



WELCOME

Clean Buildings Symposium

February 23, 2024

Opening Remarks



Jen Tetatzin
Pierce County
Director of Planning &
Public Works



Kristina Walker
Tacoma Council
Member,
At-Large Position 8



Tacoma-Pierce County Climate Efforts



Ryan Dicks
Pierce County
Sustainable Resources
Division Administrator



Kristi Lynett
City of Tacoma
Sustainability Officer





PLANNING & PUBLIC
WORKS

02/23/2024

Pierce County – Building Sustainability

Ryan Dicks, Sustainable Resources Administrator



Ryan.Dicks@piercecountywa.gov

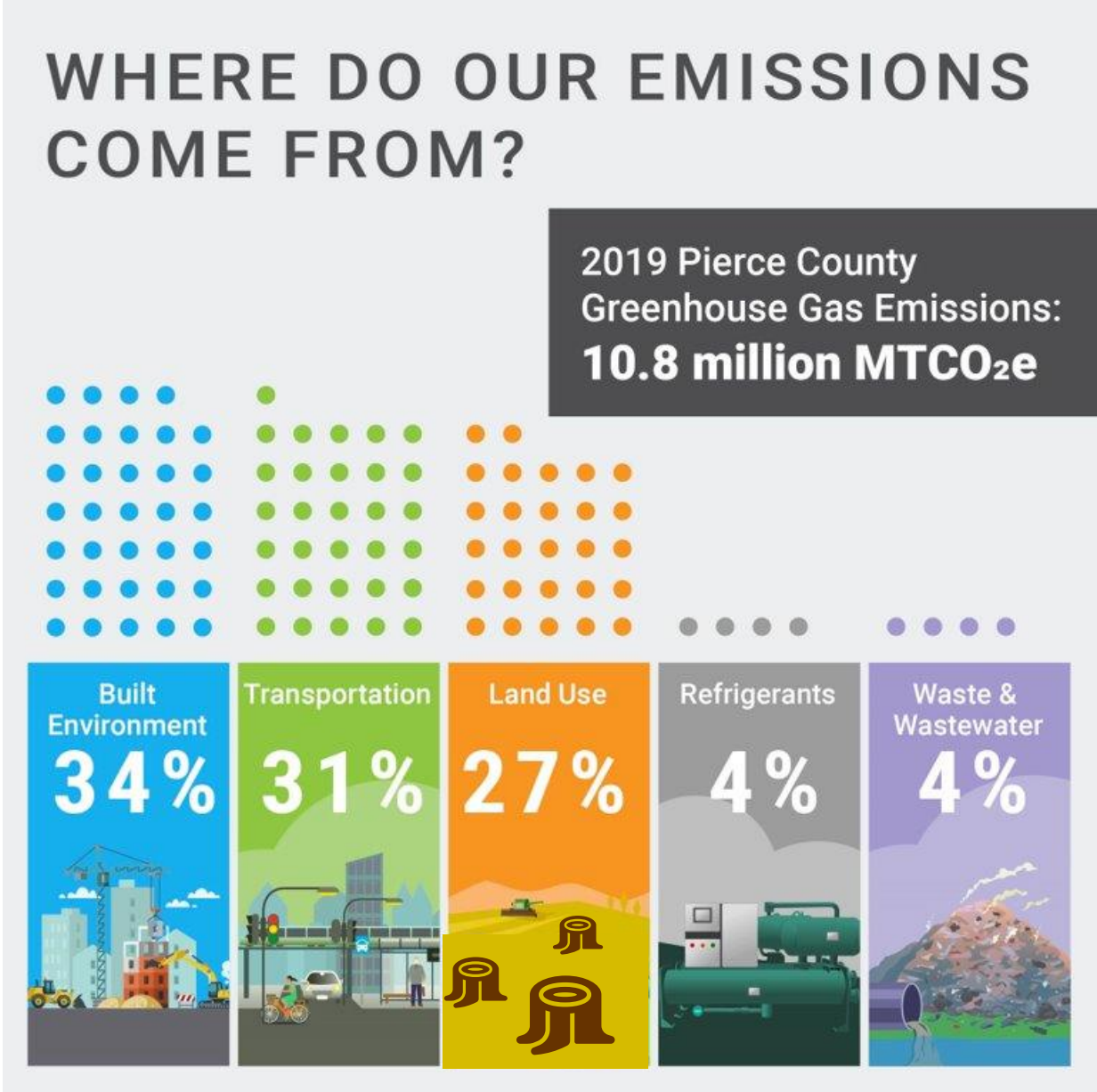


(253) 798-8603

Sources of Greenhouse Gas (GHG) Emissions

Where our communitywide human-generated emissions come from

Pierce County Communitywide GHG Emissions

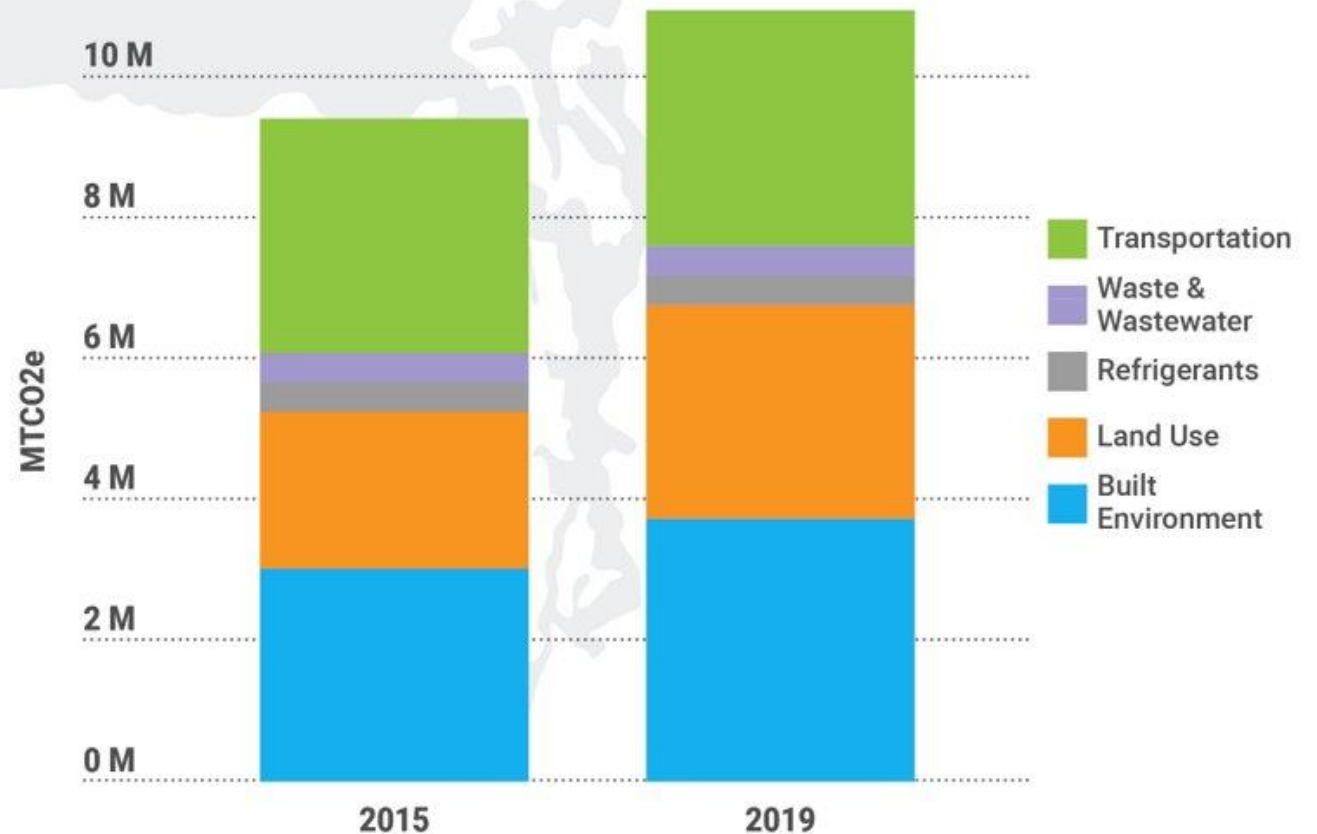


Pierce County Communitywide GHG Emissions

- Building emissions are the fastest growing sector and increased the most from 2015-2019

HOW ARE OUR EMISSIONS CHANGING OVER TIME?

From 2015 to 2019, our region increased overall emissions by about 16%. While population increased 7% during this same period, per capita emissions increased by 9%.

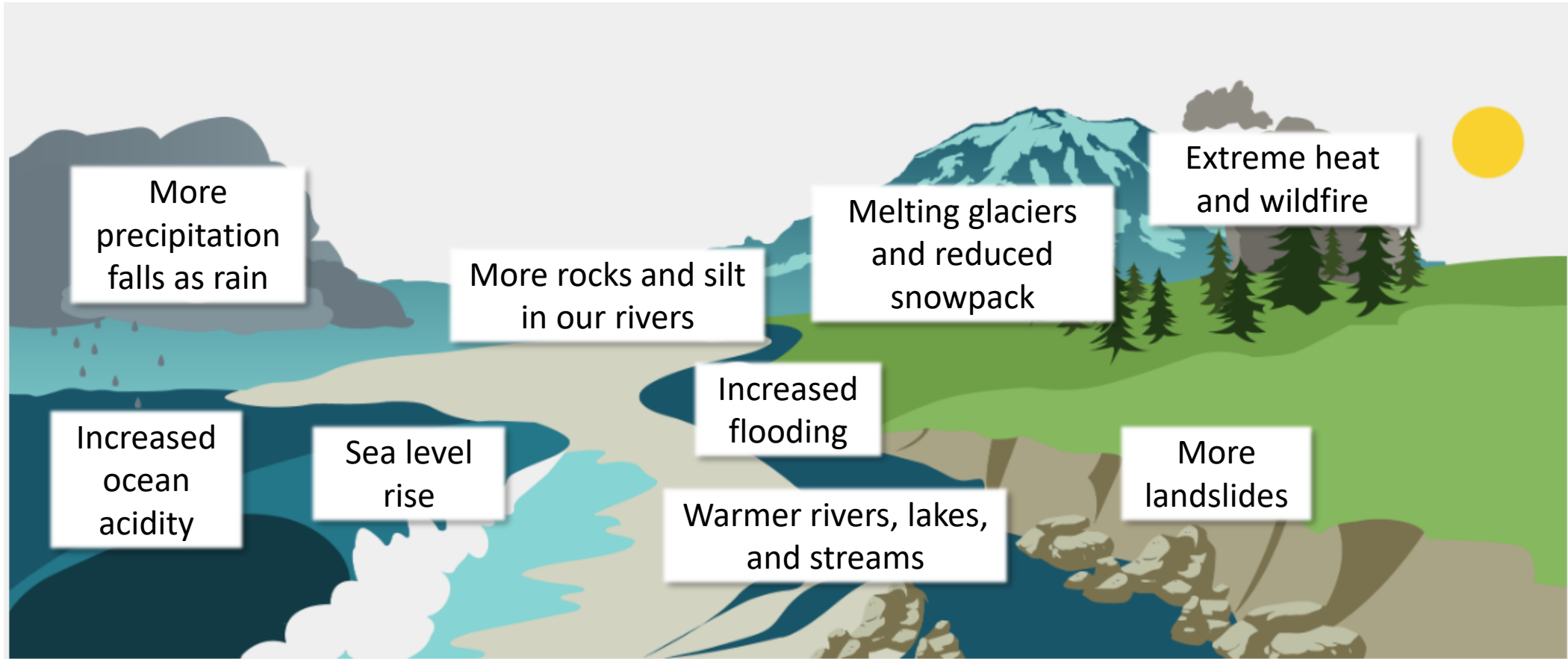




Community Burdens

Rising Greenhouse Gas emissions are affecting where we live, work, and play

Local Effects of Climate Change

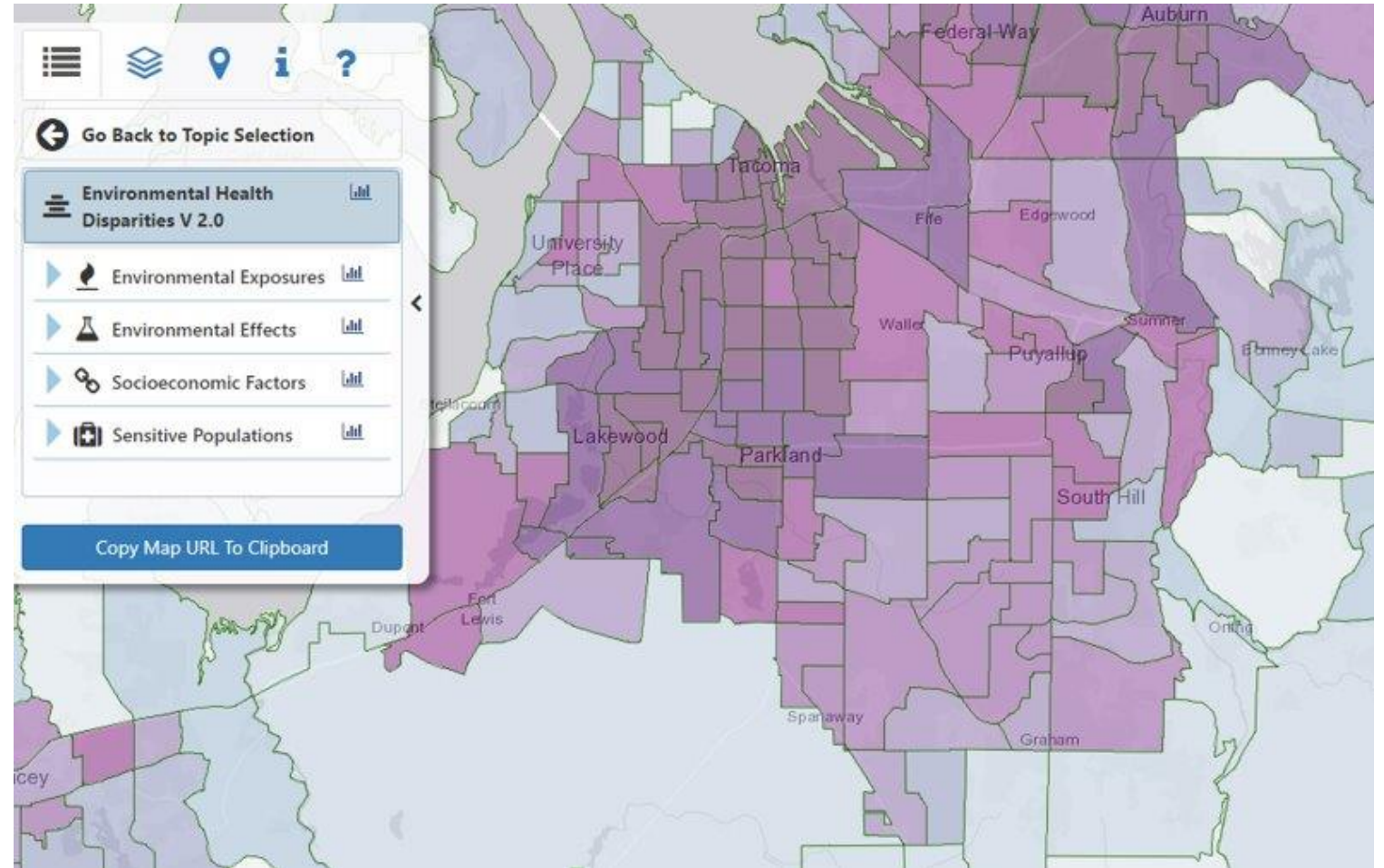


Local Climate Impacts



Unequal Impacts

- Existing health and economic disparities
- Inequitable distribution of resources to respond to or recover from climate impacts



Washington Department of Health Environmental Health Disparities Map

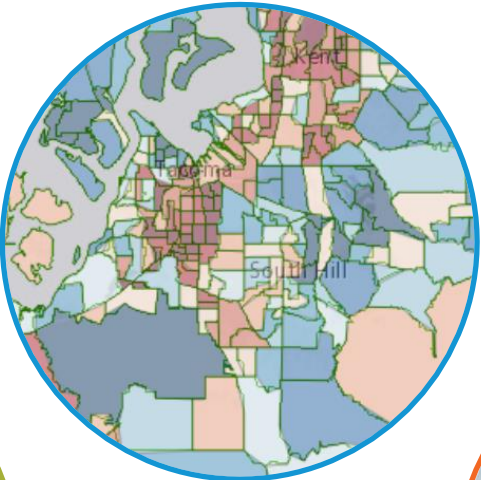
Co-Benefits of GHG Reduction



Economic benefits



Enhance public health



Promote equity



Improve air quality



Improve water quality



Pierce County's Sustainability 2030 Plan

Our commitment to reducing emissions and protecting communities

Sustainability 2030 Plan



Developed in 2020

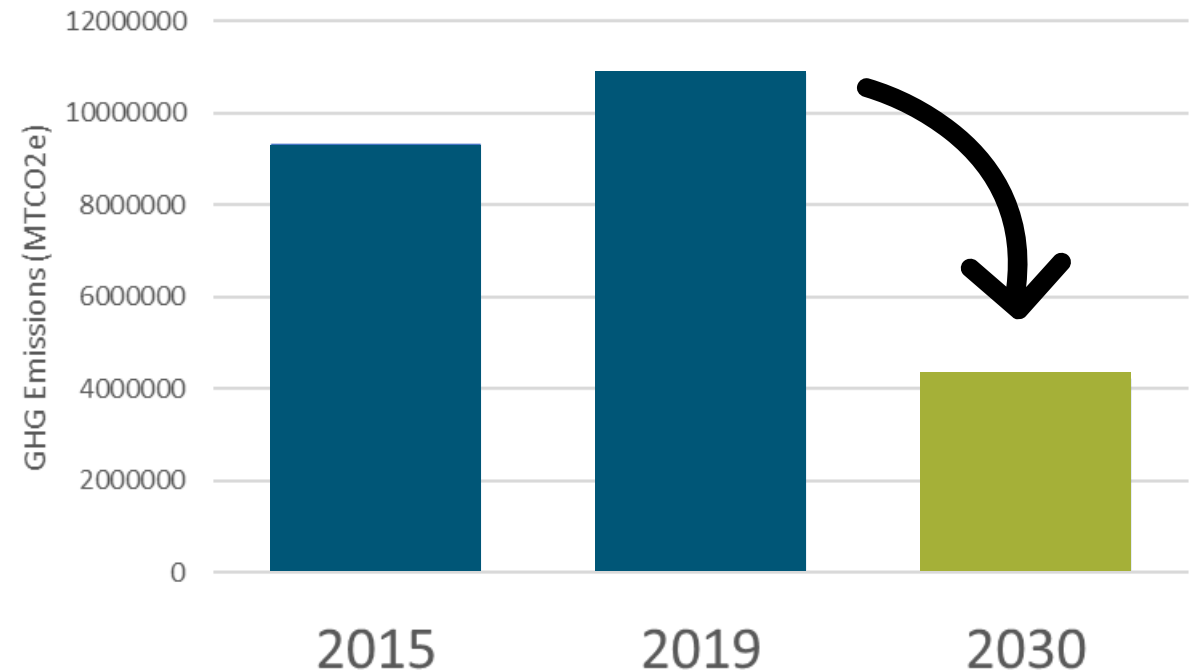


Signed in April 2021



Updated in 2023

Goal: 45% GHG Reduction by 2030



Focus Areas

Community Actions



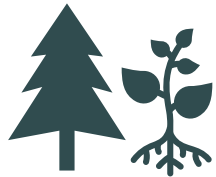
Energy & Built Environment



Transportation



Waste Reduction



Nature-based Climate Solutions



Education & Outreach



Growing Community Capacity

Municipal Actions



County Buildings & Fleet



Commute Trip Reduction



County Waste System



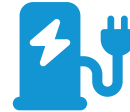
Education & Equitable Practices

Reducing Building Emissions



Energy & Built Environment Actions

- Maximizing renewables
- Advancing C-PACER Program
- Promoting IRA rebates to Pierce County residents



County Building & Fleet Actions

- Implementing the Electric First Policy
- Maximizing electrification and reducing fuel use
- Improving efficiency by planning and funding needed infrastructure

C-PACER

Commercial Property Assessed Clean Energy and Resiliency

C-PACER financing can help properties meet Clean Buildings Standard requirements

Eligible property types

- Commercial
- Industrial
- Agricultural
- Multi-family

Qualified improvements

- Meets or exceeds energy code
- Meets or exceeds Clean Building Standard
- Reduces energy purchased or GHG emissions by 20%
- Replaces fossil fuel equipment with electric alternatives

- Available for new construction and retrofit projects
- Visit PierceCountyWA.gov/C-PACER for more information

Pierce County Compliance

Meeting the Clean Building Standard

1 Tier 1 Buildings ($\geq 50,000$ square feet)

- Seven buildings totaling 1.35 million square feet
- Compliance deadlines range from 2026-2028
- Four buildings already meet EUI targets

2 Tier 2 Buildings (20,000-49,999 sqft)

- Nine buildings totaling 242,000 square feet
- June 2027 compliance deadline
- Maintenance & Operations and Energy Management Plans only



TACOMA COMMERCIAL BUILDINGS

CLIMATE
ACTIONS



DIFFERENT BUT RELATED GOALS

CBPS

- Energy Efficiency
 - Energy/Sq Ft
- Fuel agnostic

Decarbonization

- Electrification
- Whole building approach


New construction vs. Existing retrofits

DECARBONIZATION RESOLUTION # 40776

1. Requires all new municipal buildings and major renovations to exclude fossil fuels
2. Inventory existing facilities and evaluate feasibility for non fossil fuel retrofits
3. Develop plan to install EV charging at all City facilities
4. Prioritize zero emission fleet vehicle purchases
5. Develop impact assessment of requiring non-fossil fuel sourced heating, lighting, and power in new commercial and residential development in the City
6. Encourage other local entities, such as the County, school districts, and major institutions, to join in this step to invest in clean energy assets by adopting similar policies

April 2021





MUNICIPAL FACILITY ACTIONS



CITY OF TACOMA'S CBPS PROPERTIES

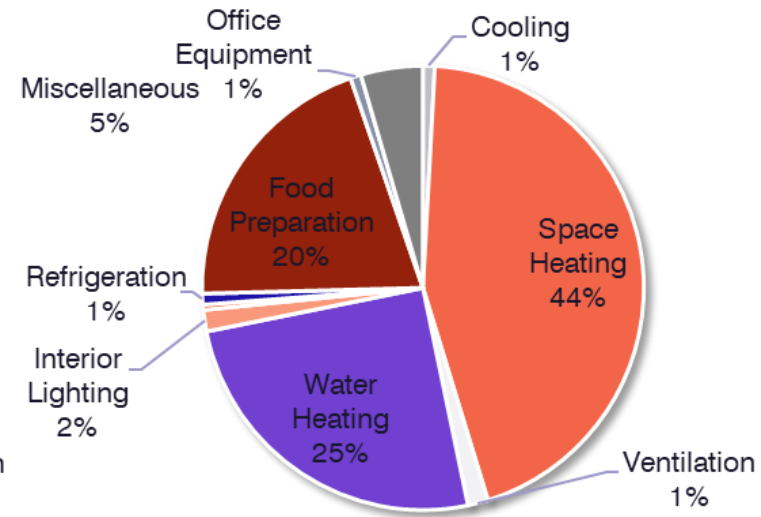
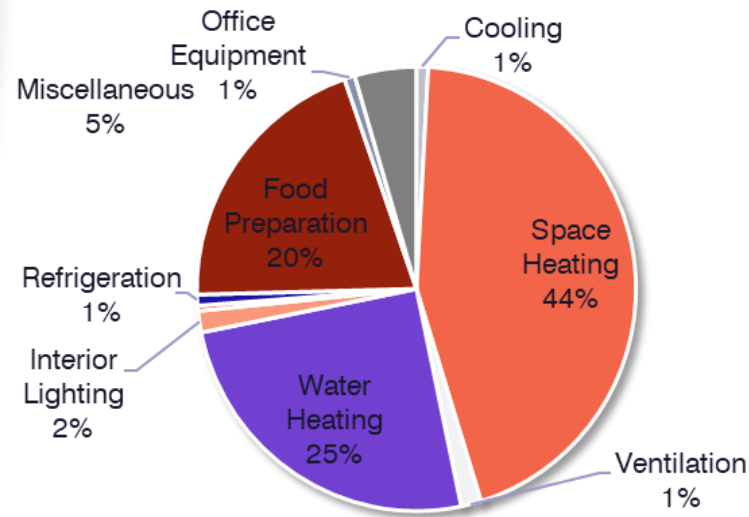
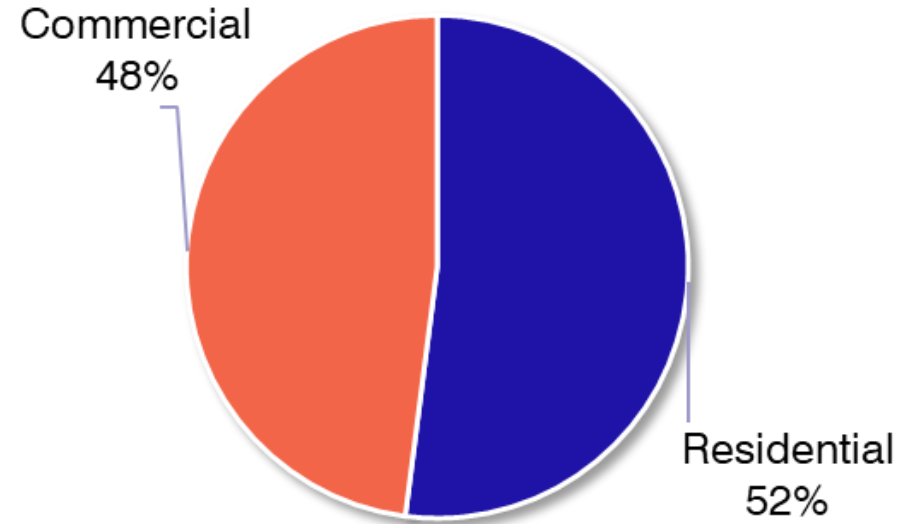
PROPERTY NAME	DEPT	2019 EUI	EUI TARGET	EUI ABOVE / BELOW TARGET	COT BENCHMARK START DATE
Center for Urban Waters	ES	74	90	-16	June 2027
Tacoma Municipal Building (garage GFA excluded)	PW	57	66	-9	June 2026
Police Warehouse includes Fleet Services	PW	36	66	-30	June 2026
Police Headquarters	PW	117	72	45	June 2027
Tacoma Main Library	TPL	50	62	-12	June 2026
Tacoma Dome	TVE	69	74	-5	June 2025
Convention Center, Greater Tacoma	TVE	51	74	-23	June 2025
Cheney Stadium	TVE	1	40	-39	June 2026
Theater complex: 1 Pantages+Jones+TOTS	TVE	50	59	-9	June 2026



COMMUNITY ACTIONS



TACOMA'S BUILDING GHG EMISSIONS



COMMUNITY ACTION ITEMS

Residential Performance Disclosure

Neighborhood Scale Implementation

State Energy Code & Performance Standard

Collaboration Framework

State/Regional Zero Emission Appliance Standard

Increase Staffing & Contracts

State/Federal Incentives

Partner with Tacoma Power & PSE

Complementary Utility Programs

Targeted Market Development

Low to No Cost Low Income Programs

Community Engagement

Targets & Milestones with Outreach

Reduce Installation Costs

NEXT STEPS & OPPORTUNITIES

- Tacoma focus for Elevate WSU CEEP multifamily retrofit pilot
- Regional navigator website (residential & small businesses)
- EPA grant funding for MF and small business retrofits

With future funding

- Expansion of TPU Income Qualified Rental Program (1-4 units)
- Small commercial retrofit program



Elected Officials Forum

Andy Kaplowitz
Moderator



**Commissioner
Kristin Ang**
Port of Tacoma



**Council Chair
Ryan Mello**
Pierce County



**Council Member
Jeni Woock**
City of Gig Harbor



**Mayor
Jason Whalen**
City of Lakewood



**Council Member
Kristina Walker**
City of Tacoma



10 Min Break



Reminder:

This Event Qualifies for Continuing Education Hours
for Real Estate Professionals

See Justin Wallander (BOMA) for Details



Submit Your Questions

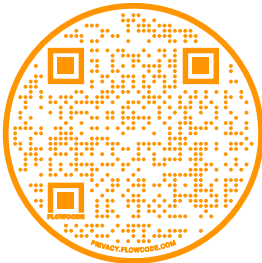
Clean Buildings Act & Performance Standards



Emily Salzberg
Buildings Unit Managing Director
Department of Commerce



Washington State
Department of
Commerce



Clean Buildings Performance Standard

Presenters

EMILY SALZBERG

9/28/2023



Washington State
Department of
Commerce

We strengthen communities



HOUSING AND HOMELESSNESS



INFRASTRUCTURE AND BROADBAND



SMALL BUSINESS ASSISTANCE



ENERGY



PLANNING AND TECH ASSISTANCE



COMMUNITY SERVICES AND FACILITIES



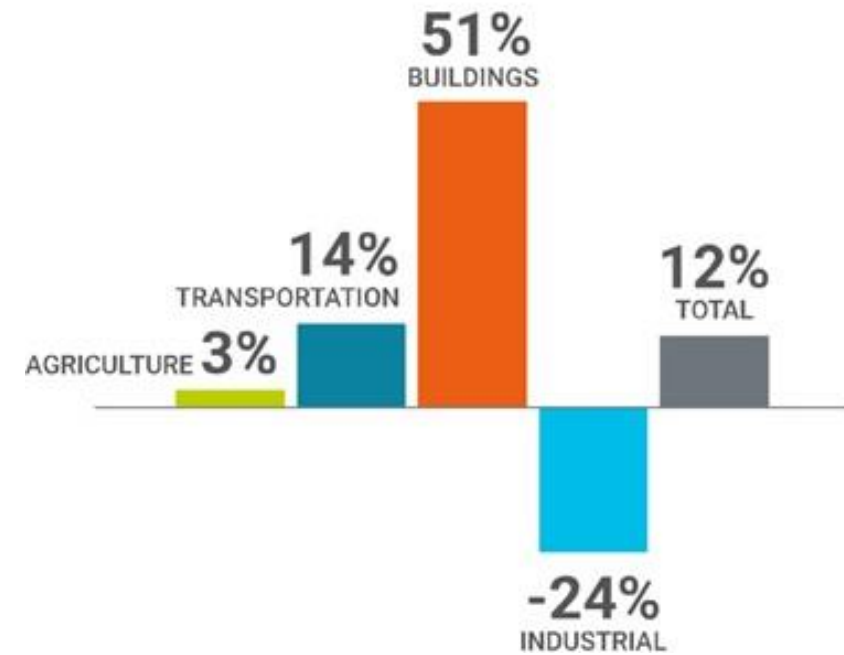
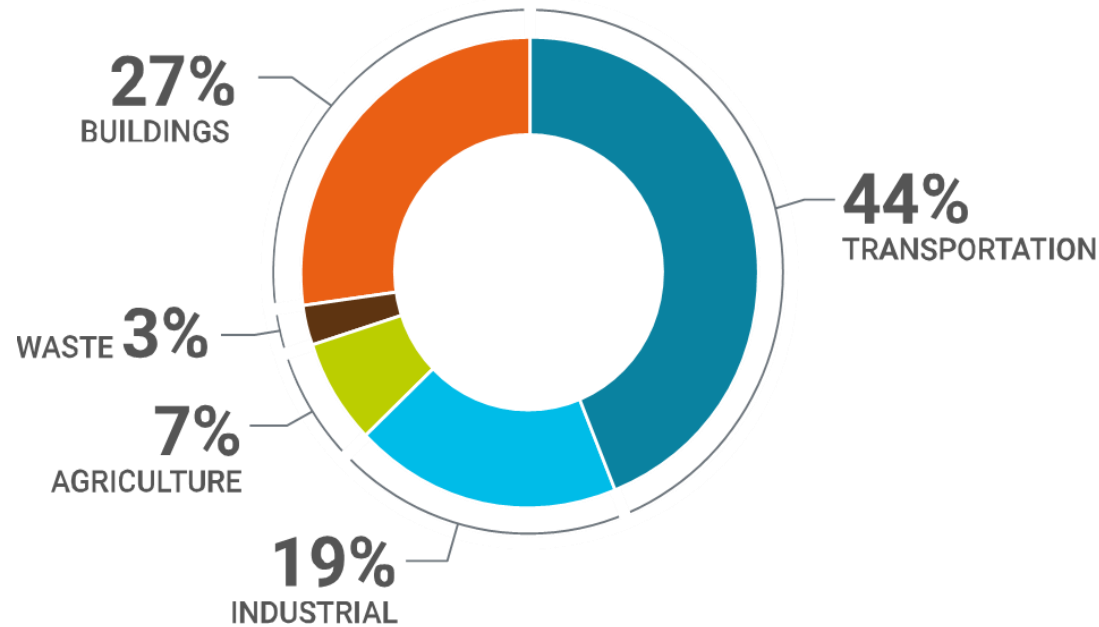
CRIME VICTIMS AND PUBLIC SAFETY



ECONOMIC DEVELOPMENT

Reducing emissions from existing buildings

As Washington's population has grown, greenhouse gas emissions from buildings jumped significantly from 1990-2015



Clean Buildings Performance Standard

- Site based Energy Use Intensity (EUI)
- Based on ASHRAE Standard 100-2018
- WAC 194-50 – Rules for compliance and administrative requirements.
 - Amendment to Standard 100
- Tier 1 Buildings
 - Buildings over 50k sq ft excluding parking
- Tier 2 Buildings
 - Buildings between 20 and 50,000 square feet
 - Multifamily over 20,000 square feet

Commerce charged with:

- Rulemaking
- Notifying building owners
- Administering incentives
- Supporting mandatory compliance

Tier I Basic requirements



- ✓ Benchmarking
- ✓ Implementation of an Operations and Maintenance program and Energy Management Plan
- ✓ Compliance with an energy performance metric
 - Energy use intensity target met
 - Or
 - Energy Audit and implementation of cost effective energy efficiency measures

Tier 2 Basic requirements

- ✓ Benchmarking
- ✓ Operations and Maintenance program
- ✓ Energy Management Plan

**not a performance standard at this point in time*



Compliance and Reporting Schedule

A building owner of a tier I building must meet the following reporting schedule for complying with the standard and every five years thereafter:



Tier 1 - Buildings more than 220,000 gross sq. ft, June 1, 2026



Tier 2 - Buildings more than 20,000 – less than 50,000 gross sq. ft, June 1, 2027







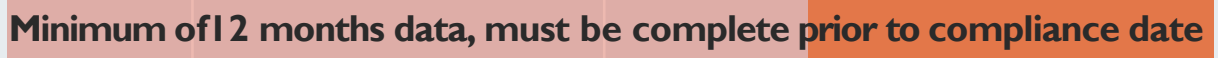




Tier 1 - Buildings more than 90,000 – less than 220,001 gross sq. ft, June 1, 2027



Tier 1 - Buildings more than 50,000 – less than 90,001 gross sq. ft, June 1, 2028

Example Timeline- 220k sq. ft. building (Tier I)

TASK	2022	2023	2024	2025	2026
Portal access and data confirmation					
Initial Benchmarking and account set up	 Benchmark using 12 consecutive months of energy data				
Energy Audit (if applicable)	 By Jan 2023				
Planning, budgeting and implementing EEMs		 6-18 months, must be complete by mid 2025			
EMP and O&M Development & Implementation		 Ongoing, must be complete by July 2025			
Measurement and verification		 Minimum of 12 months data, must be complete prior to compliance date			
Conditional Compliance (if applicable)		Shall be applied for no later than 180 days prior to compliance date			
Compliance Date		*Compliance date for buildings greater than 220k sq. ft. is Jun 1, 2026 			

Variable timeline



Minimum timeline



Compliance Date



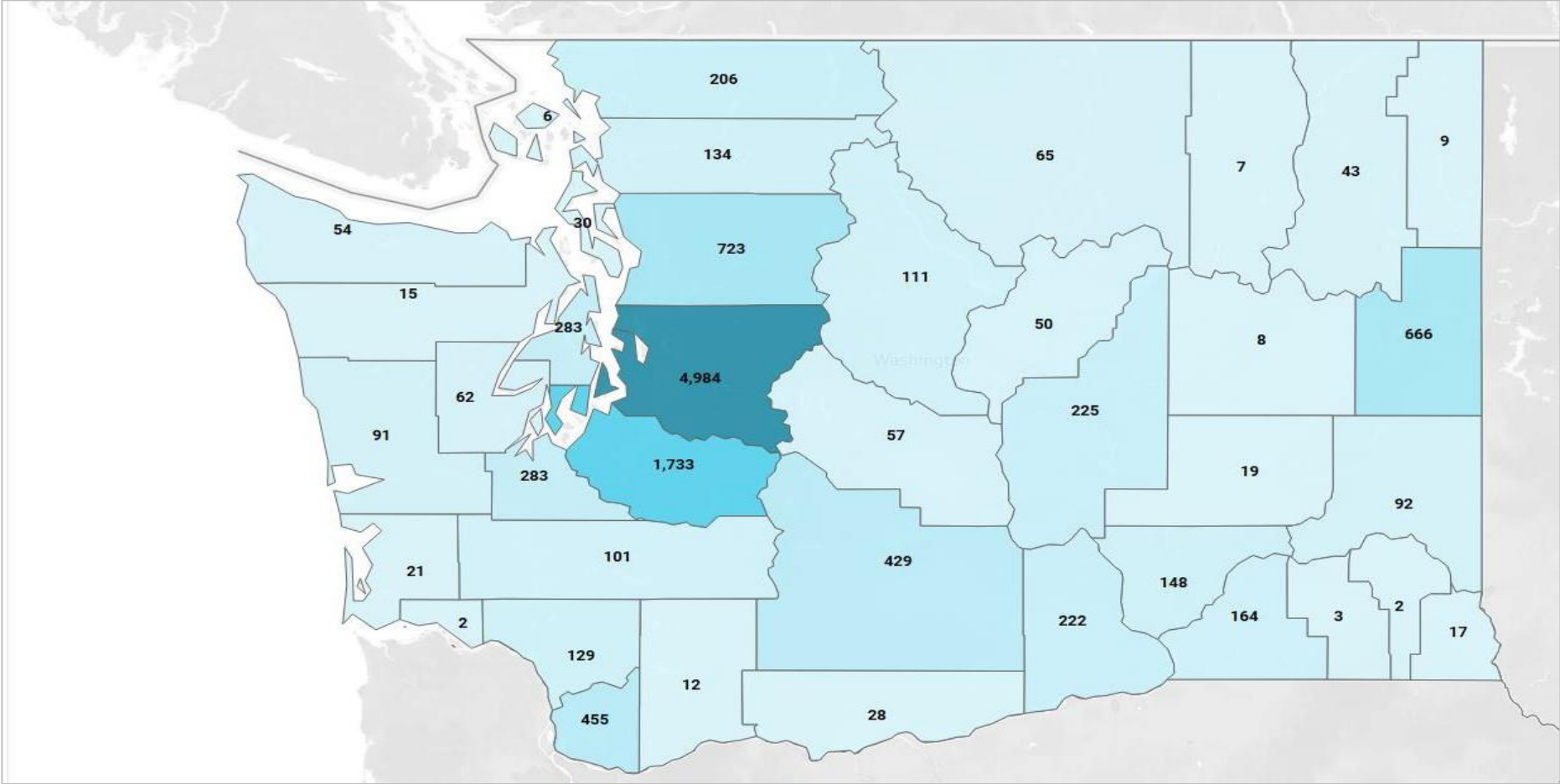
*Initial compliance dates in accordance with Section Z3.1 of the standard and every five years thereafter.

Compliance through exemption

Buildings which qualify for the following conditions can receive an exemption from meeting average energy use intensity targets:

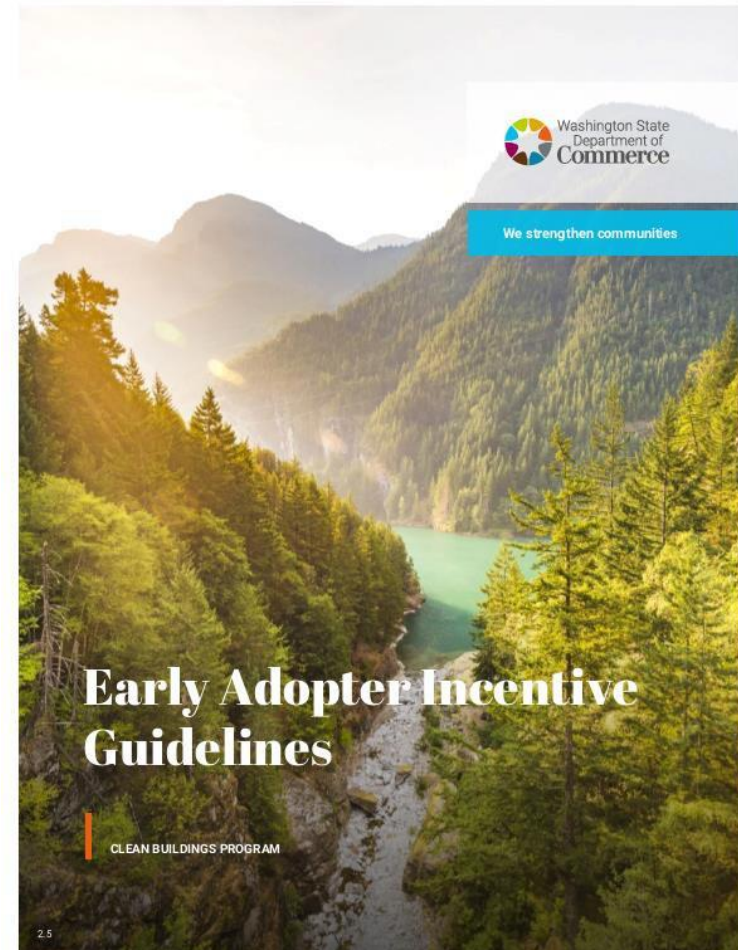
- Mostly unoccupied or vacant buildings
- Unconditioned buildings
- Buildings primarily used for manufacturing or other industrial purposes
- Agricultural structures
- Buildings pending demolition
- Buildings that meet the conditions of financial hardship

Tier I covered buildings by county



Early Adopter Incentive Program

- Incentivizes high energy users
- Incentive funds are limited to \$75 million
- \$.85 cents per gross square foot
- Equity and inclusion:
 - Rural communities
 - Multifamily affordable housing
- Tier 2 incentive coming 2025



No-Cost Support

- ✓ Clean Buildings Team
- ✓ Utility Providers
 - Accelerator Programs
- ✓ Smart Building Center/NEEC
 - Help Desk
- ✓ Energy Star Portfolio Manager
 - Customer Support
 - Live and recorded training session



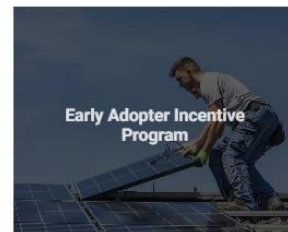
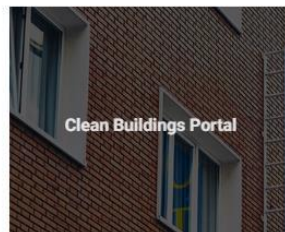
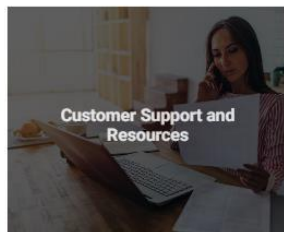
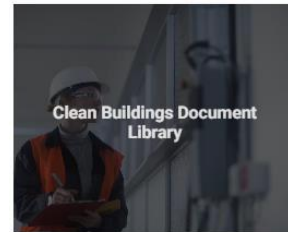
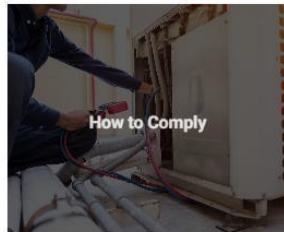
Clean Buildings Webpage

Clean Buildings

Clean buildings are essential to meeting our state energy goals. In 2019 the Clean Buildings bill was signed into law and later expanded in 2022. The objective is to lower costs and pollution from fossil fuel consumption in the state's existing covered buildings and multifamily buildings. The law also provides incentives to encourage building owners to make energy efficiency improvements earlier than required. Find out more about the Clean Buildings Performance Standard here.



- How to Comply
- Frequently Asked Questions
- Guidance Document Library
- Customer Support and Resources
- Early Adopter Incentive Program
- Clean Buildings Portal
- Customer Support Form



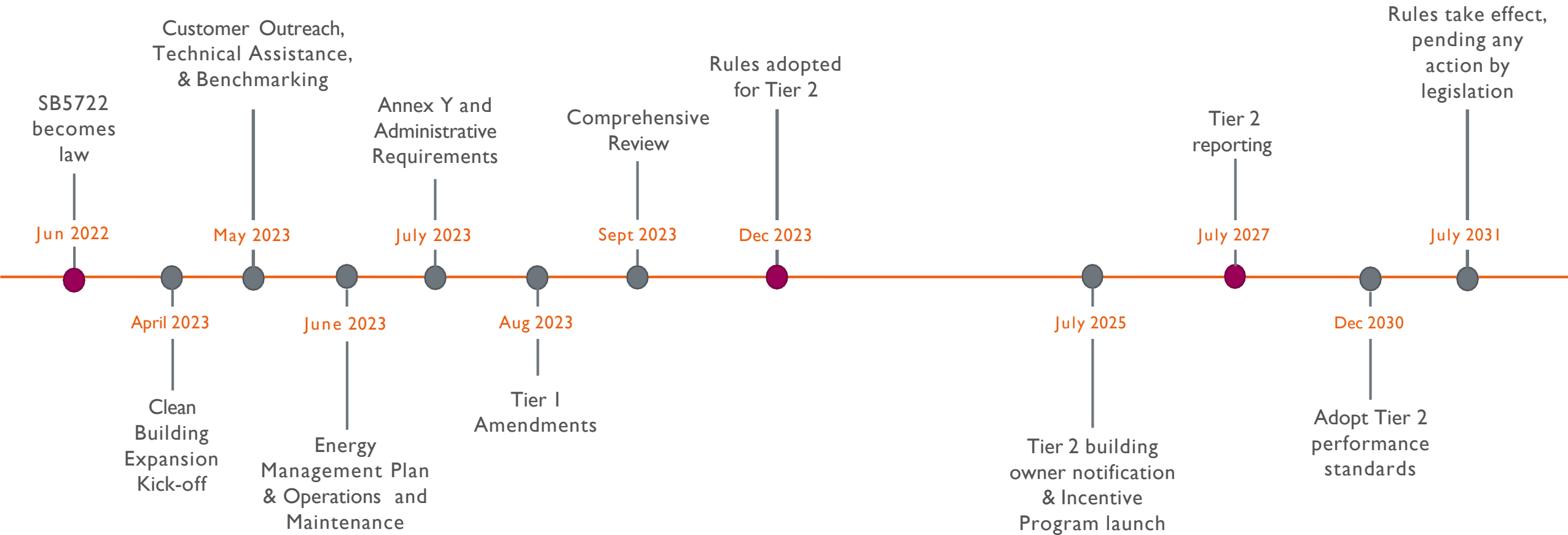
Website: <https://www.commerce.wa.gov/buildings/>

Clean Buildings Portal

- View and verify parcel/building information
- Manage roles and authorized users to work on parcel/building profile
- Submit applications
- Submit compliance forms
- Track compliance requirements
- Check on the status of applications
- Make changes to account information



Tier 2 Timeline





Washington State
Department of
Commerce

www.commerce.wa.gov



Thank You!

www.commerce.wa.gov/buildings

buildings@commerce.wa.gov

360-725-3105



Submit Your Questions

ESPM & Benchmarking



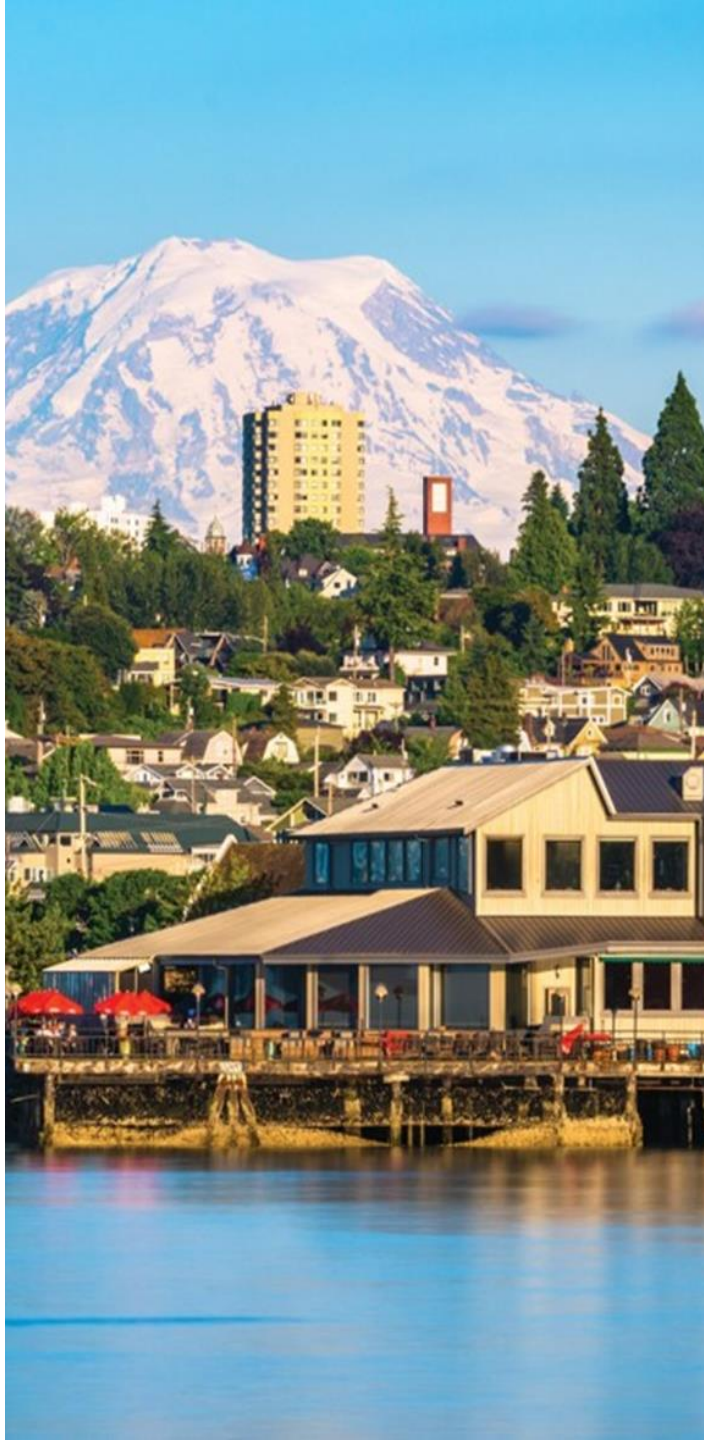
Anne Larrabee

Conservation Data Analyst
Tacoma Power



Ian Tachibana

Energy Management Engineer
Puget Sound Energy





**CONNECTING TO
ENERGY STAR
PORTFOLIO
MANAGER**

With

Anne Larrabee | Tacoma Power
Ian Tachibana | Puget Sound Energy

- How to Get Started in Energy Star Portfolio Manager (ESPM)
- The benefits of ESPM
- How to Connect to Tacoma Power
- How to Connect to Puget Sound Energy

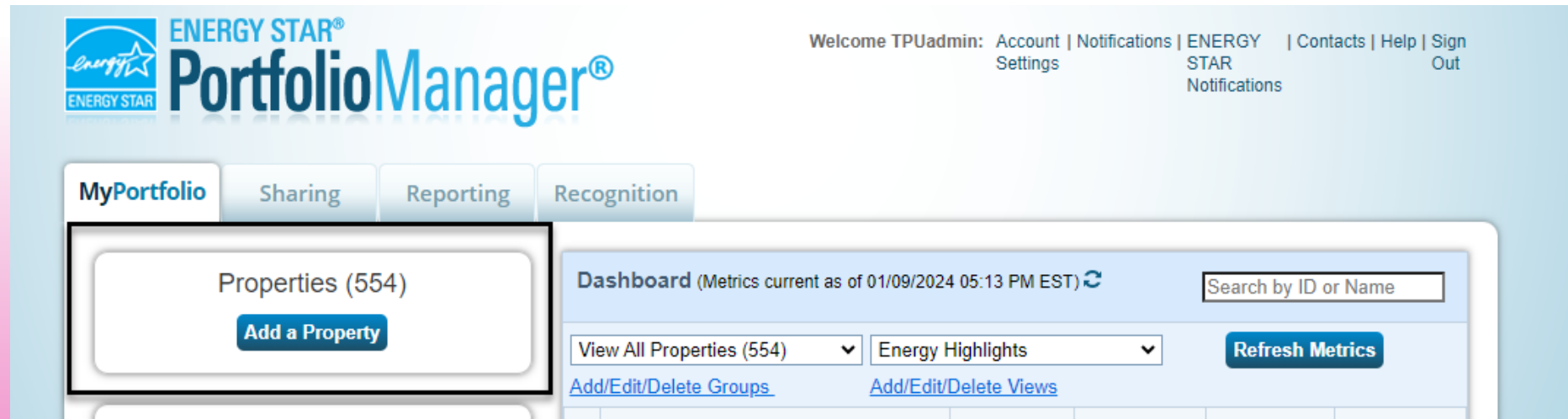
A G E N D A

HOW TO GET STARTED IN ESPM

1. Create or log in to your account
2. Add your building details
3. Add your meter details
4. Connect to your utility contact
5. Connect your building and meter to your utility

HOW TO GET STARTED IN ESPM

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HOW TO GET STARTED IN ESPM

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Set up a Property: Let's Get Started!

Properties come in all shapes and sizes, from a leased space in a large office building, to a K-12 school with a pool, to a large medical building. Since there are so many choices, Portfolio Manager can walk you through getting your property up and running. When you start monitoring your energy usage and pursue recognition!



Your Property Type

We'll get into the details later. For now, overall, what main purpose does your property have?

Select a property type

- Select a property type
- Banking/Financial Services**
 - Bank Branch
 - Financial Office
- Education**
 - Adult Education
 - College/University
 - K-12 School
 - Pre-school/Daycare
 - Vocational School
 - Other
- Electric Vehicle Charging Station**
 - Electric Vehicle Charging Station
- Entertainment/Public Assembly**
 - Convention Center
 - Movie Theater
 - Museum
 - Performing Arts
 - Recreation
 - Social/Meeting Hall



HOW TO GET STARTED IN ESPM

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Set Up a Property: Basic Property Information

Tell us a little bit more about your property, including a name that you will use to look up your property and its address.

About Your Property

Name: *

Country: *

Street Address: *

City/Municipality: *

County:

State/Province: *

Postal Code: *

Year Built: *

Gross Floor Area: * Temporary Value
Gross Floor Area (GFA) is the total property floor area, measured from the principal exterior surfaces of the building(s). Do not include parking. [Details on what to include.](#)

Irrigated Area:

Occupancy: * %

Property Photo (optional): No file chosen
Select an image file on your computer with the format type of .jpg, .jpeg, .png or .gif; photos will be resized to fit a space of 2.78 inches wide x 2 inches tall.

HOW TO GET STARTED IN ESPM

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Standard IDs

Standard IDs are typically used in data collection, including by most state and local governments with benchmarking laws. If your property is covered by a benchmarking law, you probably need to fill this in. See [this FAQ](#) if you need help finding your Standard ID.

Standard ID - City/Town:

 ID:

Standard ID - County/District:

 ID:

Standard ID - State/Province:

 ID:

Standard ID - Other:

 ID:

[+ Add Another](#)

Do any of these apply?

- My property's energy consumption includes [parking](#) areas
- My property is a single store only
- My property includes more than one store (e.g. an enclosed mall, outdoor mall, or other collection of stores)
- My property is a [restaurant](#)
- My property is a [post office](#)
- My property primarily offers personal services (health, beauty, dry cleaning, etc.)
- My property primarily offers repair services (vehicle, shoe, locksmith, etc.)

Back

Continue

[Cancel](#)

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Property Use Detail	Value	Current As Of	Temporary Value
★ Gross Floor Area	* <input type="text" value="65,165"/> Sq. Ft. ▼	<input type="text" value="1/1/1909"/>	<input type="checkbox"/>
★ Weekly Operating Hours	<input type="text"/> <input type="checkbox"/> Use a default	<input type="text" value="1/1/1909"/>	<input type="checkbox"/>
★ Number of Workers on Main Shift	<input type="text"/> <input type="checkbox"/> Use a default	<input type="text" value="1/1/1909"/>	<input type="checkbox"/>
★ Number of Open or Closed Refrigeration/Freezer Units	<input type="text"/> <input type="checkbox"/> Use a default	<input type="text" value="1/1/1909"/>	<input type="checkbox"/>
★ Number of Walk-in Refrigeration/Freezer Units	<input type="text"/> <input type="checkbox"/> Use a default	<input type="text" value="1/1/1909"/>	<input type="checkbox"/>
★ Single Store	<input type="text" value="▼"/> <input type="checkbox"/> Use a default	<input type="text" value="1/1/1909"/>	<input type="checkbox"/>
★ Exterior Entrance to the Public	<input type="text" value="▼"/> <input type="checkbox"/> Use a default	<input type="text" value="1/1/1909"/>	<input type="checkbox"/>
★ Percent That Can Be Heated	<input type="text" value="▼"/> <input type="checkbox"/> Use a default	<input type="text" value="1/1/1909"/>	<input type="checkbox"/>
★ Percent That Can Be Cooled	<input type="text" value="▼"/> <input type="checkbox"/> Use a default	<input type="text" value="1/1/1909"/>	<input type="checkbox"/>
Length of All Open or Closed Refrigeration/Freezer Units	<input type="text"/> Ft. ▼ <input type="checkbox"/> Use a default	<input type="text" value="1/1/1909"/>	<input type="checkbox"/>
Area of All Walk-in Refrigeration/Freezer Units	<input type="text"/> Sq. Ft. ▼	<input type="text" value="1/1/1909"/>	<input type="checkbox"/>
Number of Computers	<input type="text"/> <input type="checkbox"/> Use a default	<input type="text" value="1/1/1909"/>	<input type="checkbox"/>
Number of Cash Registers	<input type="text"/> <input type="checkbox"/> Use a default	<input type="text" value="1/1/1909"/>	<input type="checkbox"/>
Cooking Facilities	<input type="text" value="▼"/>	<input type="text" value="1/1/1909"/>	<input type="checkbox"/>

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

Back

Add Property

Cancel

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The screenshot displays the ENERGY STAR Portfolio Manager interface. At the top, the logo and navigation links are visible. The main content area shows a green notification box with a congratulatory message and a list of next steps, including 'Add energy use information'. Below this, the 'Demonstration Property' section provides details for '123 Power Ave, Tacoma, WA 98409' and includes an 'Edit' button. Two black arrows point from the 'Edit' button to the 'Energy' and 'Water' tabs in the navigation bar. To the right, a 'Weather Normalized Source EUI (kBtu/ft²)' widget shows 'Current' and 'Baseline' values as 'N/A'. At the bottom, a 'Metrics Summary' table lists various energy and emissions metrics, all of which are currently 'Not Available'.

ENERGY STAR®
PortfolioManager®

Welcome TPUadmin: Account | Notifications | ENERGY STAR | Contacts | Help | Sign Out
Settings Notifications

MyPortfolio | Sharing | Reporting | Recognition

Congratulations! You have successfully created your property.
Next, you can:
• Add energy use information, so that you can see your energy performance metrics.

[Change Metric](#)

Demonstration Property
123 Power Ave, Tacoma, WA 98409 | [Map It](#)
Portfolio Manager Property ID: 32766020
Year Built: 1909
[Edit](#)

Not currently eligible for ENERGY STAR Certification

Weather Normalized Source EUI (kBtu/ft²) Why not score?
Current: [N/A](#)
Baseline: [N/A](#)

Summary | Details | Energy | Water | Waste & Materials | Goals | Design

[Refresh](#) to see **Source EUI Trend**
[Change Metric](#)

2013 2015 2017 2019 2021 2023

[Change Metrics](#)
[Change Time Periods](#)

Metric	Not Available (Energy Baseline)	Not Available (Energy Current)	Change
ENERGY STAR Score (1-100)	Not Available	Not Available	N/A
Source EUI (kBtu/ft²)	Not Available	Not Available	N/A
Site EUI (kBtu/ft²)	Not Available	Not Available	N/A
Energy Cost (\$)	Not Available	Not Available	N/A
Total (Location-Based) GHG Emissions Intensity (kgCO2e/ft²)	Not Available	Not Available	N/A
Water Use (All Water Sources)

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The screenshot shows the ESPM interface for a 'Demonstration Property'. At the top, there is a navigation bar with tabs for Summary, Details, Energy, Water, Waste & Materials, Goals, and Design. The 'Energy' tab is selected. The main content area is divided into several sections:

- Property Information:** 123 Power Ave, Tacoma, WA 98409 | [Map It](#)
Portfolio Manager Property ID: 32766020
Year Built: 1909
[Edit](#)
- Energy Star Certification:** Not currently eligible for ENERGY STAR Certification. [Change Metric](#)
- Weather Normalized Source EUI (kBtu/ft²):** Why not score?
Current: [N/A](#)
Baseline: [N/A](#)
- Meter Summary:** 0 Energy Meters Total. In order to receive metrics for your property, you must provide meters. You have not entered any meters yet.
[Add A Meter](#)
Current Energy Date: Not Available
[Enter Your Bills](#)
- Meters - Used to Compute Metrics (0):** [View as a Diagram](#)
[Add A Meter](#) (button highlighted with a red box)
- Five Ways to Enter Bill Data:**
 1. Manual ([Instructions here](#))
 2. Use our [simple spreadsheet](#) (on the bottom of each meter's Manage Bills page) to upload or
- Informational Message:** There are currently no energy meters entered for this property/building. In order to track energy usage and receive energy metrics, you must provide an energy meter. [Enter information about your energy meters](#) to begin tracking energy usage. After entering the meter, you will need to [choose to include it in your metrics](#).
For a step-by-step guide to entering meter data, see [How to get Utility Data into Portfolio Manager](#).
Your utility, Tacoma Public Utilities, may be able to send energy data directly to this building record, using Portfolio Manager web services. [Click here](#) for additional information and to see if this option is right for you. If this is what you would like to do, you can [connect](#) with Tacoma Public Utilities to get the process started.

HOW TO GET STARTED IN ESPM

1. Create or log in to your account
2. Add your building details
- 3. Add your meter details**
4. Connect to your utility contact
5. Connect your building and meter to your utility

Get Started Setting Up Meters for Demonstration Property

There are five ways to enter meter data. First, you can enter manually, starting below. Second, you can set up your meters from a spreadsheet with just your bill data. Third, for advanced users, you can use our upload tool that allows you to set up all of your meters. And finally, you can [hire a company to update your data electronically](#). And finally, you can see if your [utility offers the service to update](#)



Sources of Your Property's Energy

What kind of **energy** do you want to track? Please select all that apply.

- Electric
- Natural Gas
- Propane
- Fuel Oil (No. 2)
- Diesel
- District Steam
- District Hot Water
- District Chilled Water
- Fuel Oil (No. 4)
- Fuel Oil (No. 5 and No. 6)
- Coal (anthracite)
- Coal (bituminous)
- Coke
- Wood
- Kerosene
- Fuel Oil (No. 1)
- Other:

Get Started!

[Cancel](#)

HOW TO GET STARTED IN ESPM

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Sources of Your Property's Energy

What kind of **energy** do you want to track? Please select all that apply.

- Electric
 - purchased from the grid
 - How Many Meters?
 - generated from onsite solar panels
 - generated from onsite wind turbines
- Natural Gas
- Propane
- Fuel Oil (No. 2)
- Diesel
- District Steam
- District Hot Water
- District Chilled Water
- Fuel Oil (No. 4)
- Fuel Oil (No. 5 and No. 6)
- Coal (anthracite)
- Coal (bituminous)
- Coke
- Wood
- Kerosene
- Fuel Oil (No. 1)
- Other:

HOW TO GET STARTED IN ESPM

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Sources of Your Property's Energy

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- Electric
 - purchased from the grid
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 - generated from onsite solar panels
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- Natural Gas
- Propane
- Fuel Oil (No. 2)
- Diesel
- District Steam
- District Hot Water
- District Chilled Water
- Fuel Oil (No. 4)
- Fuel Oil (No. 5 and No. 6)
- Coal (anthracite)
- Coal (bituminous)
- Coke
- Wood
- Kerosene
- Fuel Oil (No. 1)
- Other:

HOW TO GET STARTED IN ESPM

1. Create or log in to your account
2. Add your building details
- 3. Add your meter details**
4. Connect to your utility contact
5. Connect your building and meter to your utility

About Your Meters for Demonstration Property

Enter the information below about your new meters. The meter's *Units* and *Date Meter became Active* are required. You can also change the meter's name.

1 Energy Meter for Demonstration Property (click table to edit)

<input type="checkbox"/>	Meter Name	Type	Other Type	Units	Date Meter became Active	In Use?	Date Meter became Inactive	Enter as Delivery?	C
<input type="checkbox"/>	Electric Grid Met	Electric - Grid				<input checked="" type="checkbox"/>		<input type="checkbox"/>	1

[Delete Selected Entries](#)
[Add Another Entry](#)

[Back](#) [Create Meters](#) [Cancel](#)

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HOW TO GET STARTED IN ESPM

1. Create or log in to your account
2. Add your building details
- 3. Add your meter details**
4. Connect to your utility contact
5. Connect your building and meter to your utility

Your meters have been created! If you have your energy consumption information for these meters, you can enter it below. Or, you can [continue with setting up your meters](#) and enter your energy bills later.

Your Meter Entries for Demonstration Property

Now we need actual energy consumption information in order to start providing you with your metrics and, possibly, your score!

1 Energy Meter(s) for Demonstration Property

▼ Electric Grid Meter

	Start Date	End Date	Usage kWh (thousand Watt-hours)	Total Cost (\$)	Estimation	Green Power	Demand (kW)	Demand Cost (\$)
Click to add an entry								

✖ [Delete Selected Entries](#)

+ [Add Another Entry](#)

📄 [Learn how to copy/paste](#)

Upload data in bulk for this meter:

📌 Use this [single-meter spreadsheet](#) to:

- Upload the completed file below
- Copy and Paste the data into the table above

Choose File No file chosen

Upload

Continue

[Cancel](#)

HOW TO GET STARTED IN ESPM

1. Create or log in to your account
2. Add your building details
3. Add your meter details
4. Connect to your utility contact
5. Connect your building and meter to your utility

Your meter entries have been added to your meters!

Select Meters to Include in Metrics

Tell us which meters to include when calculating the metrics for [Demonstration Property](#) so that we can provide you with the most accurate metrics possible.

Summary

1

Please tell us what your meters represent.

About Sub-meters

If you have sub-meters to measure energy or water consumption for a specific purpose, and you also have a master meter (which measures total consumption), counting both of those meters would double count your consumption and skew your metrics (e.g., artificially increase your Site Energy Use Intensity). [Learn More about configuring meters for performance metrics.](#)



Energy Meters

Select all meters to be included in your metrics. (Hint: Most meters should be included unless they are [sub-meters](#).)

<input type="checkbox"/>	Name Meter ID	Type
<input checked="" type="checkbox"/>	Electric Grid Meter 180546954	Electric - Grid

Total of 1 meter(s). Tell us what this represents:

- * These meter(s) account for the total energy consumption for [Demonstration Property](#) (a single building).
- These meter(s) do not account for the total energy consumption for [Demonstration Property](#) (a single building).

Apply Selections

[Cancel](#)

HOW TO GET STARTED IN ESPM

1. Create or log in to your account
2. Add your building details
3. Add your meter details
4. **Connect to your utility contact**
5. Connect your building and meter to your utility

Welcome Test_User: Account | Notifications | ENERGY STAR Notifications | **Contacts** | Help | Sign Out

ENERGY STAR® PortfolioManager®

MyPortfolio | Sharing | Reporting | Recognition

Properties (1)
[Add a Property](#)

[Refresh](#) to see **Source EUI Trend**
[Change Metric](#)

2012 2014 2016 2018 2020 2022

Dashboard Search by ID or Name

Please [refresh](#) to see your current metrics.

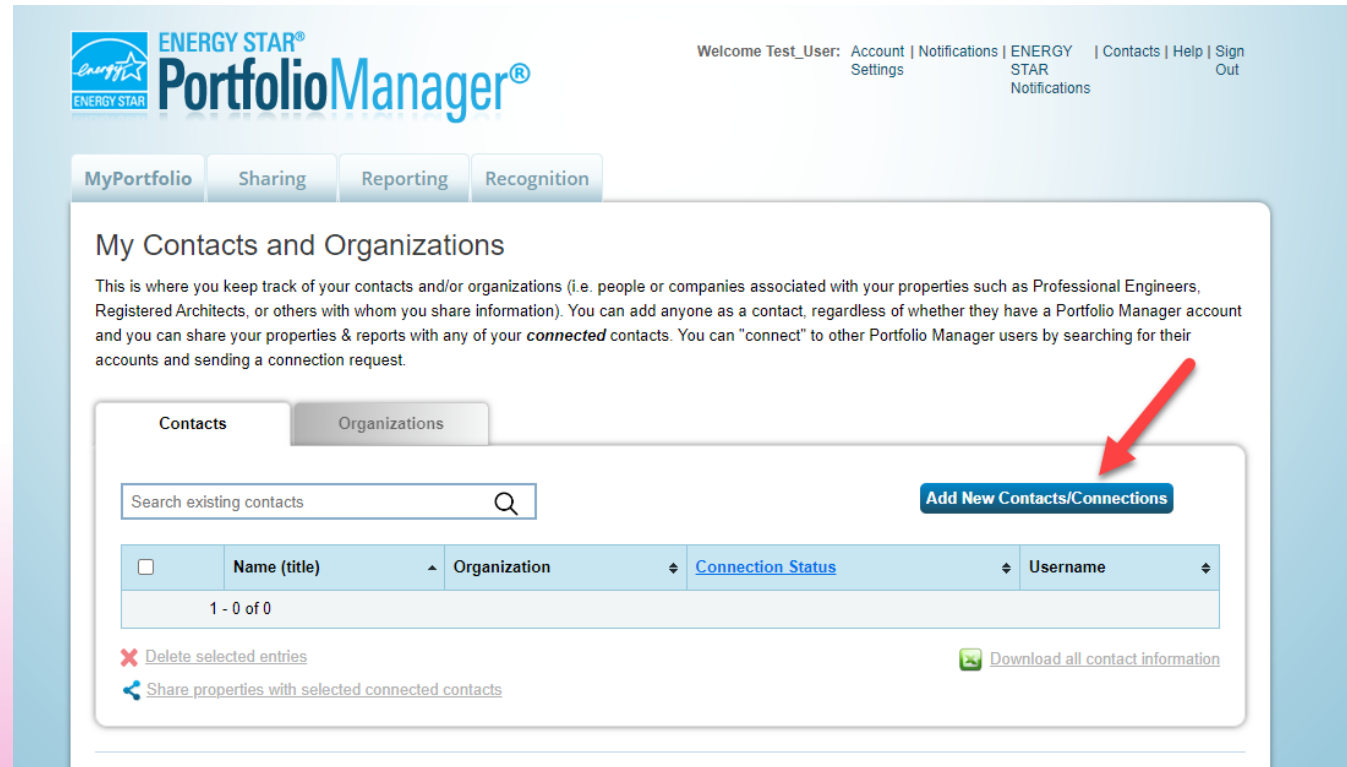
View All Properties (1) | Energy Highlights | [Refresh Metrics](#)
[Add/Edit/Delete Groups](#) | [Add/Edit/Delete Views](#)

Name	Energy Current Date	ENERGY STAR Score	Site EUI (kBtu/ft ²)	Source EUI (kBtu/ft ²)
EPA Sample Office 28491457				

First Previous Page 1 of 1 Next Last 100 View 1 - 1 of 1

HOW TO GET STARTED IN ESPM

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3. Add your meter details
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5. Connect your building and meter to your utility



The screenshot displays the ENERGY STAR Portfolio Manager interface. At the top, the logo and navigation links are visible. The main content area is titled 'My Contacts and Organizations' and includes a descriptive paragraph. Below this, there are tabs for 'Contacts' and 'Organizations'. A search bar is present, and a prominent blue button labeled 'Add New Contacts/Connections' is highlighted with a red arrow. Below the search bar is a table with columns for Name (title), Organization, Connection Status, and Username. The table currently shows '1 - 0 of 0' entries. At the bottom, there are links for 'Delete selected entries', 'Share properties with selected connected contacts', and 'Download all contact information'.

Welcome Test_User: Account | Notifications | ENERGY STAR | Contacts | Help | Sign Out

MyPortfolio | Sharing | Reporting | Recognition

My Contacts and Organizations

This is where you keep track of your contacts and/or organizations (i.e. people or companies associated with your properties such as Professional Engineers, Registered Architects, or others with whom you share information). You can add anyone as a contact, regardless of whether they have a Portfolio Manager account and you can share your properties & reports with any of your **connected** contacts. You can "connect" to other Portfolio Manager users by searching for their accounts and sending a connection request.

Contacts | Organizations

Search existing contacts

<input type="checkbox"/>	Name (title)	Organization	Connection Status	Username
1 - 0 of 0				

HOW TO GET STARTED IN ESPM

1. Create or log in to your account
2. Add your building details
3. Add your meter details
- 4. Connect to your utility contact**
5. Connect your building and meter to your utility

The screenshot displays the ESPM interface with a navigation bar at the top containing 'MyPortfolio', 'Sharing', 'Reporting', and 'Recognition'. Below the navigation bar, the 'Search Results' section is active. It includes a descriptive paragraph: 'The results of your search are listed below. Clicking "Connect" will send a request to the person asking them to confirm your request to add them as your contact. If they accept, you will see them listed as a connected contact in your address book. If they do not accept, or have not accepted yet, you will see them as an unconnected contact in your address book. Connecting with contacts will make it easier to share property information within Portfolio Manager.'

Below the text, there is a 'Your Search Criteria' form with the following fields:

- Name: TPU MyConsumption
- Organization: (empty)
- Username: (empty)
- Email Address: (empty)

A 'Search' button is located at the bottom right of the criteria form.

To the right of the search criteria, a search result is displayed in a table-like format:

TPU MyConsumption (TPUadmin) Customer Solutions with Tacoma Public Utilities	Connect
Navigation: < << Page 1 of 1 >> >> 50	1 - 1 of 1

HOW TO GET STARTED IN ESPM

1. Create or log in to your account
2. Add your building details
3. Add your meter details
4. Connect to your utility contact
5. **Connect your building and meter to your utility**



1. Email myconsumption@cityoftacoma.com
 - a) Include your ESPM Building ID
 - b) Any details you know about your building (e.g. account numbers, meter numbers, etc)

Demonstration Property



123 Power Ave, Tacoma, WA 98409 | [Map It](#)

Portfolio Manager Property ID: 32766020

Year Built: 1909

[Edit](#)

HOW TO GET STARTED IN ESPM

1. Create or log in to your account
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2. Tacoma Power will provide you with a “Custom Meter ID 1”
 - a) Enter the custom meter ID 1 on the meter
 - b) Enter custom meter ID 1 during sharing

Manage Bills (Meter Entries) for [Demonstration Property](#)

Meter Selection:

Basic Meter Information (**click on the arrow to the left to expand this section)

Name: [Delete Meter](#)

Meter ID: 180546954

Type: Electric - Grid [Need to change?](#)

Units:

Date Meter became Active: [Calendar](#)
 Still In Use

Date Meter became Inactive: [Calendar](#)

Is this an Aggregate Meter?: No Yes

Custom Meter IDs

Custom Meter ID 1: Name: ID: [Remove ID](#)

[+ Add Another Custom Meter ID](#)

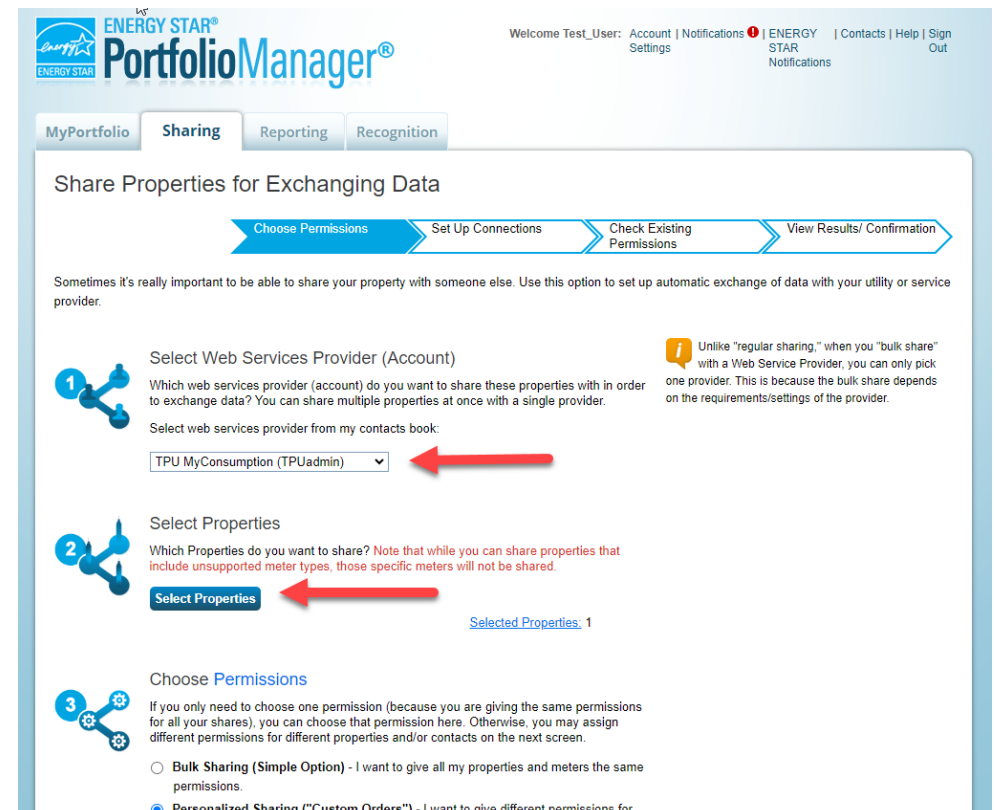
[Save Changes](#)

HOW TO GET STARTED IN ESPM

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HOW TO GET STARTED IN ESPM

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2. Tacoma Power will provide you with a “Custom Meter ID 1”
 - a) Enter the custom meter ID 1 on the meter
 - b) Enter custom meter ID 1 during sharing

Share Your Property(ies)

To finish up, tell us what type of access the people you have selected should have for each of the properties that you have selected. The option to exchange data is only available for authorized accounts.





4 Select Permissions for Each Contact
The access levels you select do not have to be the same for each property or each person.

NEW Who gets to **Share Forward?**

- Full Access** - Automatically includes "Share Forward" rights
- Read Only** - Automatically does NOT include "Share Forward" rights
- Custom** - You decide, along with the individual permissions for property, meter, goals and recognition permissions.
- Exchange Data** - You decide, along with the individual permissions for property, meter, goals and recognition permissions.

Sort by:

Name (ID)	No Access	Read Only Access	Full Access	Custom Access	Exchange Data
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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HOW TO GET STARTED IN ESPM

1. Create or log in to your account
2. Add your building details
3. Add your meter details
4. Connect to your utility contact
5. Connect your building and meter to your utility



2. Tacoma Power will provide you with a “Custom Meter ID 1”
 - a) Enter the custom meter ID 1 on the meter
 - b) Enter custom meter ID 1 during sharing

A screenshot of the Energy Star Portfolio Manager web application. The page is titled 'Share Your Property(ies)' and shows a table for selecting access permissions for a property. The table has columns for 'Item', 'None', 'Read Only Access', 'Full Access', 'Meter Number1', and 'HistoricalCons2'. Red arrows point to the 'Full Access' radio button for 'Property Information', the 'Full Access' radio button for 'Electric Grid Meter', the 'None' radio button for 'Potable Indoor Meter', and the 'HistoricalCons2' input field for 'Electric Grid Meter'. The 'Meter Number1' input field for 'Electric Grid Meter' contains the value '12345678'.

Item	None	Read Only Access	Full Access	Meter Number1	HistoricalCons2
Property Information	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		
All Meter Information					
Energy Meters					
Electric Grid Meter	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	12345678	Y
Natural Gas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Water Meters					
Potable Indoor Meter	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		

HOW TO GET STARTED IN ESPM

1. Create or log in to your account
 2. Add your building details
 3. Add your meter details
 4. Connect to your utility contact
 5. **Connect your building and meter to your utility**
3. Tacoma Power sends data around 5am daily as bills close
 - a) There is a 60 day delay between when the bill closes and when the data shows in ESPM
 - b) Only two years of historical data will be shared



<input type="checkbox"/>	9/1/2023	9/30/2023	111,858		<input type="checkbox"/>	<input type="checkbox"/>			12/19/2023 TPUadmin
<input type="checkbox"/>	10/1/2023	10/31/2023	117,820		<input type="checkbox"/>	<input type="checkbox"/>			12/31/2023 TPUadmin
<input type="checkbox"/>	11/1/2023	11/30/2023	122,711		<input type="checkbox"/>	<input type="checkbox"/>			2/5/2024 TPUadmin

HOW TO GET STARTED IN ESPM-PSE & ENERGYCAP

1. Create or log in to your account - <https://www.pse.com/en/pages/property-management-services/EnergyCAP>
2. Add your building & Meters
3. Connect EnergyCAP to Energy Star Portfolio Manager & Share Buildings

Questions? Email: EnergyCAP@PSE.COM



<https://www.pse.com/en/pages/property-management-services/EnergyCAP>

PSE PUGET SOUND ENERGY

RESIDENTIAL BUSINESS

PAY BILL SIGN IN OUTAGES EN Search

Account & Billing Safety & Outages Customer Service Efficiency & Green Options Construction Services Who We Are

Home > Property Management Services

Empower your PSE energy data with EnergyCAP®

Puget Sound Energy (PSE) has partnered with the energy management software experts at EnergyCAP to provide PSE customers and property management professionals with a robust suite of data resources to help you manage your energy portfolio. EnergyCAP replaces two retiring PSE data resources: MyData and MyDataManager.

ENERGY STAR® Portfolio Manager® users can use EnergyCAP to connect to their Portfolio Manager account to enable automatic data flow from PSE into Portfolio Manager.

Commercial customers can access their daily, invoice and interval data streams, as well as reporting and analytics functionality.

Learn more: [Resources for PSE's EnergyCAP](#)

Get started with EnergyCAP or log in to your EnergyCAP account

[CREATE ACCOUNT >](#) [LOG IN](#)

ASK AN EnergyCAP ADMINISTRATOR

Have questions about EnergyCAP and how to sign up? PSE has EnergyCAP System Administrators ready to help.

[CONTACT US NOW](#)

Welcome to PSE's new EnergyCAP® website

We set up online [EnergyCAP training modules](#) for some of the most common features of this software, including how to add properties and addresses, link an account and building, and aggregate meters.

HOW TO GET STARTED IN ESPM-PSE & ENERGYCAP

1. Create or log in to your account - <https://www.pse.com/en/pages/property-management-services/EnergyCAP>
2. Add your building & Meters
 - a. 3 or more tenants = aggregate meter, add by address or meter number
 - b. If you have a bill in hand, add by account number
3. Connect EnergyCAP to Energy Star Portfolio Manager & Share Buildings

Questions? Email: EnergyCAP@PSE.COM

Add Meters on Rental

Cancel

Add Meters

Search by

Address

Meter Number

Account Number

Enter account number and select meters to add to the building.

200012345678

HOW TO GET STARTED IN ESPM-PSE & ENERGYCAP

1. Create or log in to your account - <https://www.pse.com/en/pages/property-management-services/EnergyCAP>
2. Add your building & Meters
 - a. 3 or more tenants = aggregate meter, add by address or meter number
 - b. If you have a bill in hand, add by account number
3. Connect EnergyCAP to Energy Star Portfolio Manager & Share Buildings

Questions? Email: EnergyCAP@PSE.COM



ENERGY STAR Settings

Cancel

Before you can submit data to Portfolio Manager you must first invite EnergyCAP to share data with your Portfolio Manager account by following these steps:

1. Create a [Portfolio Manager account](#) (if you don't have one).
2. Create properties in Portfolio Manager.
3. Send a connection request to **EnergyCAP ENERGY STAR Admin** from Portfolio Manager.

[Start Connection Request](#)

[I already sent a connection request](#)

1. Connect > 2. Verify Connection > 3. Settings

?

Clean Buildings Owner Forum

Rod Kauffman
Chief Staff Officer &
President of the
Building Owners
and Managers Association
(BOMA) Greater Seattle



Perry Spring
Resource
Conservation
Manager,
City of Tacoma



Jeff Langhelm
Director of
Public Works,
City of Gig Harbor



Lexi Brewer
Sustainability
Director,
University of
Puget Sound



Jeff Hicks
SVP & Director of
Engineering &
Sustainability,
Kidder Mathews



**Submit Your
Questions**



SUSTAINABILITY REPORT CARD | GIG HARBOR CIVIC CENTER

Your sustainability cliff notes for your building's mechanical system design & impacts. This summary supports the best system selection for your business and our planet.



BUILDING VITALS	PROJECT SCOPE CORE VALUES for HVAC & Plumbing IMPACT POTENTIAL
Location: Gig Harbor, WA	<input checked="" type="checkbox"/> Conservation (energy)
Type: Civic, Commercial	<input type="checkbox"/> Conservation (water)
Size: 3 buildings, 2 floors, 40,975 sq. ft.	<input type="checkbox"/> Decrease embodied carbon
Year Built: 2002	<input checked="" type="checkbox"/> Decrease operational carbon
Current HVAC: Multizone unit, variable volume heat pump, with electric reheat	<input checked="" type="checkbox"/> Health & wellness (air quality)
	<input type="checkbox"/> Waste reduction (construction)
	<input type="checkbox"/> Diversity & inclusion (process)
	<input type="checkbox"/> Other: _____

WA STATE CLEAN BUILDINGS ENERGY USE INTENSITY (EUI) TARGET

Note: A project of this size is not required to meet this target at this time, however this project will be required to report annual EUI, Energy Management Plan, and O&M Program by 2027.



Futureproofing: There is a high likelihood that buildings of this size will need to comply, possibly as soon as 2029 and certainly within the next HVAC equipment's useful life.

Proposed Mechanical System (SYSTEM A):

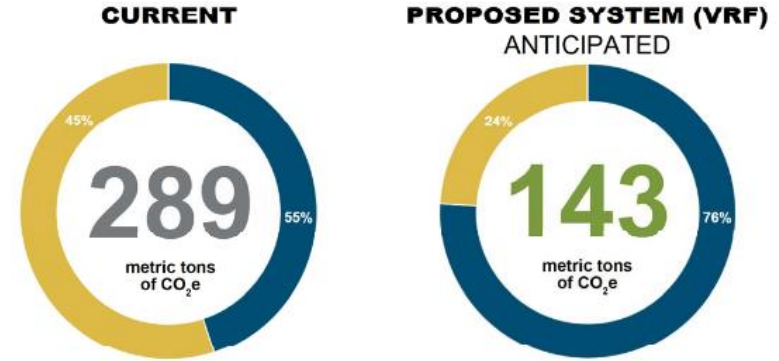
CENTRALIZED VARIABLE REFRIGERANT FLOW (VRF)

VRF 101: Uses a heat pump to supply a refrigerant based energy recovery unit and zone level refrigerant coils. This system allows simultaneous heating and cooling of the zones using the energy recovery unit.

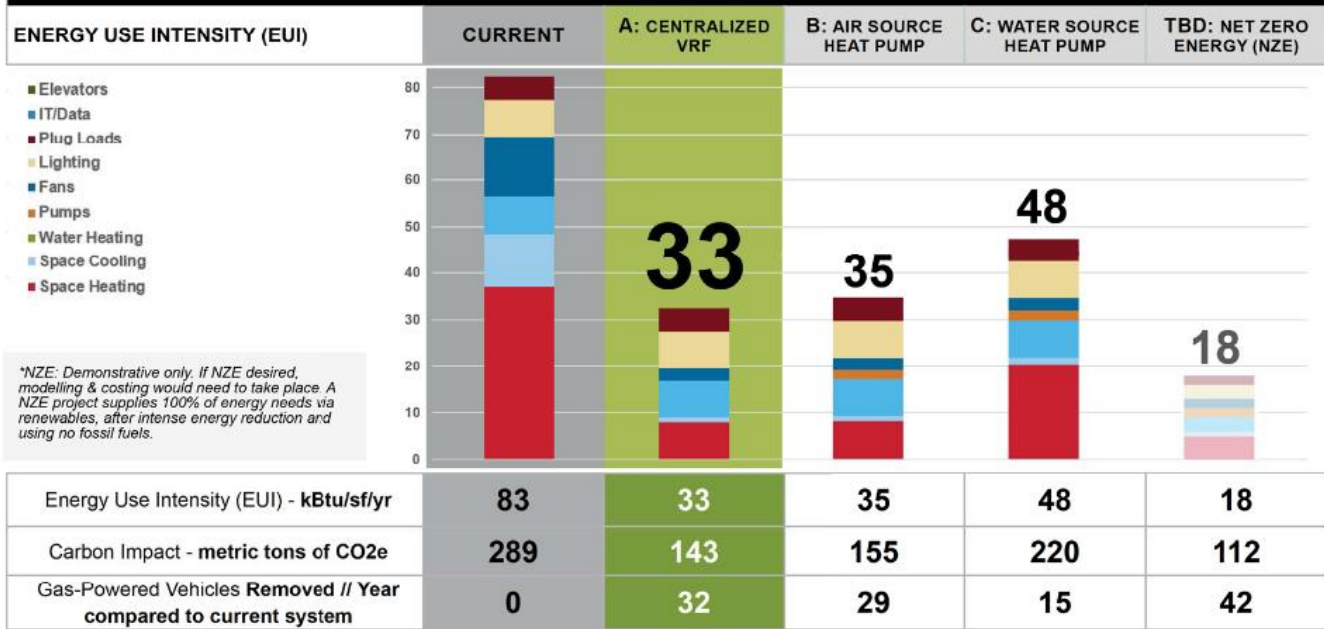
ENERGY FUEL MIX

- Electricity
- Natural Gas

OPERATIONAL CARBON



COMPARING SYSTEM OPTIONS





Non-Compliance Penalty

Any building owner not in compliance by the target dates will incur a penalty of \$5,000 + \$1.00 per square foot, per year.

Fines are not to exceed 18 months of accrued penalty.

Example using a 100,000 sqft building:

$\$5,000 + (100,000 \text{ sqft} \times \$1/\text{sqft per year}) = \$105,000/\text{year}$

Maximum penalty = $\$105,000 \times 1.5 \text{ years} = \$157,500$



Clean Buildings Resources



Rebecca Sheppard
Senior Project Manager



▶ Envisioning a World with Net-Zero Carbon Emissions

Building Potential's mission is to eliminate carbon emissions from building energy use through market-based thought leadership, education, and advocacy.



Building Potential



Programs

- Smart Buildings Center
- Building Operator Certification (BOC)
- Tool Lending Library
- Remote Learning Library
- YouTube Training Series
- Clean Buildings Performance Standard Helpdesk

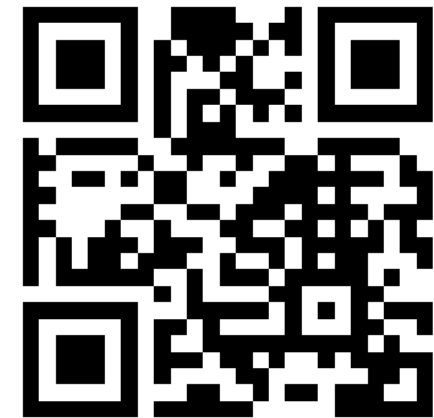


Building Operator Certification® (BOC) THE ESSENTIAL CREDENTIAL

- Leading training and credentialing program for building engineers and maintenance personnel
- Graduates gain skills to make their buildings more:
 - Comfortable
 - Efficient
 - Environmentally friendly
- Graduates help their organizations substantially cut operating costs (as much as \$20,000 per year)



Photo courtesy of Resource Media



Tool Lending Library

Often the first step is achieving operational excellence is gaining an understanding of how systems in the building are actually operating.



- Diagnostic & Monitoring Tools
- 85 Tool Types
- Online reservation system
- Loan period up to 4 weeks
- Local pickup or shipped



FREE!!!



Smart Buildings Center Clean Buildings Performance Standard Helpdesk



Offering

- Resources
- Training videos
- One-on-One consultation



Clean Buildings Resources



WASHINGTON STATE DEPARTMENT OF COMMERCE CLEAN BUILDINGS PERFORMANCE STANDARDS

This site provides information on the Clean Buildings bill and Performance Standards.



PIERCE COUNTY C-PACER PROGRAM

The C-PACER program allows owners and developers of eligible properties in Pierce County to obtain long-term financing, at a lower interest rate, for qualifying energy generation, energy efficiency, water conservation or resiliency projects.



TACOMA POWER WASHINGTON CLEAN BUILDINGS LAW

This site provides information specific to the Washington Clean Buildings law as well as guidance around benchmarking with the Energy Star Portfolio Manager.



PUGET SOUND ENERGY ACCELERATOR PROGRAM

Puget Sound Energy's Clean Buildings Accelerator program unpacks the complex law, meets you where you're at with your energy use, and teaches you how to comply and go beyond through a hands-on approach using your own building(s).



SMART BUILDINGS CENTER

The Smart Buildings Center accelerates the adoption and commercialization of smart buildings technologies and practices through education and demonstration.



MACDONALD-MILLER CLEAN BUILDINGS

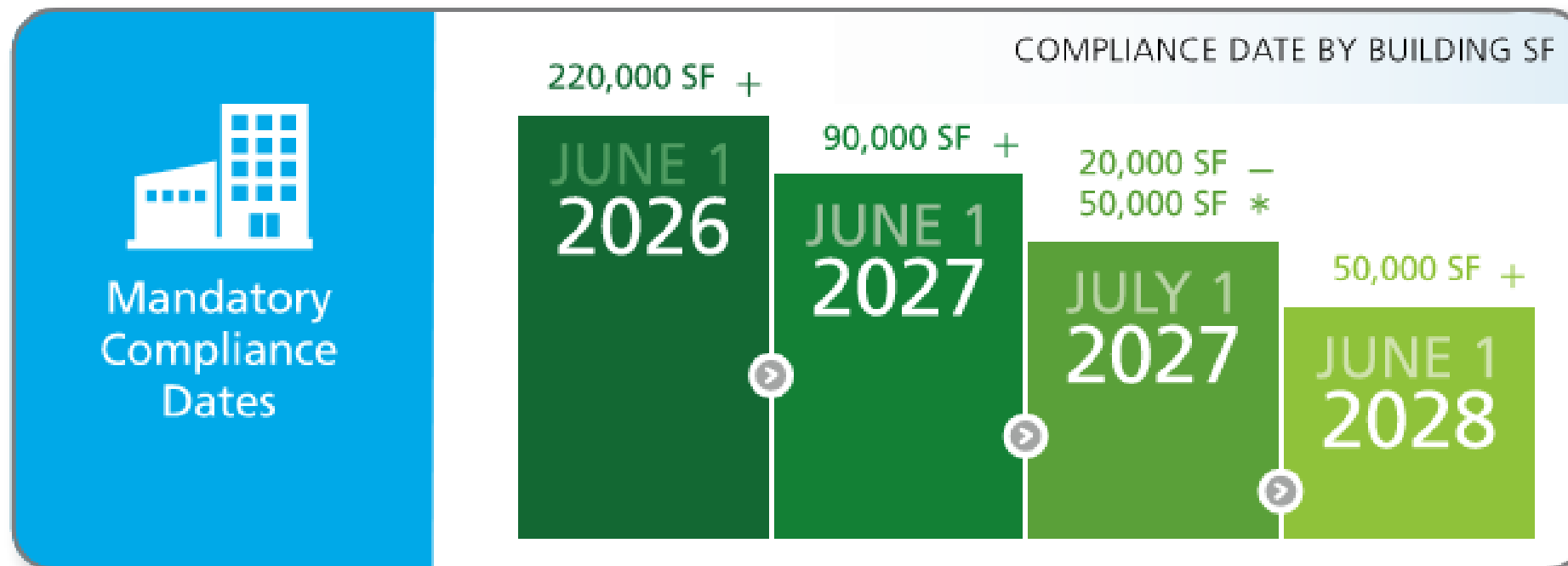
MacDonald-Miller works with building owners to provide cost-effective energy-saving solutions. Visit macmiller.com/clean-buildings/ or scan here to learn more and get started on your benchmarking today.





It is not too early to get the ducks in a row

It's Time to Act



* Reporting Only





THANK YOU!

Clean Buildings Symposium

February 23, 2024

Please share your thoughts about today's Clean Buildings Symposium

