

# BPS 001 – Tier 1 and Tier 2 Compliance

# **OR BPS Background**

The Oregon Building Performance Standard (OR BPS) is a mandatory program that aims to bring awareness about building energy use to owners of existing commercial buildings, and to reduce energy use and utility costs for less efficient buildings. Buildings that must comply with this program are divided into two tiers, based on Gross Floor Area and property type. The table below shows the two tiers covered by the OR BPS program and gives compliance dates.

## **Oregon Building Performance Standard Tiers**

Gross Floor Area (excludes parking garage area)	Property Type	Tier / Compliance Date
35,000 to 90,000 square feet	Nonresidential, Hotel, or Motel	Tier 1 / June 1, 2030
90,000 to 200,000 square feet	Nonresidential, Hotel, or Motel	Tier 1 / June 1, 2029
200,000 square feet and greater	Nonresidential, Hotel, or Motel	Tier 1 / June 1, 2028
20,000 to 35,000 square feet	Nonresidential, Hotel, or Motel	Tier 2 / July 1, 2028
35,000 square feet and greater	Multifamily, Hospital, School, University, Dormitory, Barracks, Prison, Residential/Senior Care Facility	Tier 2 / July 1, 2028

**Tier 2** buildings are required to **report Energy Use Intensity and Energy Use Intensity Targets** by their July 1, 2028, compliance date.

**Tier 1** buildings are required to **report Energy Use Intensity and Energy Use Intensity Targets** and submit operations & maintenance and energy management plans by their compliance date. They must also **meet EUIt** or demonstrate an effort to **reduce energy use**. Tier 1 buildings that expect to exceed their energy target must report at least **180 days before** their compliance date, perform **energy audits** and **life cycle cost assessments**, and develop a plan to implement **cost-effective energy efficiency measures** by their June 1, 2028/2029/2030, compliance date.

This guidance explains how to determine building tier, then gives details about Tier 1 and Tier 2 compliance requirements. Additional guidance documents are available on the OR BPS website: https://tinyurl.com/ODOE-BPS

# OR BPS Definitions for Tier 1, Tier 2, and Grouped Buildings

Definitions to understand when determining whether a building must comply with OR BPS:

**Building:** a structure, including mobile homes, manufactured homes, and other factory-built buildings, wholly or partially enclosed within exterior walls, or within exterior and party walls and a roof, that affords shelter to people, animals, or property.

**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. For condominium structures, building owner means the owners' association.

**Gross Floor Area (GFA):** the space of a building measured from its exterior enclosing walls, not including any parking garage area, but:

- Including all offices, lobbies, restrooms, equipment storage areas, mechanical rooms, break rooms, elevator shafts, and conditioned basements.
- Not including outside bays or docks, exterior spaces, covered walkways, open roofed- over areas, outdoor play courts, porches, exterior terraces or steps, roof overhangs, balconies, decks, patios, pipe trenches, interstitial plenum space between floors, driveways, parking garages, or surface parking areas.
- Including specific areas for each building activity type listed in Table 7-4 of the Oregon Building Performance Standard and the table at the end of this guidance.

**Building Gross Floor Area**: sum of a building's regular gross floor area and special gross floor area. **Regular Gross Floor Area**: sum of a building's gross floor area for hotel, motel, and nonresidential use, excluding any parking garage or special gross floor area.

**Special Gross Floor Area**: sum of a building's gross floor area for multifamily, hospital, school, university, dormitory, barracks, prison, residential care, and senior care use, excluding any parking garage area.

**Tier 1 Building:** a building under ownership by a sole individual or entity, with regular gross floor area of at least 35,000 square feet, and that does not meet any Tier 2 building definition.

**Tier 2 Building:** a building under ownership by a sole individual or entity that is either:

- a. a "regular" Tier 2 building with regular gross floor area of at least 20,000 square feet and less than 35,000 square feet, and not a "special" Tier 2 building as in part b. of this definition; or
- b. a "special" Tier 2 building with building gross floor area of at least 35,000 square feet and either special gross floor area that equals or exceeds regular gross floor area if regular gross floor area is at least 20,000 square feet, or special gross floor area of at least 15,000 square feet if regular gross floor area is less than 20,000 square feet; or
- c. an "extended" Tier 2 building with regular gross floor area that equals or exceeds 35,000 square feet, submitted as part of a set of grouped buildings that includes a "special" Tier 2 building as in part b. of this definition.

**Nonresidential Building:** as used in this standard, any building not a lodging/residential building type in Table 7-1 of this standard, so not a barracks, hotel, motel, multifamily, prison, dormitory, residential care facility, senior care facility, or other-residential.

**Hotel:** buildings renting overnight room/suites, typically with bath/shower and other facilities in guest rooms, with daily services for guests including housekeeping/laundry & front desk/concierge.

Hotel does not apply if greater than 50 percent of area is fractional ownership units like condominiums, vacation timeshares, or private residences rented on a daily or weekly basis.

**Motel:** hotel-like lodging where most rooms are entered from the exterior.

**Multifamily**: a building with five or more dwelling or sleeping units where occupants are primarily permanent in nature and where the occupants do not own the units.

**Hospital:** a general medical and surgical facility providing acute care services intended to treat patients for short periods of time, including emergency medical care, physician's offices, diagnostic care, ambulatory care, surgical care, and limited specialty services such as children's hospitals, long-term acute care, inpatient rehabilitation, cancer care, psychiatric care, and substance abuse care.

**School:** buildings used for educational purposes, including:

- **Adult Education:** buildings used primarily for providing adult students with continuing education, workforce or professional development outside of a college or university.
- **K-12 School**: buildings or campuses used as a school for kindergarten through 12th grade students. At least 75 percent of the students must be in grades K-12.
- **Preschool/Daycare**: buildings used for educational programs or daytime supervision/recreation for young children before they attend Kindergarten.
- **Vocational School:** buildings primarily designed to teach skilled trades, including trade and technical schools. Vocational schools are commonly post-secondary education, consisting of 1-2 years of technical/trade training.
- Other School: buildings used for religious, community, or other educational purposes that do not meet the definition of any other type of school.

**College/University:** buildings used for the purpose of higher education. This includes public and private colleges and universities.

**Dormitory**: buildings associated with educational institutions or military facilities which offer multiple accommodations for long-term residents, also called a residence hall or barracks.

**Barracks**: refers to residential buildings associated with military facilities or educational institutions, which offer multiple accommodations for long-term residents.

**Prison:** federal, state, local, or private-sector buildings used for the detention of persons awaiting trial or convicted of crimes.

**Residential Care Facility**: provides rehabilitative and restorative care to patients on long-term or permanent basis; can treat mental health issues, substance abuse, and rehabilitation for injury, illness, and disabilities.

**Senior Care Community:** houses and provides care and assistance for elderly residents.

**Grouped Buildings:** a set of Tier 1 and/or Tier 2 buildings that comply at the connected or campuslevel, or that comply at the complex level and have a single shared primary function, along with any other connected buildings that are not covered buildings.

**Complex:** a group of individual or connected buildings on contiguous property.

**Connected Buildings:** buildings with shared energy meter(s) on contiguous property.

**Contiguous Property:** adjoining property sharing a common border under sole ownership.

**Campus:** collection of buildings served by district heating, cooling, water reuse, and/or a power system owned by the same building owner.

# **OR BPS Definitions for Energy Calculations**

Before calculating energy use intensity or energy use intensity target, terms to understand:

**Building Activity Type**: classification for the function or business that takes place within a building. There are 113 different building activity types in OR BPS corresponding to property types in U.S. EPA ENERGY STAR Portfolio Manager.

**Net Energy Use**: the sum of metered and bulk fuel energy that enters a building minus the sum of metered energy that leaves the building, including all fuels used or generated in the building, most commonly:

- Electricity, natural gas, fuel oil, and propane use.
- Steam, hot water, or chilled water use from district heating and cooling systems.
- Electricity generated from renewable sources.

**Energy Use Intensity (EUI):** a measurement of energy use that normalizes building energy use relative to building size, calculated by dividing the total net energy the building consumes in one year by the building gross floor area, reported in units of thousands of British thermal units per square foot per year (kBtu/ft²-yr).

**Energy Use Intensity Target (EUIt)**: EUI value established for compliance with this standard as the maximum total energy use buildings are expected to consume in a year. EUIt values were set for Oregon buildings by analyzing local, regional, and national commercial buildings and applying average weather-normalized energy use to different building activity types.

**Operating Factor:** aka the Building Operating Shifts Normalization Factor from OR BPS, used as a multiplier on EUIt for each building activity type. Operating factors vary between 0.5 and 1.9 in value based on the building activity type and weekly operating hours of the building, with different factors for buildings with 0 to 50 hours, 51 to 167 hours, and 168 hours.

Weather Normalized Energy Use Intensity (WN-EUI): a measurement of energy use that normalizes building energy use relative to building size and corrects for deviations in weather from typical weather at the building location, reported in units of a thousand British thermal units per square foot per year (kBtu/ft²-yr).

# **Building Tier Determination for OR BPS**

Determining a building's tier for the OR BPS program can be a straightforward process. Most building owners can look up their building's gross floor area and property type in the table below to find their building tier and compliance date.

<b>Oregon Building</b>	Performance	Standard	Tiers
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Gross Floor Area (excludes parking garage area)	Property Type	Tier / Compliance Date
35,000 to 90,000 square feet	Nonresidential, Hotel, or Motel	Tier 1 / June 1, 2030
90,000 to 200,000 square feet	Nonresidential, Hotel, or Motel	Tier 1 / June 1, 2029
200,000 square feet and greater	Nonresidential, Hotel, or Motel	Tier 1 / June 1, 2028
20,000 to 35,000 square feet	Nonresidential, Hotel, or Motel	Tier 2 / July 1, 2028
35,000 square feet and greater	Multifamily, Hospital, School, University, Dormitory, Barracks, Prison, Residential/Senior Care Facility	Tier 2 / July 1, 2028

The tier of mixed-use buildings or grouped buildings is not always that obvious, and the tier definitions must be consulted. These definitions are complex, however the <u>OR BPS EUI Target Tool</u> uses them to find each building, or group of buildings, tier and compliance date automatically. The logical processes used by the target tool are laid out below.

#### Tier Determination for a Single Building:

• Identify areas of the building in the "special Tier 2" categories of multifamily, hospital, school, dormitory, university, prison, or residential/senior care, so that:

Regular GFA + Special GFA = Building GFA

- If Building GFA is less than 35,000 square feet AND Regular GFA less than 20,000 square feet, THEN Not Covered
- If Building GFA is greater than or equal to 35,000 square feet
  - o IF Special GFA is less than 15,000 square feet THEN Special Tier 2 / July 1, 2028
  - IF Regular GFA is greater than 20,000 square feet AND Special GFA is greater than or equal to Regular GFA THEN "Special" Tier 2 / July 1, 2028
- If Regular GFA is greater than Special GFA (less than half the building is Special), and
  - o Regular GFA is greater than or equal to 200,000 square feet THEN Tier 1 / June 1, 2028
  - Regular GFA is greater than or equal to 90,000 square feet and less than 200,000 square feet THEN Tier 1 / June 1, 2029
  - Regular GFA is greater than or equal to 35,000 square feet and less than 90,000 square feet THEN Tier 1 / June 1, 2030
  - Regular GFA is greater than or equal to 20,000 square feet and less than 35,000 square feet THEN "Regular" Tier 2 / July 1, 2028

#### Tier Determination for a set of **Grouped Buildings**:

- Identify the area of buildings in the "special" categories of multifamily, hospital, school, dormitory, university, prison, or residential/senior care, so that:
  - Regular GFA + Special GFA = Group GFA
- Note that when dealing with grouped buildings, each building's GFA is assigned to one activity type, so its entire Building GFA is either Special GFA or Regular GFA
- IF building Regular GFA is less than 20,000 square feet THEN that building is Not Covered (building is only included if it shares metering with other buildings in this group)
- IF building Regular GFA is greater than or equal to 20,000 square feet and less than 35,000 square feet THEN that building is "Regular" Tier 2
- IF building Regular GFA is greater than or equal to 35,000 square feet THEN that building is Tier 1
- IF largest building Regular GFA is greater than or equal to 200,000 square feet THEN group compliance date is **June 1, 2028**
- IF largest building Regular GFA is greater than or equal to 90,000 square feet and less than 200,000 square feet THEN the group compliance date is **June 1, 2029**
- IF largest building Regular GFA is greater than or equal to 35,000 square feet and less than 90,000 square feet THEN the group compliance date is **June 1, 2030**
- IF largest building Regular GFA is greater than or equal to 20,000 square feet and less than 35,000 square feet THEN the group compliance date is **July 1, 2028**
- IF building Special GFA is greater than or equal to 35,000 THEN that building is
   "Special" Tier 2
- IF any building has Special GFA is greater than or equal to 35,000 THEN any Tier 1 building in the group becomes "Extended" Tier 2" AND group compliance date becomes July 1, 2028

# **OR BPS Compliance Forms**

If a building is determined to be a Tier 1 or Tier 2 building that must comply with OR BPS, various forms must be submitted. These forms are listed below, then described in this guidance.

**Tier 1** building owners must submit the following **no later than their June 1**, **2028/2029/2030**,

compliance date, but can submit documents as early as July 1, 2026:

• Form A: Application for Oregon BPS Compliance, or

Form G: Grouped Buildings\* Application for Oregon BPS Compliance. or

Form X: Exemption Application (must be filed 180 days before compliance date)

- Form B: Building Activity and Energy Use Intensity Target (EUIt)
- Form C: Calculation of Energy Use Intensity (EUI)
- Operations and Management plan (**O&M**)
- Energy Management Plan (EMP) and
- Form D: Decarbonization Plan, only for Grouped Buildings with district systems

If the building doesn't meet target (EUI is greater than EUIt), building owners must submit:

- Form A or Form G at least 180 days before the compliance date, and
- Submit the following **no later than their June 1, 2028/2029/2030,** compliance dates:
  - o Form E: Energy Audit
  - o Form L: Life Cycle Cost Assessment

In addition, the following forms are updated annually until EUIt has been reached or all compliance work has been completed:

Form A and Form C

**Tier 2** building owners need to submit the following **no later than July 1, 2028**, but can submit documents as early as July 1, 2026:

- Form A: Application for Oregon BPS Compliance or
  - Form G: Grouped Buildings\* Application for Oregon BPS Compliance or

Form X: Exemption Application (must be filed 180 days before compliance date)

- Form B: Building Activity and Energy Use Intensity Target (EUIt)
- Form C: Calculation of Energy Use Intensity (EUI)

Tier 2 building owners do **NOT** need to submit an Operations and Management plan (O&M), an Energy Management Plan (EMP), or Form D: Decarbonization Plan for grouped buildings with district systems, and do **NOT** need to take any action if building EUI is greater than EUIt.

# Form A: Application for Oregon BPS Compliance or

#### Form G: Grouped Building Application for Oregon BPS Compliance

Form A and Form G request the following information for Tier 1 and Tier 2 buildings:

- Building identification details, including building ID (UBID) and address
- Contact information for the building owner
- Contact information and qualifications for energy professionals for the building(s)
  - Qualified Person for Tier 1 buildings
  - Qualified Energy Manager or Qualified Person for Tier 2 buildings
- Summary of energy information
  - Energy Use Intensity Target from Form B: Building Activity and Energy Use
     Intensity Target (EUIt)
  - Energy Use Intensity, Weather-Normalized Energy Use Intensity, and months/year over which energy data was collected from *Form C: Calculation of Energy Use Intensity*

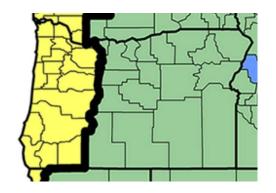
**Tier 1 buildings** must also indicate their compliance status on *Form A* or *Form G*, as either:

- Building meets its energy target, EUIt (file *Form A* or *Form G* by the compliance date)
- Building does not meet its energy target, EUIt (file Form A or Form G at least 180 days before the compliance date) but intends to comply via either:
  - Conditional Compliance Energy Efficiency Measures (EEMs) from the Energy Audit or an optional Life-Cycle Cost Assessment (LCCA) have been implemented by the compliance date and the building IS expected to reach its energy target, but more time is needed to collect energy data for confirmation. Projected energy use and energy savings must also be reported.
  - Investment Criteria Energy Efficiency Measures from the Energy Audit and Life-Cycle Cost Assessment have been implemented by the compliance date, but the building is **NOT** expected to reach its energy target, or EUI cannot be determined due to unavailability of energy data.
  - Investment Criteria through Conditional Compliance Energy Efficiency Measures from the Energy Audit and Life-Cycle Cost Assessment are **NOT** implemented before the compliance date but are being phased in over time. Projected energy use and energy savings must also be reported.
  - Annual reporting update on Energy Use Intensity (EUI), submitted annually,
     potentially after the compliance date, until the building reaches its energy target
  - Completion reporting final reporting on Energy Use Intensity (EUI), potentially submitted after the compliance date, showing the building met its energy target.

# Form B: Building Activity and Energy Use Intensity Target

All Tier 1 and Tier 2 buildings that are not exempt must submit the following information to characterize their building and its expected energy use:

- Building location and climate zone, shown at right with yellow counties in climate zone 4C and green counties in 5B.
  - o 4C counties:
    - Benton
    - Clackamas
    - Clatsop
    - Columbia
    - Coos
    - Curry
    - Douglas
    - Jackson
    - Josephine
    - Lane
    - Lincoln
    - Linn
    - Marion
    - Multnomah
    - Polk
    - Tillamook
    - Washington
    - Yamhill



- o 5B counties: Baker
  - Crook
  - Deschutes
  - Gilliam
  - Grant
  - Harney
  - Hood River
  - Jefferson
  - Klamath
  - Lake
  - Malheur
  - Morrow
  - Sherman
  - Umatilla
  - Union
  - Wallowa
  - Wasco
  - Wheeler
- Details about how the building is sectioned into areas with different Building Activity Type, Gross Floor Area, and operating hours.
- Overall building Energy Use Intensity Target (EUIt).

This form should be filled out by the building's energy professional, either a Qualified Person for Tier 1 buildings, or a Qualified Energy Manager or Qualified Person for Tier 2 buildings.

See <u>BPS 003 – Finding Energy Use Intensity Target</u> and <u>BPS 006 – Energy Professionals</u> for more information.

# Form C: Calculation of Energy Use Intensity (EUI)

This form documents the building's Energy Use Intensity (EUI), Weather Normalized Energy Use Intensity (WN-EUI) and the months/years over which EUI and WN-EUI were calculated. This form is output from the <u>U.S. EPA</u> (ESPM), a free online tool widely used to benchmark building energy use. ENERGY STAR Portfolio Manager automatically calculates Energy Use Intensity values based on the building's Gross Floor Area, building energy use, and local weather information.

Note that EUI and WN-EUI must be calculated from 12 continuous months of a building's net energy use during the period no more than 24 months before the *Form C: Calculation of Energy Use Intensity (EUI)* submission date. EUI and WN-EUI are based on a building's net energy use, defined as the sum of metered and bulk fuel energy that enters a building minus the sum of metered energy that leaves the building. Buildings that can't calculate EUI and WN-EUI due to unavailability of energy data **are treated as though they don't meet their energy target** and would need to comply using the Investment Criteria pathway.

The building's energy professional, either a Qualified Person for Tier 1 buildings, or a Qualified Energy Manager or Qualified Person for Tier 2 buildings, is responsible for calculating Energy Use Intensity.

See <u>BPS 004 – Calculating Energy Use Intensity</u> and <u>BPS 006 – Energy Professionals</u> for more information.

#### Form X: Exemption Application

An exemption can be requested for **Tier 1 or Tier 2 buildings** that meet one or more of these conditions:

- At least 50 percent of the building's square footage is manufacturing or industrial.
- The building is used for agricultural purposes.
- The building owner is undergoing financial hardship.
- The building had no certificate of occupancy for 12 months before the compliance date.
- Building occupancy was less than 50 percent for 12 months before the compliance date.
- Conditioned floor area is below the minimum threshold for Tier 1 or Tier 2

Each exemption category includes specific criteria in OR BPS that must be met to be eligible for that exemption.

Historic buildings are NOT exempt from OR BPS, although they are not required to undertake any energy efficiency work that would compromise their historic integrity.

<u>See BPS 002 – Exemptions and Historic Buildings</u> for more information

#### Other Submittals

**Tier 1 buildings** are required to attest that these programs and plans are being followed:

- Operations and Maintenance (O&M) program information detailing the normal operating schedules and settings of building equipment, and the schedule for routine maintenance, testing, and replacement of equipment.
- Energy Management Plan (EMP) for the building or buildings that lays out how energy use and emissions are monitored and tracked. It should list the major energy-using systems in the building and estimate how much energy they use. The EMP also compiles energy audit results and schedules for EEM implementation, including expected expenditures for energy use and equipment. It should also list building personnel and their training, and list suppliers of HVAC, lighting, and other energy-using equipment.
- Form D: Decarbonization Plan for buildings that are part of a district heating and cooling system that serves at least three buildings with at least 100,000 total square feet of conditioned space, which outlines the strategy being undertaken to reduce or eliminate the use of fossil fuels that serve the district system.

See <u>BPS 007 – Operations and Maintenance Programs</u>, <u>BPS 008 – Energy Management Plans</u>, <u>BPS 009 – Grouped Buildings or Campuses</u> and <u>BPS 012 – Decarbonization Plans</u> for more information.

#### Form E: Energy Audit

If a Tier 1 building exceeds its energy target (Energy Use Intensity is greater than Energy Use Intensity target), then it may need to perform an Energy Audit. An audit includes reviewing a building's major systems to look for energy inefficiencies and opportunities for improvement. The systems to review include HVAC, lighting, service hot water heating, building envelope, internal building loads, and any large energy-using equipment.

A Qualified Energy Auditor (QEA) must be engaged to perform Energy Audits for OR BPS compliance. ODOE may provide a list of QEA with the proper credentials, certifications, and experience on the OR BPS website, but building owners should verify themselves that an auditor has the necessary credentials before engaging them in audit work. The QEA should be assisted with access to the building and information about its construction and systems by each Tier 1 building's Qualified Person and building owner.

For Tier 1 buildings not meeting their energy target, the Energy Audit must be performed and the *Form E: Energy Audit* report must be submitted **before the compliance date**. Note that a *Form A* or *Form G* program application should have already been submitted for the building at least 180 days before the compliance date.

The main output from an Energy Audit is a list of recommended cost-effective energy efficiency measures (EEMs). To be "cost-effective," an energy efficiency measure is expected to pay for itself over its lifetime by saving money on utility bills and maintenance costs. Many energy efficiency measures resulting from energy audits are "no-cost" or "low-cost" items, simple tweaks to building operations or inexpensive repairs to equipment. Other energy efficiency measures may involve the replacement of old, inefficient equipment that was already near the end of its life. Energy audits under OR BPS are geared toward finding the most practical and affordable energy efficiency improvements to buildings.

The energy audit provides the following information about each EEM:

- Energy efficiency measure description.
- Energy efficiency measure expected Useful Life (EUL).
- Existing equipment the energy efficiency measure affects or replaces.
- Age and condition of existing equipment.
- Estimated energy efficiency measure cost, including materials and labor.
- Estimated energy efficiency measure incremental cost compared to minimally efficient
- equipment.
- Estimated annual energy savings.
- Estimated annual utility cost savings, may also include maintenance costs.
- Estimated simple payback (annual utility bill savings / incremental energy efficiency measure cost, in years).

QEAs should use the free, online *Audit Template* tool to collect and analyze building information. Output from this tool serves as the *Form E: Energy Audit* report that gets submitted to the OR BPS program.

See <u>BPS 005 – Energy Audits and Life Cycle Cost Assessments</u> and <u>BPS 006 – Energy</u> Professionals for more information.

## Form L: Life Cycle Cost Assessment (LCCA)

If the building owner or Qualified Person would like a more in-depth look at the financial aspects of energy efficiency measure implementation, a Life Cycle Cost Assessment can be performed. This assessment includes costs and savings associated with capital expenditures, labor for design, installation and commissioning of Energy Efficiency Measures, utility bill savings, financing fees, tax credits, equipment rebates, and maintenance expenses over the lifetime of an energy efficiency measure. This extra analysis helps refine the list of energy efficiency measures from the Energy Audit into a package of upgrades that is best suited to the building's condition and financial situation.

This assessment can also help the building owner and Qualified Person decide how to stage building improvements over time. The Life Cycle Cost Assessment can consider the age and condition of existing equipment, potential savings of Energy Efficiency Measures, and the availability of capital, to develop an attainable schedule for energy efficiency measure implementation.

Like the Energy Audit, a Life Cycle Cost Assessment should be conducted by a Qualified Energy Auditor (QEA). OR BPS requires the use of an Life Cycle Cost Assessment tool that is compliant with <u>NIST Handbook 135</u> and capable of supporting the evaluation criteria required by Normative Appendix X of the Oregon Building Performance Standard.

For Tier 1 buildings not meeting their energy target, the Life Cycle Cost Assessment must be performed and the *Form L: Life Cycle Cost Assessment (LCCA)* report must be submitted **before the compliance date**. Note that a *Form A* or *Form G* program application should have been submitted for the building at least 180 days before the compliance date.

See <u>BPS 005 – Energy Audits and Life Cycle Cost Assessments</u> and <u>BPS 006 – Energy Professionals</u> for more information.

# **Energy Efficiency Measure Implementation and Reporting**

If a Tier 1 building does not meet its energy target (energy use intensity is greater than Energy Use Intensity target), or if the energy use of the building cannot be assessed, then energy efficiency measures likely need to be implemented in the building. This means either tackling the list of cost-effective Energy Efficiency Measures from the Energy Audit, or phasing in work on the package of energy efficiency measures from the Life Cycle Cost Assessment over time.

To reap the most benefits from the OR BPS program, building owners should strive to implement energy efficiency measures promptly. This helps the building accrue energy and utility bill savings as soon as possible and enables the building to reach OR BPS compliance.

Ideally, install energy efficiency measures before the building compliance date. If energy efficiency measures can be installed early enough, the building may be able to reach its energy target before the compliance date. This means it would be able to demonstrate compliance, forego submitting *Form E* or *Form L*, and not need to submit annual follow up reports to track progress on energy efficiency measure implementation and building energy performance.

As discussed above, buildings that do not expect to meet their energy target by the compliance date can choose one of three ways to comply with OR BPS:

- Conditional Compliance Energy Efficiency Measures from the Energy Audit or Life
   Cycle Cost Assessment have been implemented by the compliance date and the building
   IS expected to reach its energy target, but more time is needed to collect energy data
   for confirmation.
- Investment Criteria Energy Efficiency Measures from the Energy Audit and Life Cycle
  Cost Assessment have been implemented by the compliance date, but the building is
  NOT expected to reach its energy target, or Energy Use Intensity cannot be determined
  due to unavailability of energy data.
- Investment Criteria through Conditional Compliance Energy Efficiency Measures from the Energy Audit and Life Cycle Cost Assessment are NOT implemented before the compliance date but are being phased in over time.

In all three cases, Annual Reporting to document energy efficiency measure implementation and progress in reducing Energy Use Intensity is required when following these options, using *Form A* or *Form G* and *Form C*. When the building reaches its energy target, Completion Reporting can be submitted via *Form A* or *Form G* and *Form C* to show the building has met its energy target and to demonstrate OR BPS compliance.