

BPS 008 – Energy Management Plans

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 operation & 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 dates.

This guidance describes what to submit about Energy Management Plans for Tier 1 buildings. Additional guidance documents are available on the OR BPS website: https://tinyurl.com/ODOE-BPS.

Energy Management Plans

All Tier 1 buildings are required to establish and implement an Energy Management Plan (EMP). As laid out in Section 5 of the Oregon Building Performance Standard, the objectives of an EMP are to ensure:

- Building energy use is regularly tracked and compared to a standard
- Staff and occupants understand how to run and use the building efficiently
- Energy-using equipment is replaced with more efficient equipment when it reaches the end of its life, or in the case of unexpected failure

OR BPS Energy Management Plan Reporting

OR BPS requires each Tier 1 building owner and Qualified Person to review the building's EMP and records. If any elements are missing or are not performed satisfactorily, building personnel are to make improvements.

The *OR BPS O&M and EMP Checklist* is a combined document to be filled out by a Tier 1 building's Qualified Person and submitted by the building's compliance date. The EMP portion of the checklist is included on the following pages, listing the required elements for each EMP program, The checklist below includes the list of required elements for each EMP. These elements should have been developed and are currently being maintained as of the date of the EMP submission. There is also an optional <u>OR BPS O&M and EMP Template</u> available, a spreadsheet tool a facility may use to help meet EMP requirements.

EMP Checklist for Tier 1 Buildings

| Bui | lding | UBID: |
|-----|-------|-------|
|-----|-------|-------|

Building Owner:

Qualified Person:

| Element | YES | N/A |
|---|-----|-----|
| 5.1 An Energy Management Plan (EMP) has been established and maintained in accordance with this standard. | | |
| 5.1.1 The building owner has designated a Qualified Person or Qualified Energy Manager to develop and maintain the EMP for the building. | | |
| 5.1.2.1 EMP includes an energy accounting system to evaluate Energy Use Intensity (EUI) and Weather Normalized Energy Use Intensity (WN-EUI), if energy data is available for the building. | | |
| 5.1.2.2 Building EUI and WN-EUI were assessed for the first year of program compliance, if energy data is available for the building. | | |
| 5.1.2.3 Building EUI and WN-EUI are assessed annually, if energy data is available for the building. | | |
| 5.1.2.4 Annual EUI and WN-EUI and EUI are compared to Energy Use Intensity target (EUIt), if the building has an energy target. | | |
| 5.1.2.5 For buildings without performance targets, annual comparison of the building's EUI to the adjusted EUI established by its most recent energy audit with decarbonization assessment. | | |
| 5.1.2.6 The EMP documents values of and changes to the number of occupants, weekly operating hours, schedules of production, and operation of equipment that affect EUI and WN-EUI. | | |
| 5.1.2.7 An Energy Audit was performed and a set of recommended Energy Efficiency Measures was identified for this building, if applicable. | | |
| 5.1.2.8 Contact information has been gathered for utilities and programs that may offer incentives for Energy Efficiency Measures. | | |
| 5.1.2.9 Energy Efficiency Measures were implemented to ensure compliance with the standard, if applicable. | | |

| Element | YES | N/A |
|---|-----|-----|
| 5.1.3.1 Occupants are informed about the benefits of efficient energy use and instructed in the use and adjustment of operable windows, HVAC system controls, and lighting system components and controls. | | |
| 5.1.3.2 Training is given to Operations and Maintenance personnel about how to operate the building systems to achieve established indoor environmental targets with optimum energy efficiency. | | |
| 5.1.3.3 A capital management plan identifies all building equipment and a schedule for its replacement with energy efficient and ENERGY STAR rated equipment at the end of its useful life or in case of failure. | | |
| 5.1.3.4 There is a contact list of suppliers and local manufacturer's representatives of energy efficient equipment, qualified energy auditor, Qualified Person and/or Qualified Energy Manager, and the building owner. | | |
| 5.1.3.5 There is a lighting schedule and calculations of lighting power density and potential energy savings from any lighting Energy Efficiency Measures, if building does not meet Energy Use Intensity target and no utility program lighting upgrade has been done in the last five years. | | |
| 5.1.3.6 There is a lighting satisfaction survey and lighting checklist as described in Performance Measurement Protocols for Commercial Buildings Appendix D, if building does not meet Energy Use Intensity target and no utility program lighting upgrade has been done in the last five years. | | |
| 5.1.4 The Energy Manager provides access to the Energy Management Plan for building occupants and other stakeholders on an annual basis. | | |
| 5.1.5 The building owner reviews and signs the Energy Management Plan annually. | | |
| 5.2 The building's net energy use is monitored and recorded in accordance with this section. | | |