

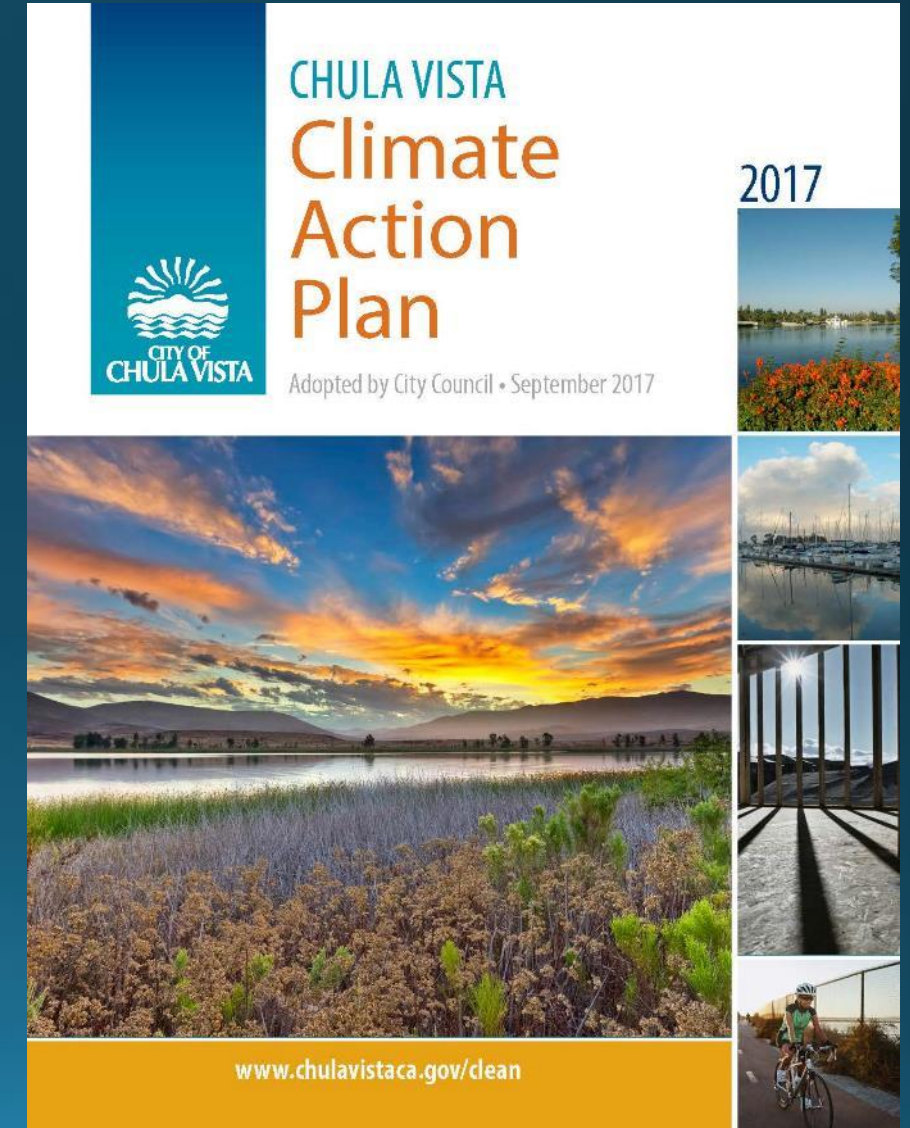
Proposed Multifamily and Commercial Energy Benchmarking and Conservation Ordinance

February 16, 2021



2017 Chula Vista Climate Action Plan

- Adopted by City Council
- Set a target of retrofitting 20% of multifamily and commercial space to achieve 50% savings by 2035
- Calls for “building performance reporting and public disclosure” policies
- Directed city staff to “develop a Residential and Commercial Energy Conservation Ordinance for City Council consideration.”



California AB 802

- Requires buildings 50,000 sq ft and over to report their energy usage
 - Commercial buildings must report by June 1, 2018.
 - Multifamily buildings must report by June 1, 2019.
- Provides opportunity for local control
 - Berkeley, Brisbane, Los Angeles, San Francisco, San Jose, San Diego

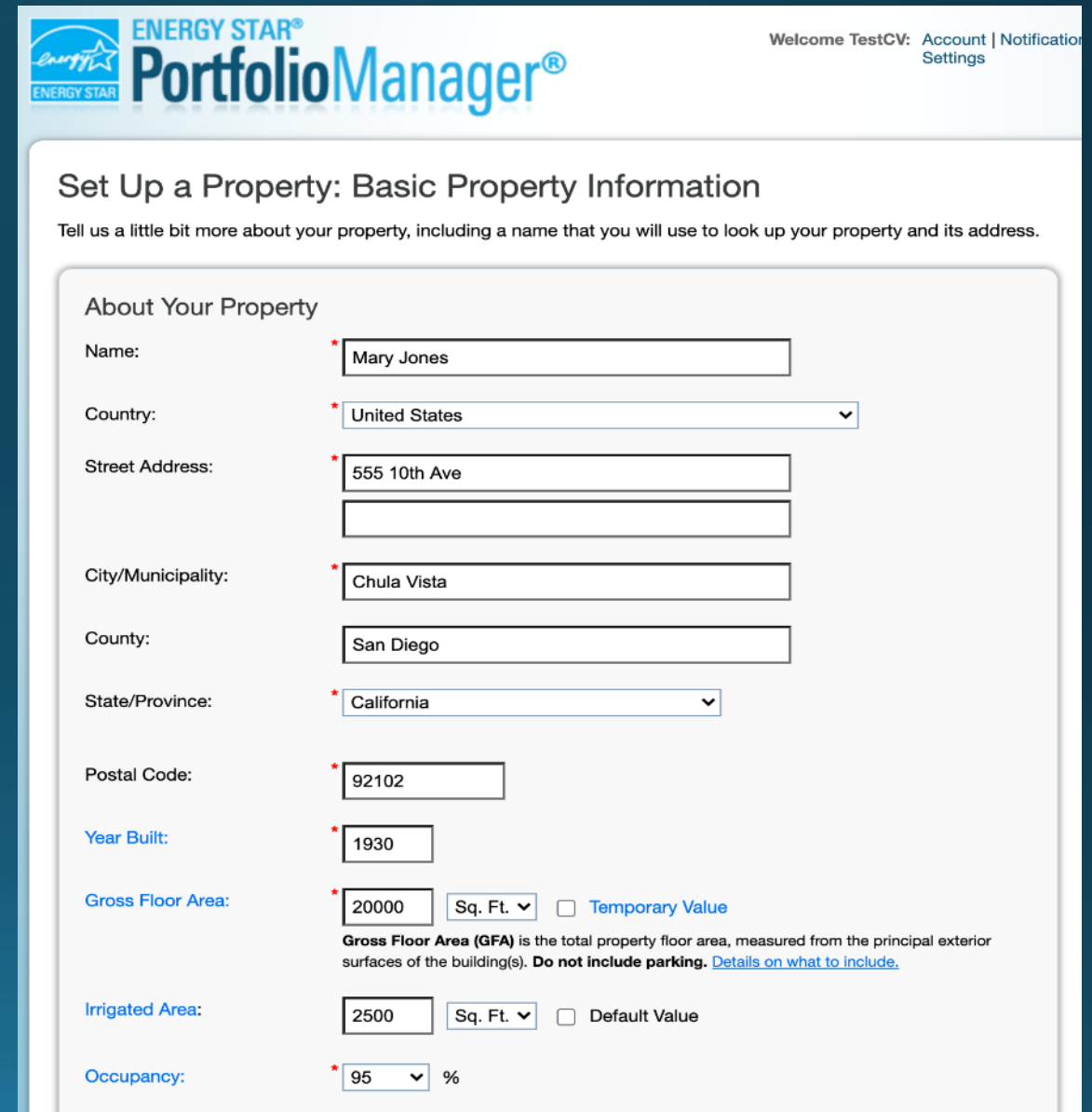


Benchmarking

- Benchmarking is the process of measuring a building's energy consumption
 - energy use divided by the square footage of your building
 - compare the efficiency of the building to that of previous years or to those of similar buildings.
- Helps measure the performance of a building and lets tenants and owners know how efficient or inefficient it may be.
 - A significant portion of a company's operating expenses goes toward energy bills. Energy efficiency improvements may reduce these costs substantially.
- Benchmarking can help prioritize energy-efficiency investments and track energy efficiency improvements over time.

Benchmarking Basics

- Register buildings in ENERGY STAR Portfolio Manager
- Energy bills electronically imported from SDG&E
- Portfolio Manager calculates an ENERGY STAR Score between 1 and 100
- Score allows easy comparison between similar buildings
- Click Chula Vista's reporting link to electronically submit building data each year starting 2022



The screenshot shows the 'Set Up a Property: Basic Property Information' form in the ENERGY STAR Portfolio Manager interface. The form is titled 'About Your Property' and contains the following fields:

- Name:** Text input field containing 'Mary Jones'.
- Country:** Dropdown menu set to 'United States'.
- Street Address:** Text input field containing '555 10th Ave'.
- City/Municipality:** Text input field containing 'Chula Vista'.
- County:** Text input field containing 'San Diego'.
- State/Province:** Dropdown menu set to 'California'.
- Postal Code:** Text input field containing '92102'.
- Year Built:** Text input field containing '1930'.
- Gross Floor Area:** Text input field containing '20000', followed by a dropdown menu set to 'Sq. Ft.' and a checkbox for 'Temporary Value'.
- Irrigated Area:** Text input field containing '2500', followed by a dropdown menu set to 'Sq. Ft.' and a checkbox for 'Default Value'.
- Occupancy:** Dropdown menu set to '95' followed by a '%' symbol.

Below the Gross Floor Area field, there is a note: **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.](#)

A snapshot of Chula Vista buildings

- 368 buildings fall under AB802
 - 39 of proposed required buildings have complied and reported
 - Of the 39 proposed covered buildings that have reported, 24 have an Energy Star score below 80
- Proposed ordinance would add 480 buildings subject to reporting

Chula Vista Buildings	
20K to 50k Sqft	50K Sqft and Above
480	368

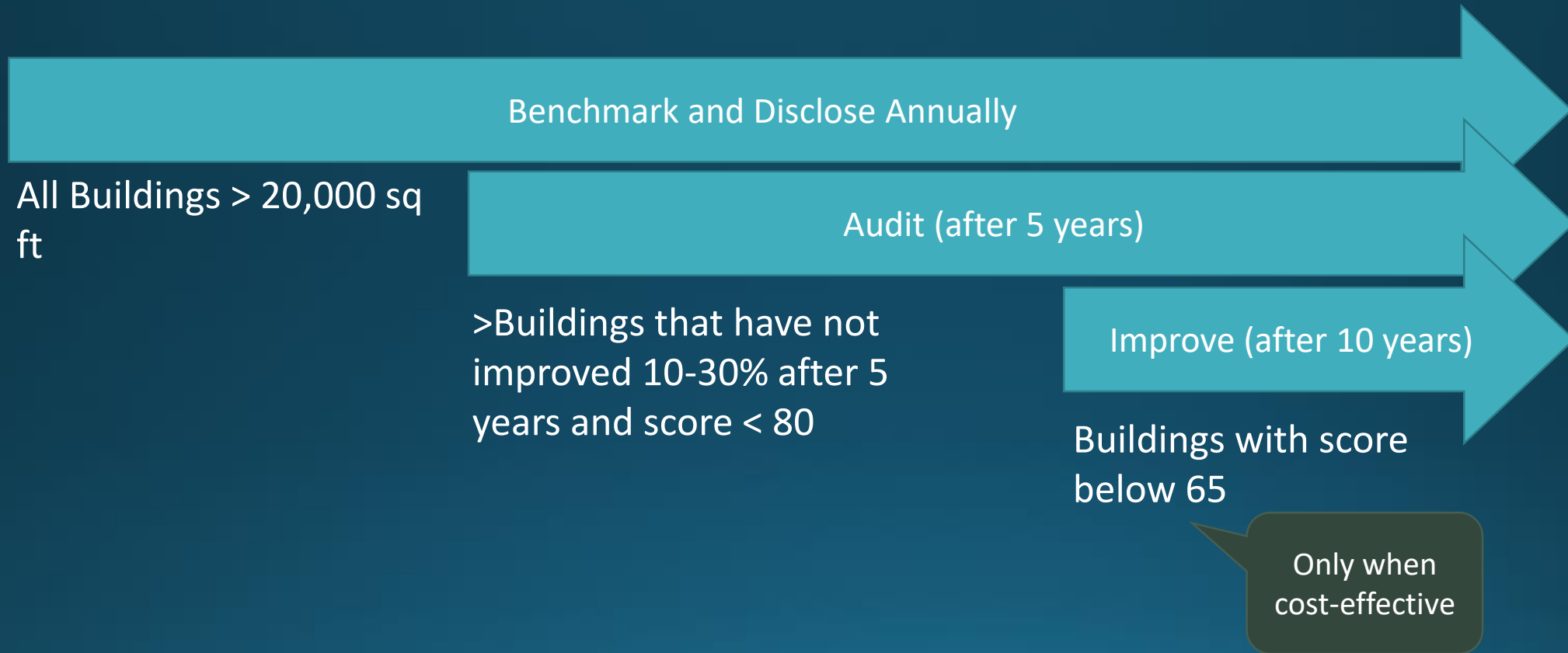
Proposed Energy Benchmarking Ordinance

- ▶ AB 802 allows for buildings reported under a local benchmarking program to be exempted from reporting to the state
- ▶ Proposed ordinance proposes a reach code to attain CAP goals
 - ▶ Applies to buildings of 20,000 and more.
 - ▶ Requires audits to prioritize energy efficiency improvements with highest return on investment
 - ▶ Retro-commissioning – Low cost, immediate results
 - ▶ Performance standards – Assure follow-up on audits
- ▶ Local program provides staff the ability to work with owners and tenants on improvements that help businesses and residential tenants

Proposed Chula Vista Program Design

	Who	What	When
Benchmark (Compare energy used to similar buildings in similar climates)	All	Submit energy data	Annually from 2022
Disclose (Report consumption and Energy Star data to the city of Chula Vista)	All	Provide benchmarking report to current and prospective owners and tenants	Starting 2022
Audit (Conduct a study of building systems to identify issues)	Buildings with ENERGY STAR score below 80 that do not meet Performance Targets after 5 years of benchmarking (10-30% energy use reduction)	Conduct an ASHRAE Level I Audit (including Retro-commissioning where appropriate)	Every 5 years starting 2023
Improve (Based on the audit, apply improvements that are cost-effective with a minimum ROI)	Buildings with ENERGY STAR score below 65 that do not meet Minimum Improvement requirements after 10 years of benchmarking (10-15% energy use reduction)	Apply cost-effective measures identified in the audit in order to reduce energy consumption	Every 10 years, beginning 2028

Proposed Chula Vista Program Design



Multifamily Buildings

Benchmark and Disclose Annually

All Buildings > 20,000 sq ft (tenant spaces and common areas)

Tenant Spaces (built pre-2006)

- Install cost-effective one-time prescriptive upgrades where applicable
 - LED Lighting
 - Low-Flow Water Fixtures
 - Duct Sealing
 - Attic Insulation

Common Areas (if building has significant common load)

Audit (after 5 years)

>Buildings that have not improved 10-30% after 5 years and score < 80

Improve (after 10 years)

>Buildings with score below 65

Only when cost-effective

Benchmarking Impacts

- EPA study conducted on buildings benchmarked between 2008 and 2011
 - On average over those years, all buildings saved up to 7% energy and had a 6-point ENERGY STAR score increase
- In Chula Vista, multifamily, commercial and industrial buildings over 20K square feet are emitting 113,000 metric tons CO₂e/year
 - Based on study findings, staff estimates the ordinance is projected to reduce these emissions by 6% after 10 years and 8% after 15 years.

Proposed Ordinance Benefits

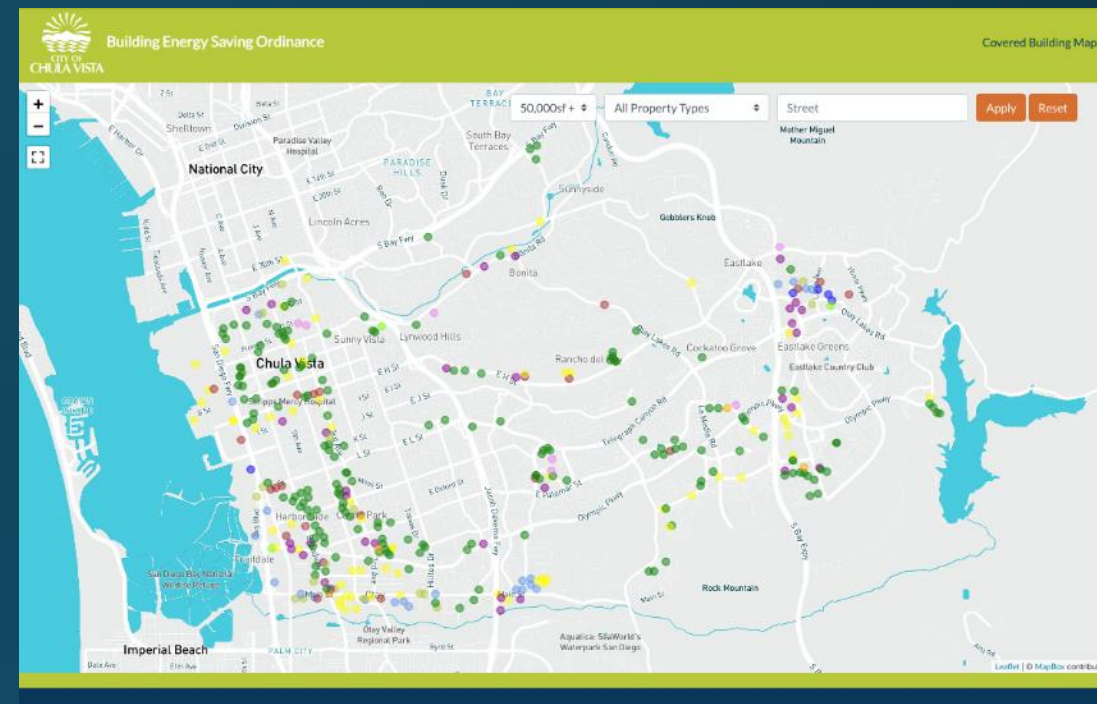
- Reduce greenhouse gas emissions of existing commercial and multi-family buildings
- Marketing point for building owners versus their peer group in the market.
 - Lower utility consumption means lower operating costs which directly translates into higher NOI, building valuations, and asking rents.
 - Improve Chula Vista building stock
 - Encourage market transparency for building energy efficiency
 - Guarantees energy data disclosure

Exemptions

- The entire property did not have a Certificate of Occupancy or Temporary Certificate of Occupancy for at least half of the year required to be benchmarked
- The entire property was not occupied, due to renovation, for at least half of the year to be benchmarked
- A demolition permit for the entire property has been issued and demolition work has commenced
- The property did not receive energy or water services for at least half of calendar year required to be benchmarked
- The property is in financial distress
- Disclosure of the property energy usage data would result in the release of proprietary information or would violate a customer's right to privacy under the California Constitution or other applicable law

Implementation

- Office of Sustainability staff will:
 - Notify building owners
 - Provide tutorials and step-by-step instructions
 - Guide the building owners throughout the process, as needed
- Website will assist with sharing info on building energy data
 - Help promote more efficient buildings to potential tenants
- Staff will provide outreach and support
 - This will leverage over 10 years of staff expertise in commercial building energy outreach
 - Facilitate tailored guidance for energy efficiency programs and other opportunities



Proposed Ordinance Recap

- Implement state law at the local level
- Reach code proposed to extend requirement from 50,000 to 20,000 sq ft to meet goals of CAP by 2035
- Require an audit after 5 years of benchmarking for buildings that have not improved already
- Require cost effective improvements after 10 years of benchmarking for low-performing buildings

Recommended Action and next steps

- ▶ Staff Recommendation:
 - ▶ Approve for implementation in 2022

Tentative Adoption Schedule

Action	Timeframe
Sustainability Commission Referral to City Council	August 10, 2020
City Council First Reading	February 16, 2021
City Council Second Reading	TBD
Ordinance in Effect	2022
First Benchmarking Deadline	March 20, 2022

QUESTIONS

Coleen Wisniewski

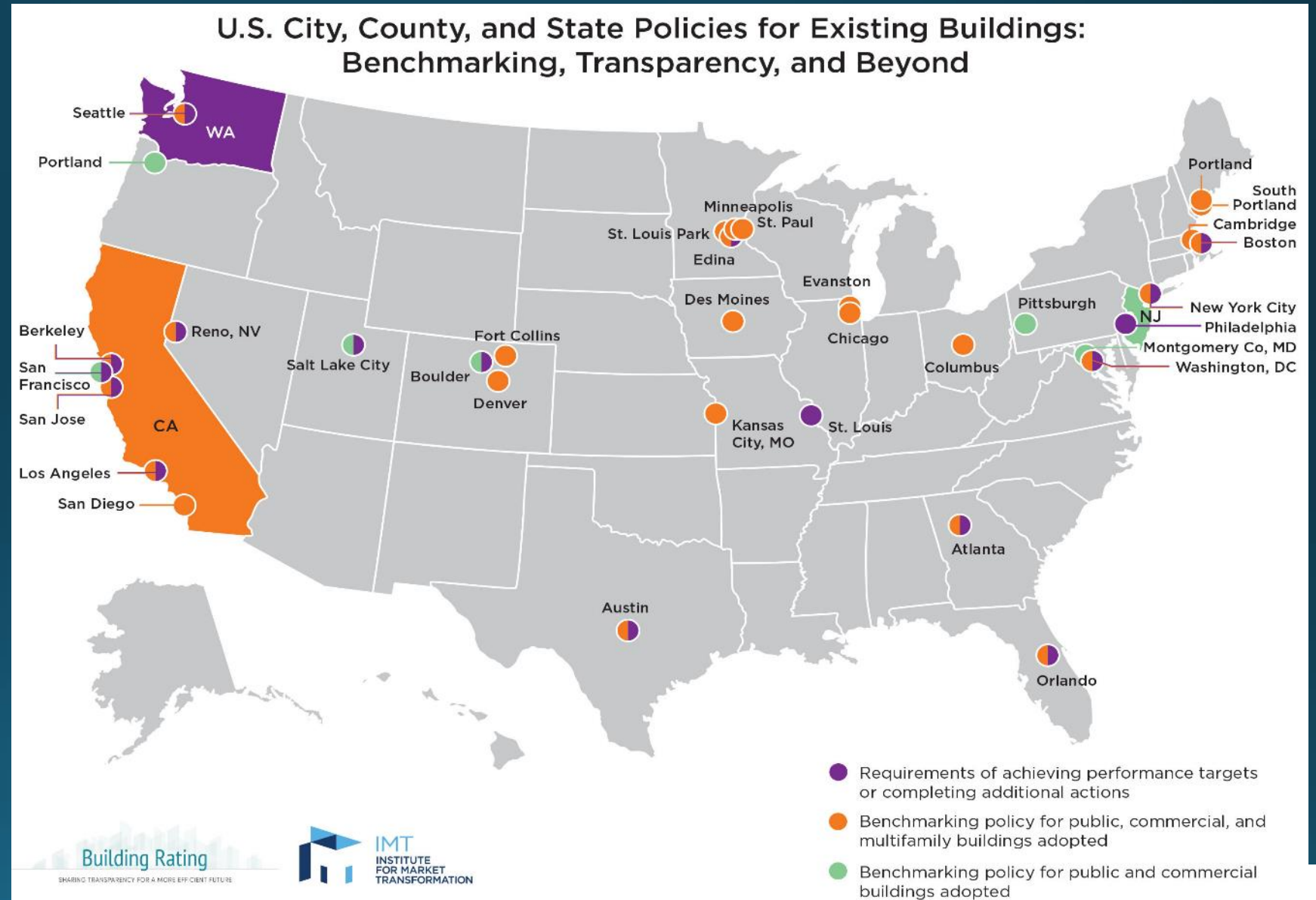
Environmental Sustainability Manager

cwisniewski@chulavistaca.gov



Building Performance Ordinances

- Adopted by more than 30 major US cities
- California AB802 already requires benchmarking



What Are Other Cities Doing?

City/State	Adopted	Covers Multifamily	Min. Building Size (sqft)	Bench- marking	Public Disclosure	Audit Req.	Minimum Performance Standard
Berkeley, CA	2015	✓	none	✓	✓	✓	
Salt Lake City, UT	2017		25,000	✓	✓	✓	
Edina, MN	2019	✓	25,000	✓	✓	✓	
Reno, NV	2019	✓	30,000	✓	✓	✓	
Boulder, CO	2015	✓	10,000	✓	✓	✓	✓
Washington DC	2012; 2018	✓	10,000	✓	✓	✓	✓
San Jose, CA	2018	✓	20,000	✓	✓	✓	
PROPOSED Chula Vista	-	✓	20,000	✓	✓	✓	✓