Oregon Department of **ENERGY**

Oregon Building Performance Standard

Madeline O'Dwyer
Ken Davies
Codes & Standards Team

Christie Sphoon
Schools Sector Lead

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Oregon Building Performance Standard

- In 2023, Oregon Legislature passed House Bill 3409, establishing Building Performance Standards for commercial buildings.
  - The BPS addresses energy use and emissions from existing commercial buildings in Oregon.
  - The BPS requires certain commercial buildings to enhance energy management practices and implement efficiency measures to meet energy use targets.
- In 2024, ODOE went through rulemaking advisory committees to finalize the BPS Standard language.
- In December of 2024, ODOE published the official Oregon version of the ASHRAE 100 that serves as the BPS standard.
- Compliance deadlines start as soon as June 1, 2028.

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BPS (HB3409) vs Public Purpose Charge (SB1149) Schools Program

BPS

- School buildings over 35,000 square feet. (pre-k, public, private, charters, etc.)
- Commercial buildings – regardless of ownership
- Other building types such as admin buildings, bus barns, shops, etc. above 20,000 sq. ft

SB 1149 Program

- K-12 public schools within PGE or Pacific Power territory
- Buildings owned by SD
- Only educational structures, does not include admin buildings, bus barns, shops, etc. unless the building is used more than 50 percent by students

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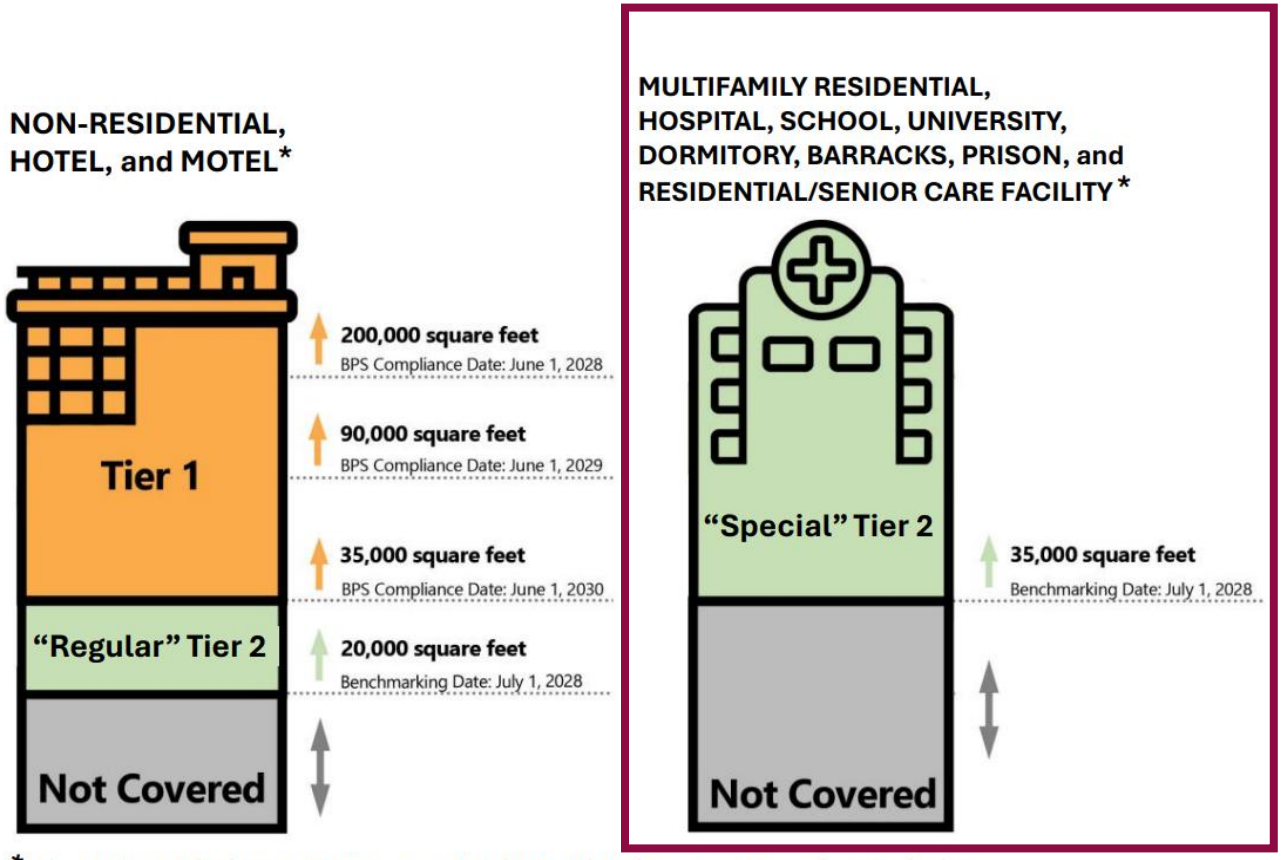
School Buildings Covered by OR BPS

School are considered Tier 2: Multifamily Residential, Hospitals, Schools, Dormitories, & University Buildings

- Compliance Dates
  - July 1, 2028

Separate Admin buildings could be considered Tier 1

- Compliance Dates
  - Dependent on gross square footage



Mixed-use buildings follow more detailed guidelines to determine their tier

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Examples of Buildings

What is building type → What is square footage → Then determine tier

- Elementary School, 25,000 square feet. - Not Covered
- Middle School, 40,000 square feet. - Tier 2
- Bus barn, 25,000 square feet. - Tier 2
- District facilities shop, 37,000 square feet. - Tier 1
- Admin building that is split use (65% admin, 35% students), 40,000 square feet . - Tier 2
- District pool building not on campus of school but used mostly by students with some community use, 35,000 square feet. - Tier 2 if owned by school (justification for student use), Tier 1 if community owned and operated

OR BPS Compliance Requirements for Schools

- Tier 1 and Tier 2 Buildings
  - Find Energy Use Intensity Target (EUIt), based on building activity type, climate zone, occupancy
  - Calculate Energy Use Intensity (EUI)

EUI = Net Building Energy Use ÷ Gross Floor Area

EUIt = predetermined EUI targets based on activity type

- Only Tier 1 Buildings (Potential separate Admin buildings)
  - If EUI > EUIt
  - Work to reduce energy use
    - Energy Audits, Life Cycle Cost Assessment by compliance date
    - Implement Cost-effective Energy Efficiency Measures (EEMs)
  - Attest to Operations & Maintenance (O&M) program and Energy Management Plan (EMP)

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OR BPS Exemptions

- Manufacturing or Industrial Buildings
- Agricultural Buildings
- No Certificate of Occupancy
- Less than 50 percent Physical Occupancy
  - Depends on amount of leased space, not whether occupants or tenants work from home
- Large amount of unconditioned floor area
  - Brings conditioned GFA below OR BPS GFA limits
- Financial Hardship
- Historic Buildings
  - Are NOT exempt
  - But do not have to install EEMs that would compromise historic integrity

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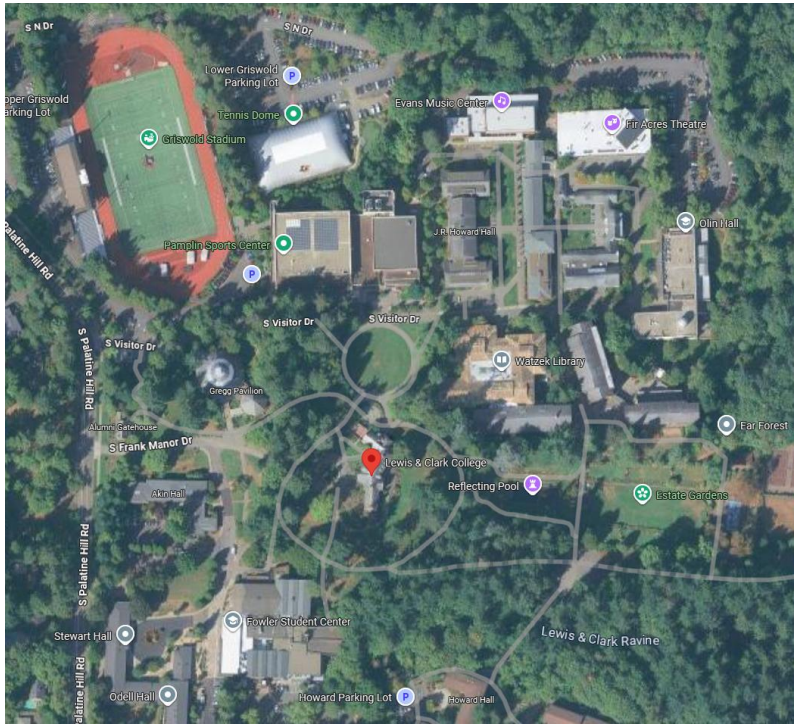
Grouped Buildings – Definitions

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

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

- **Grouped Buildings**: a set of Tier 1 and/or Tier 2 buildings that comply at the **connected** or campus level, 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*.



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Grouped Buildings – Form G Application

- **Does the group include buildings with shared energy metering?** If so, and if the group includes any Tier 1 or Tier 2 buildings, then a **Form G application** for a set of Grouped Buildings must be used.

- **WOU Example:** At least 13 buildings on a university campus are on a shared district system that distributes steam for heating to each of these buildings, with some shared electrical metering. The buildings range in size from a 37,000 gross square foot dormitory to a 95,000 square foot dormitory. Since these are university buildings, any buildings of at least 35,000 square feet may qualify as "special" Tier 2 buildings with a compliance date of July 1, 2028. The whole set of buildings would apply to OR BPS as Grouped Buildings using Form G (under development).

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Examples of School Campuses – Grouped Buildings or Not

Elementary School, Middle School and High School buildings on **same campus** with **5 total buildings, 2 of which are over 35,000 square feet**. The 5 total buildings have 3 electric meters that serve the buildings.

Grouped Buildings?	Tier?	Compliance date?	Energy target compliance?
They can or parse out (if able) and submit individually	Tier 2	July 1, 2028	No

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Examples of School Campuses – Grouped Buildings or Not

High School and Middle School campus with 3 buildings but **each building has its own electric meter**, and each **building has its own heating system**. If the main High School **building is 40,000 square feet** and the **Middle School building is 35,000 square feet.**

Grouped Buildings?	Tier?	Compliance date?	Energy target compliance?
Not a group	Tier 2	July 1, 2028	No

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Examples of School Campuses – Grouped Buildings or Not

Middle School and admin buildings are on the same campus and share an electric meter. The Middle School building is 35,000 square feet and the admin building is 37,000 square feet.

Grouped Buildings?	Tier?	Compliance date?	Energy target compliance?
Grouped	Tier 2	July 1, 2028	No

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Understand Compliance Paths

- Tier 1 Buildings that **don't meet their energy target**
  - If they can meet target before their compliance date >>
    based on 12 consecutive months of energy data
  - If they can't meet target before their compliance date, there are three options:

Compliance
Implement cost-effective energy efficiency measures (EEMs) far enough in advance for the building to meet its energy target by its compliance date.

Conditional Compliance
Cost-effective measures from the Energy Audit are 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
Measures from the Energy Audit are implemented by the compliance date, but the building is NOT expected to reach its energy target, or its EUI cannot be determined due to unavailability of energy use data.

Investment Criteria through Conditional Compliance
Measures from the Energy Audit are NOT implemented before the compliance date because they are being phased in over time. This path requires a Life Cycle Cost Assessment (LCCA).

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Civil Penalties

- Penalties are only assessed on Tier 1 buildings that have **not** complied with this standard.
- Penalties are capped at a maximum value of $5,000, plus one dollar per square foot of Gross Floor Area per year, based on the duration of any continuing violation.
- Penalties may be assessed for each compliance period.
- Before assessing penalties, BPS staff will notify the building owner about their noncompliance and follow the procedures outlined in the standard

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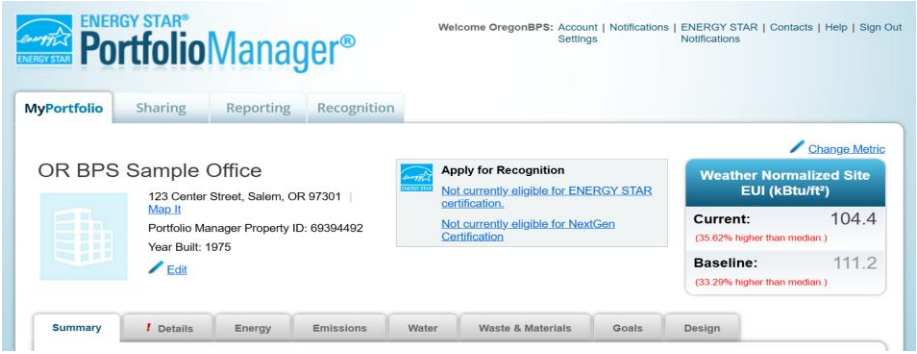
What are Energy Targets?

- Energy targets are used to benchmark buildings
  - Benchmarking compares energy use of similar buildings
  - In OR BPS, we compare your EUI to an established EUIt
- EUI - Energy Use Intensity
  - Actual energy use of the building divided by its gross floor area (not including parking area)
  - Determined for each building using US EPA's free online tool, ENERGY STAR Portfolio Manager
- EUIt - Energy Use Intensity Target, aka Energy Target
  - Comparison value based on activity type and operation
  - Predetermined values based on best available information
  - Determined for each building using the OR BPS EUI Target Tool



OR BPS ENERGY USE INTENSITY TARGET (EUIt) TOOL		Determined for (dropdown):	Single Building
Energy Professional:	Qualified Person Name	Building EUI Target	Tier / Size Category / Compliance Date
Qual Level (dropdown):	QP	40	Tier 1 / ≥ 90,000 SF and < 200,000 SF / June 1, 2029
UBID:	long string of numbers and letters		
Building Address:		Nontarget Area = 0%	No nontarget areas
County (dropdown):	Marion		
Climate Zone:	4C	Vacant Area = 0%	No vacant areas
Building GFA, SF:	101,208	GFA Check = 101,208 SF	OK

#	Area Name	Activity Type (dropdown) Select ESPM Number: Type | Subtype | Details	GFA, ft²	Weekly Hours	Months per Year	EUIt	Operating Factor	Area EUIt	Building Tier
1	office	69: Office | Office | Admin / professional office	101,208	50	12	50	0.8	40	Tier 1

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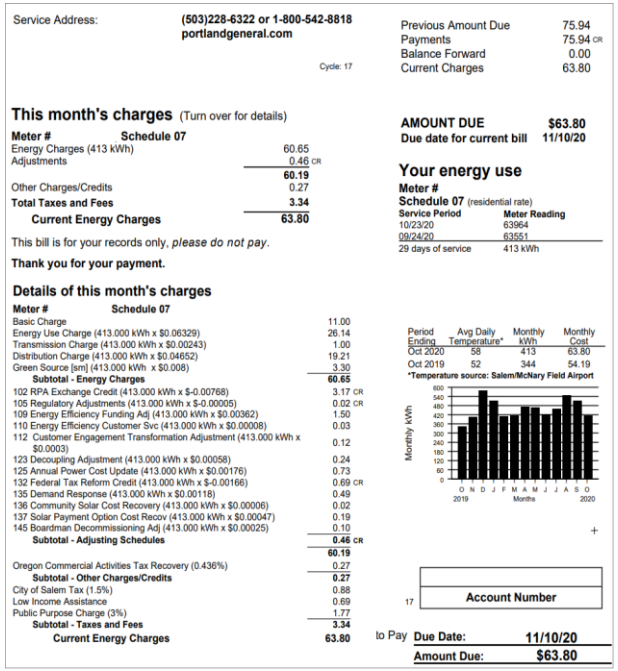
Gather Energy-Related Information

- Acquire all energy bills/data for at least 12 consecutive months within the two years prior to your OR BPS submittal
  - May get bills directly from owner or tenants
  - May get bills from utilities via release forms
  - Buildings with multiple tenants (5+ MF, 3+ commercial) can get aggregated bills from PGE, Pacific Power (Pacificorp), EWEB, Avista, Cascade Natural Gas, or NW Natural
  - May install submeters, if it can be done early enough to collect sufficient energy data before the compliance date
  - Buildings without complete energy use info are treated as though they don't meet their energy targets



Service Address: (503)228-6322 or 1-800-542-8818 portlandgeneral.com

Cycle: 17

Previous Amount Due	75.94
Payments	75.94 CR
Balance Forward	0.00
Current Charges	63.80

This month's charges (Turn over for details)

Meter # Schedule 07	
Energy Charges (413 kWh)	60.65
Adjustments	0.46 CR
	60.19
Other Charges/Credits	0.27
Total Taxes and Fees	3.34
Current Energy Charges	63.80

This bill is for your records only, *please do not pay*.

Thank you for your payment.

AMOUNT DUE $63.80
Due date for current bill 11/10/20

Your energy use

Meter #
Schedule 07 (residential rate)

Service Period	Meter Reading
10/23/20	63964
09/24/20	63551
29 days of service	413 kWh

Details of this month's charges

Meter # Schedule 07	
Basic Charge	11.00
Energy Use Charge (413.000 kWh x $0.06329)	26.14
Transmission Charge (413.000 kWh x $0.00243)	1.00
Distribution Charge (413.000 kWh x $0.04652)	19.21
Green Source [sm] (413.000 kWh x $0.008)	3.30
Subtotal - Energy Charges	60.65
102 RPA Exchange Credit (413.000 kWh x $-0.00768)	3.17 CR
105 Regulatory Adjustments (413.000 kWh x $-0.00005)	0.02 CR
109 Energy Efficiency Funding Adj (413.000 kWh x $0.00362)	1.50
110 Energy Efficiency Customer Svc (413.000 kWh x $0.00008)	0.03
112 Customer Engagement Transformation Adjustment (413.000 kWh x $0.0003)	0.12
123 Decoupling Adjustment (413.000 kWh x $0.00058)	0.24
125 Annual Power Cost Update (413.000 kWh x $0.00176)	0.73
132 Federal Tax Reform Credit (413.000 kWh x $-0.00166)	0.69 CR
135 Demand Response (413.000 kWh x $0.00118)	0.49
136 Community Solar Cost Recovery (413.000 kWh x $0.00006)	0.02
137 Solar Payment Option Cost Recov (413.000 kWh x $0.00047)	0.19
145 Boardman Decommissioning Adj (413.000 kWh x $0.00025)	0.10
Subtotal - Adjusting Schedules	0.46 CR
	60.19
Oregon Commercial Activities Tax Recovery (0.436%)	0.27
Subtotal - Other Charges/Credits	0.27
City of Salem Tax (1.5%)	0.88
Low Income Assistance	0.69
Public Purpose Charge (3%)	1.77
Subtotal - Taxes and Fees	3.34
Current Energy Charges	63.80

Period Ending	Avg Daily Temperature*	Monthly kWh	Monthly Cost
Oct 2020	58	413	63.80
Oct 2019	52	344	54.19

*Temperature source: Salem/McNary Field Airport

17 Account Number

to Pay Due Date: 11/10/20
Amount Due: $63.80

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Public Purpose Charge (SB 1149) Schools Program

SB 1149 Schools Program will be working to align to BPS where feasible for consistency:

- EUI Targets
- Energy use reporting through Energy Star Portfolio Manager

Resources:

- Public Purpose Charge (SB 1149) Schools Program webpage: https://www.oregon.gov/energy/energy-oregon/Pages/SB1149-Program-Guidelines.aspx
- List of SB 1149 schools: https://www.oregon.gov/energy/energy-oregon/Documents/SB1149-Eligibility-List.xlsx

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OR BPS Website and Guidance Documents

- Many guidance documents available to explain compliance procedures:

BPS 000 – BPS Basics
BPS 001 – Tier 1 and Tier 2 Compliance
BPS 002 – Exemptions and Historic Buildings
BPS 003 – Finding Energy Use Intensity Target
BPS 004 – Calculating Energy Use Intensity
BPS 005 – Energy Audits and Life Cycle Cost Assessments

BPS 006 – Energy Professionals

BPS 007 – Operations and Maintenance Programs
BPS 008 – Energy Management Plans

BPS 009 – Grouped Buildings or Campuses
BPS 010 – Incentives and Penalties
BPS 011 – Application to Tribal and Federal Buildings

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What Should Building Owners Do Now?

- Verify building information in the Property Inventory List
  - OR BPS Online Property Inventory List
  - Submit any changes to contact information, property type, square footage
- Gather building information
  - Accurate square footage of each area of the building
  - Utility billing data for entire building (may need tenant bills or release forms)
- Identify energy professionals
  - Qualified Person (QP)/Qualified Energy Manager (QEM) to calculate EUI and EUIt
  - Qualified Energy Auditor if a Tier 1 buildings does not meet EUIt
  - Building owners or their staff members may be able to qualify for these roles

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OR BPS Current Status

- Compliance dates don't begin until July 1, 2028
  - But buildings may have work to do, so owners should start ASAP
- Work underway by ODOE BPS staff
  - Gathering information on Oregon commercial buildings
    - Letters went out to building owners in late June
    - Incentive structure is designed for early compliance efforts
    - Incentive Rulemaking was completed and first application cycle complete
  - Website is populated with guidance documents
  - The BPS Compliance Portal will be online soon

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Energy Professionals

Various types of energy professionals must oversee BPS submittals.

- Qualified Person
- Qualified Energy Manager
- Qualified Auditor

Energy professionals may be employed by the building owner / organization, or they may be contracted, if they meet the required criteria

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BPS Submittals

Various types of energy professionals must oversee BPS submittals.

Submittal	Tier 1 Buildings	Tier 2 Buildings
Form A: Application for Oregon BPS Compliance	Building Owner	Building Owner
Form G: Grouped Buildings Application for Oregon BPS Compliance	Building Owner	Building Owner
Form X: Exemption Application	Building Owner	Building Owner
Form H: Historic Building Documentation	Building Owner	Building Owner
Form B: Building Activity and Energy Use Intensity Target (EUIt)	Qualified Person	Qualified Energy Manager or Qualified Person
Form C: Calculation of Energy Use Intensity (EUI)	Qualified Person	Qualified Energy Manager or Qualified Person
Operations and Management Program (O&M)	Qualified Person	n/a
Energy Management Plan (EMP)	Qualified Person	n/a
Form D: Decarbonization Plan	Qualified Person	n/a
Form E: Energy Audit	Qualified Energy Auditor	n/a
Form L: Life Cycle Cost Analysis	Qualified Energy Auditor	n/a

Energy Professionals – Energy Manager

Either a **Qualified Person or a Qualified Energy Manager must be identified for all Tier 2 buildings,** and must complete Form B and Form C.

A Qualified Energy Manager must have:

- At least two years of educational and/or professional experience with commercial building operations or building energy management, OR
- Must meet the definition of a Qualified Person.

QEM's will oversee school building/campus BPS submittals

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Energy Professionals – Qualified Person

A **Qualified Person** must be identified for all **Tier 1 Buildings and must have:**

- **Training and expertise in building energy use analysis, AND**
- **At least one (1) of the following certifications:**
  - Professional architect's or engineer's license in the state of Oregon
  - Qualified as an energy auditor (see next slide)
  - Certified Energy Manager in current standing, through the Association of Energy Engineers
  - Building Operator Certification Level II by Building Potential
  - Energy Management Professional through the Energy Management Association
  - Degree from the Building Controls program at Lane Community College Energy Management, or an equivalent degree approved by ODOE
  - Building commissioning professional certified by an ANSI/ISO/IEC 17024:2012 accredited organization

QP's will oversee admin building BPS submittals (if separate from school)

Energy Professionals – Energy Auditor

A **Qualified Energy Auditor** must perform any Energy Audits and Life Cycle Cost Assessments for **Tier 1** buildings and must **have:**

- At least three years of professional experience in building energy auditing, ***AND***
- At least **one** (1) of the following certifications:
  - Professional architect's or engineer's license in the state of Oregon
  - Building Energy Assessment Professional certified from ASHRAE
  - Certified Energy Auditor via the Association of Energy Engineers
  - Certified Energy Manager in current standing, via AEE
  - Energy Management Professional via the Energy Management Association

Only necessary if admin building is not meeting target

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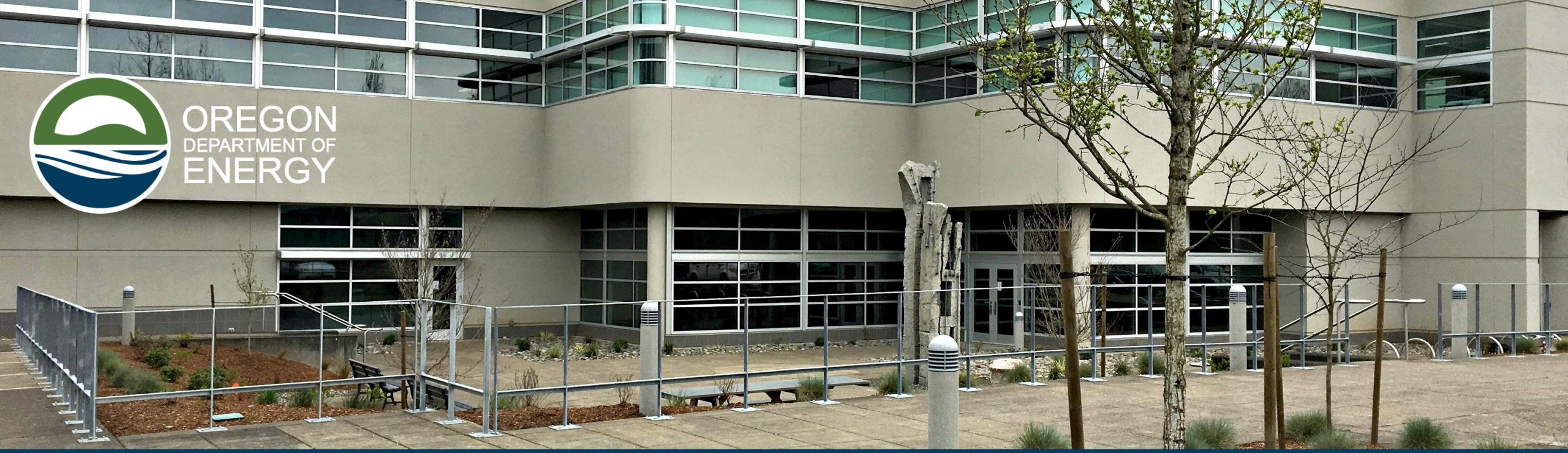
OR BPS Incentive Programs

State-funded program ($2m) (HB 3409)	Federally-funded program ($12m) (CERTA)
• Incentivizes early compliance	• Incentivizes early compliance
• Incentives for planning activities required for compliance	• Incentives for energy efficiency measures that reduce energy use and GHG emissions
• Tier 1 and Tier 2 buildings	• Tier 1, Tier 2, and Tribal buildings
• Up to $0.85 per sq ft (with caps)	• Caps of $50k and $100k
• Incentive awards are competitive	• Incentive awards are competitive
• 2 funding rounds - $1m each round	• 2-3 funding rounds



Thank you for helping make OR BPS a success

https://www.oregon.gov/energy/save-energy/Pages/BPS.aspx

OregonBPS@energy.oregon.gov

sb1149.sch@energy.oregon.gov