential;
- (c) A building commissioning professional certified by an ANSI/ISO/IEC 17024:2012 accredited organization;
- (d) A *qualified energy auditor*;
- (e) A certified energy manager (CEM) in current standing, certified by the Association of Energy Engineers (AEE);
- (f) An energy management professional (EMP) certified by the Energy Management Association (EMA);
- (g) A person with South Seattle College Sustainable Building Science Technology Bachelor of Applied Science degree, or as approved as equivalent by the *AHJ*.

The *AHJ* may prescribe additional certifications and training to meet the minimum qualifications of a *qualified person*. When the *AHJ* prescribes such additional qualifications, it will provide notice of the determination on the agency website and will periodically update these rules to reflect additional qualifications of *qualified persons*.

Recommissioning: An application of the commission process requirements to a project that has been delivered using the commissioning process.

Renewable natural gas: A gas consisting largely of methane and other hydrocarbons derived from the decomposition of organic material in landfills, wastewater treatment facilities, or anaerobic digesters and that is fully interchangeable with conventional natural gas.

Residential building: Not adopted.

Savings-to-investment ratio: The ratio of the total present value savings to the total present value costs of a bundle of an energy or water conservation measure estimated over the projected *useful life* of each measure. The numerator of the ratio is the present value of net savings in energy or water and nonfuel or nonwater operation and maintenance costs attributable to the proposed energy or water conservation measure. The denominator of the ratio is the present value of the net increase in investment and replacement costs less salvage value attributable to the proposed energy or water conservation measure.

Semi-heated space: An enclosed space within a *building*, including adjacent connected spaces separated by an uninsulated component (e.g., basements, utility rooms, garages, corridors) which:

(a) Is heated but not cooled, and has an installed heating system output capacity greater than or equal to 3.4 Btu/(h-ft²) but not greater than 8 Btu/(h-ft²);

(b) Is not a walk-in cooler, walk-in freezer, refrigerated warehouse cooler or refrigerated warehouse freezer space.

Service life: See *useful life*.

Simple payback (years): The estimated incremental initial cost of an *EEM* divided by the estimated incremental annual cost savings of the measure expressed in years. The cost savings may include *energy cost* savings and incremental routine operations and maintenance costs or savings. The simple payback calculation shall be in accordance with NIST Handbook 135, Section 6.4.4, Equation 6-13.

State campus district energy system: A *district energy system* that provides heating, cooling, or heating and cooling to a *campus* through a distributed system providing steam, hot water, or cool water to five or more *buildings* with more than 100,000 square feet of combined *conditioned space*, where the system and all *buildings* connected to the system are owned by:

(a) The state of Washington; or

(b) A public-private partnership including one public *buildings* owner and one private entity.

State equipment standards: Appliance and equipment standards listed in chapter 19.260 RCW, Energy efficiency.

Tier 1 covered building: A *building* where the sum of nonresidential, hotel, motel, and dormitory floor areas exceeds 50,000 gross square feet, excluding the parking garage area.

Tier 2 covered building: A *building* where the sum of multifamily residential, nonresidential, hotel, motel, and dormitory floor areas exceeds 20,000 gross square feet, but does not exceed 50,000 gross square feet, excluding the parking garage area. *Tier 2 covered buildings* also include *multifamily residential buildings* where floor areas are equal to or exceed 50,000 gross square feet, excluding the parking garage area.

Useful life: The expected *service life* of *building* systems or equipment as published by the AHJ. For *EEMs* not included, the *qualified energy auditor* will be responsible for determining *useful life*. Used interchangeably with *service life*.

Weather normalized: A method for modifying the measured *building* energy use in a specific weather year to energy use under normal weather conditions.

Weather normalized energy use intensity (WNEUI): Measurement that normalizes a *building's site energy* use relative to its size based on the *buildings weather normalized site energy* use. A *building's energy use intensity* is calculated by dividing the total net *weather normalized* energy consumed in one year by the *gross floor area* of the *building*, excluding the parking garage. *Weather normalized energy use intensity* is reported as a value of 1,000 British thermal units per square foot per year.

3.2 Common abbreviations and acronyms

- AEE** Association of Energy Engineers.
- AHJ** authority having jurisdiction.
- DDC** direct digital control.
- EEM** energy efficiency measure.
- EM** energy manager.
- EMP** energy management plan.
- EUI** energy use intensity.
- IRR** internal rate of return.
- LCCA** life cycle cost analysis.
- O&M** operations and maintenance.
- WSEC** Washington State Energy Code.
- WNEUI** Weather normalized energy use intensity.

[Statutory Authority: RCW 19.27A.210. WSR 24-16-041, § 194-50-030, filed 7/30/24, effective 8/30/24. Statutory Authority: RCW 19.27A.210 and 19.27A.250. WSR 24-03-033, § 194-50-030, filed 1/8/24, effective 2/8/24. Statutory Authority: RCW 19.27A.210. WSR 20-22-059, § 194-50-030, filed 10/30/20, effective 11/30/20.]