

# City of San José

## Energy and Water Building Performance Ordinance

City Council Meeting  
December 11, 2018  
Item 7.1



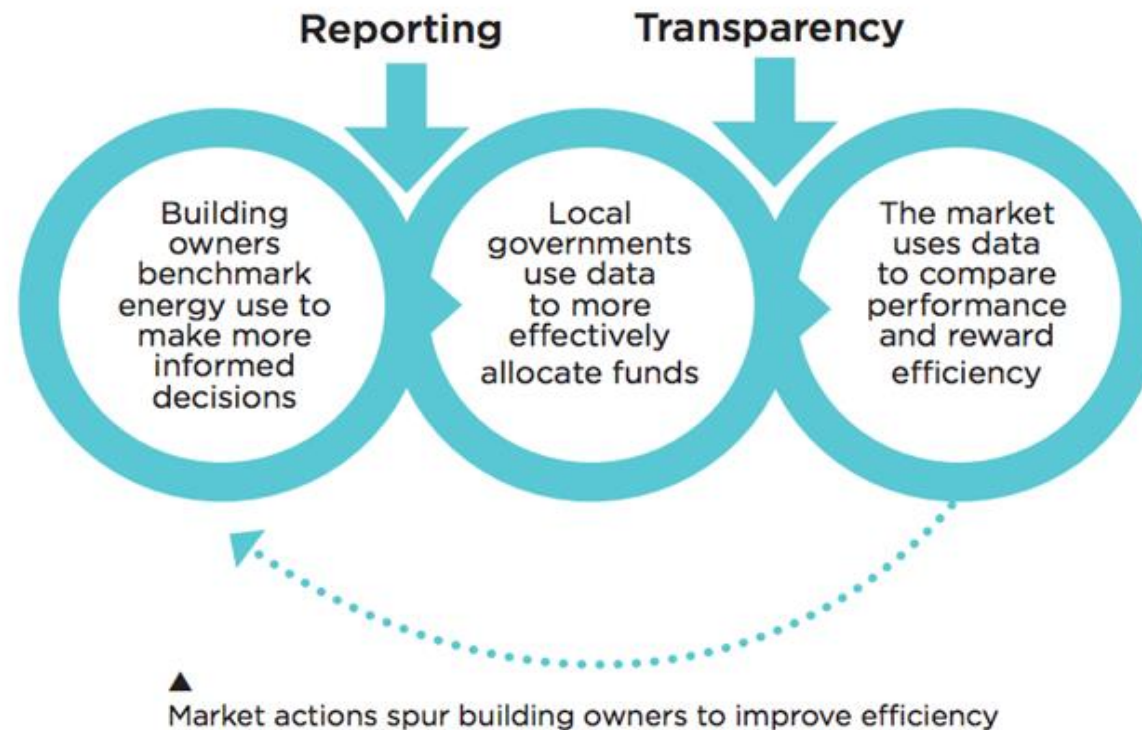
*Environmental Services*



Delivering world class utility services and programs to improve our health, environment, and economy.

# What is Benchmarking?

Benchmarking: The process of tracking a building's energy and/or water use over time, using a free tool called ENERGYSTAR Portfolio Manager, to assess how energy efficient their buildings are compared to similar buildings

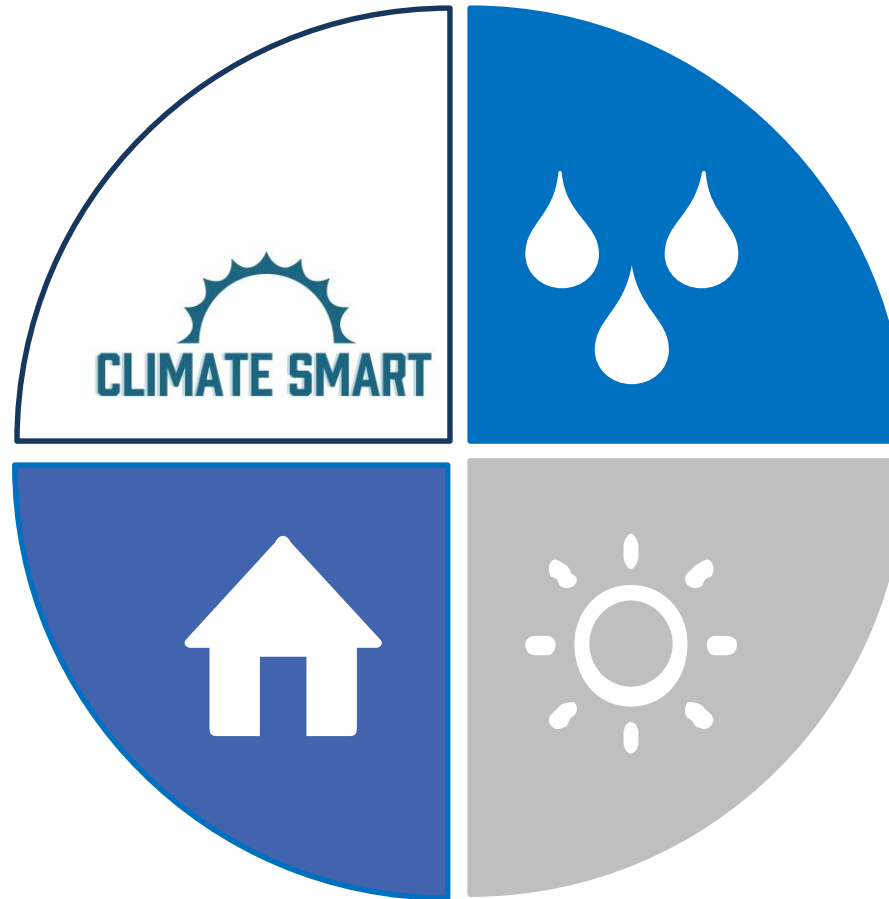


Delivering world class utility services and programs to improve our health, environment, and economy.

# Why Building Performance?

Climate Smart targets a 6.5% reduction in GHG emissions, every year, for the next 3 decades

In San José, buildings account for 33% of energy usage



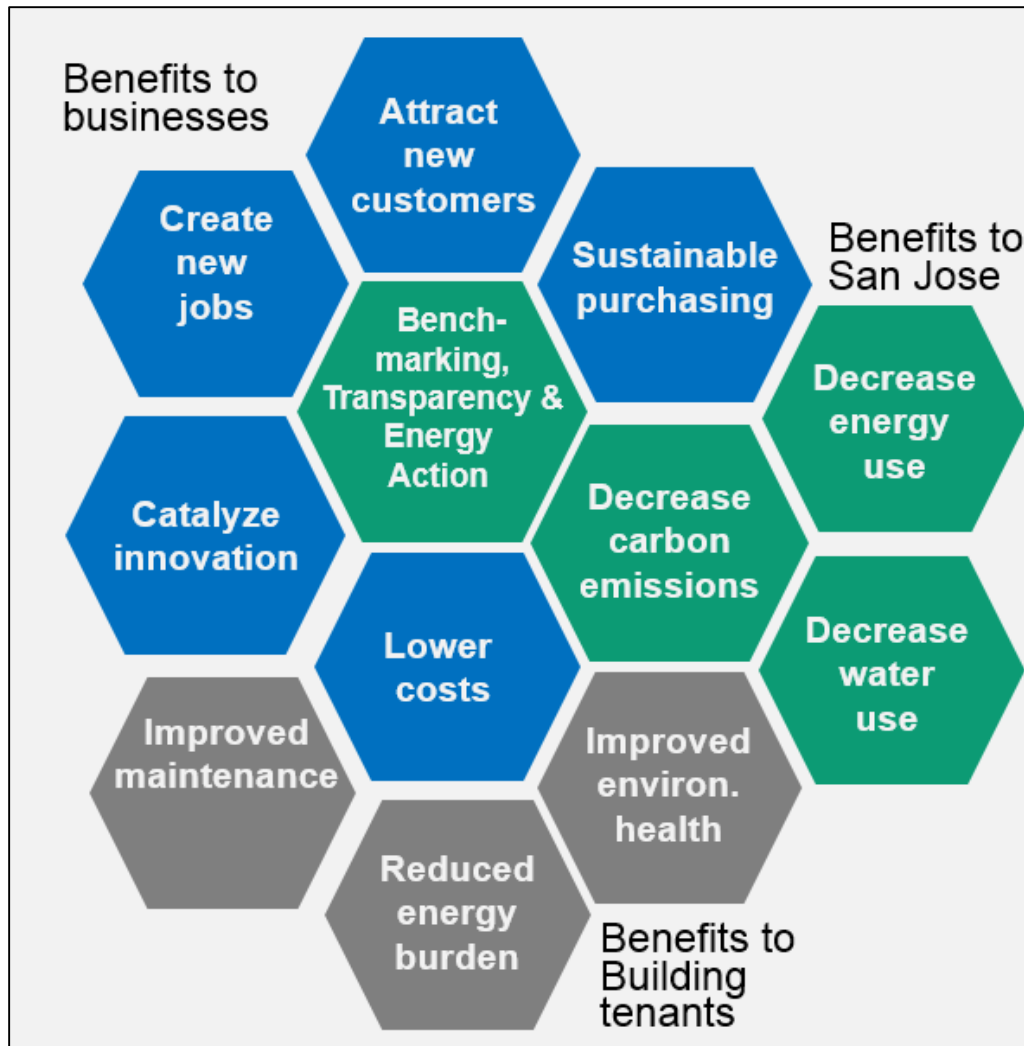
Help businesses understand their carbon and water footprints

Accelerate energy-efficiency retrofits in existing buildings

Delivering world class utility services and programs to improve our health, environment, and economy.

# Ordinance Benefits

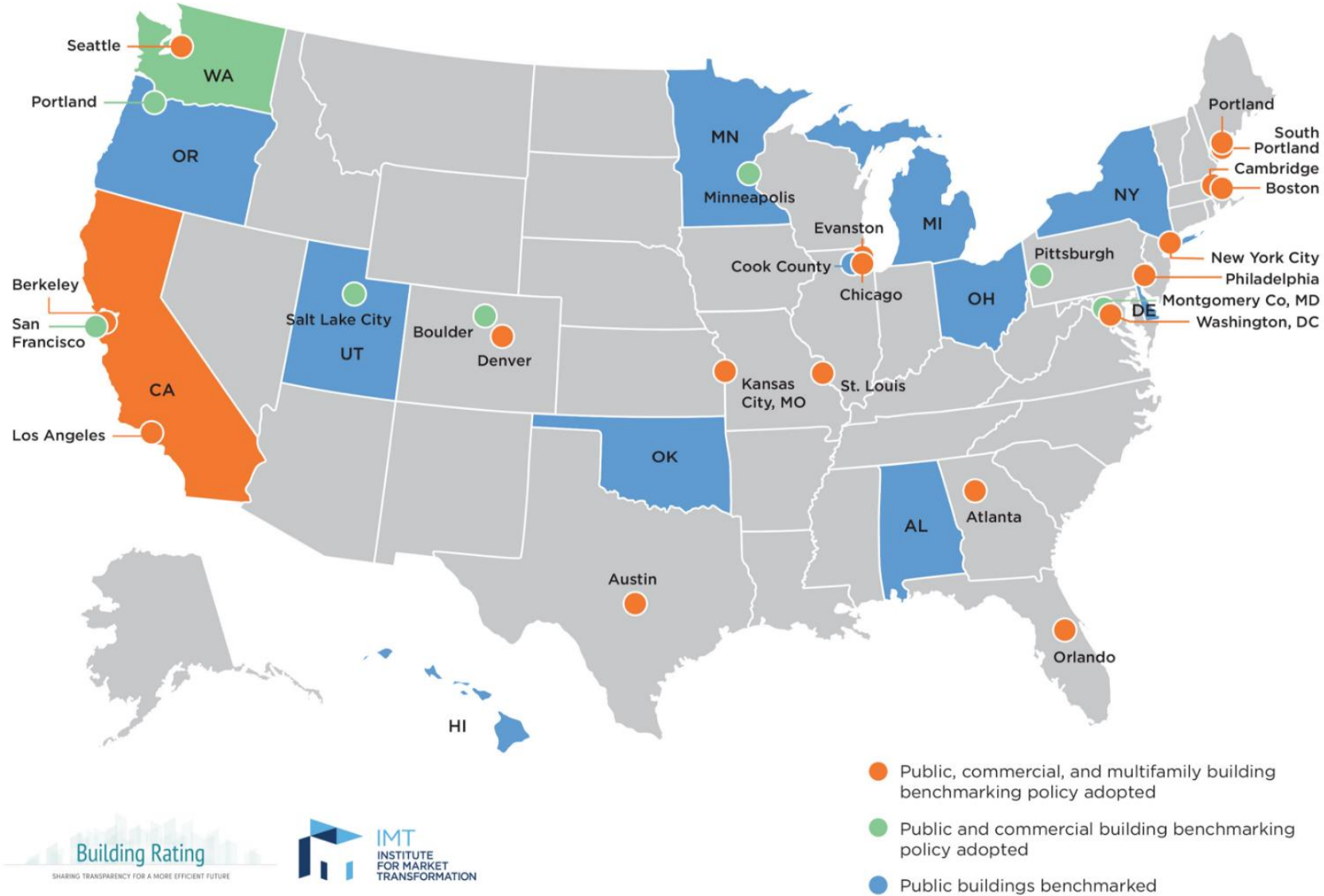
## Market Transformation



Delivering world class utility services and programs to improve our health, environment, and economy.

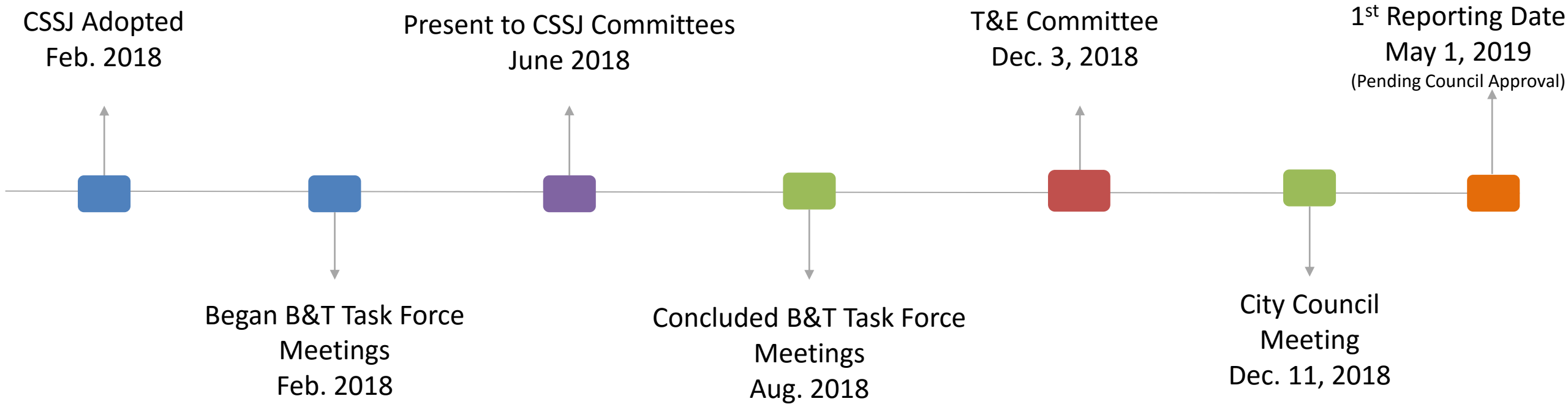


## U.S. Building Benchmarking and Transparency Policies



Delivering world class utility services and programs to improve our health, environment, and economy.


# Initiative Background and Timeline



Delivering world class utility services and programs to improve  
our health, environment, and economy.



# About the Task Force

- 
- Over 50 organizations and 100 individuals engaged over the course of 8 months
  - Task Force developed by interdepartmental City team
    - Large building owners and managers
    - Energy consultants
    - Environmental advocates
    - Trade organizations
    - Labor groups
    - Academia
    - Energy and water utilities

Delivering world class utility services and programs to improve our health, environment, and economy.



# Task Force Topics



- **Meeting 1:** Introduction to benchmarking and transparency ordinance
- **Meeting 2:** Examining San José's building stock
- **Meeting 3:** Reporting and transparency
- **Meeting 4:** Examining ordinance options, reporting, and compliance
- **Meeting 5:** Implementation and enforcement, education and training
- **Meeting 6:** Draft ordinance and next steps
- **Follow Up Webinar (11/30/18):** Proposed ordinance



# Key Ordinance Components

<b>Covered Sectors:</b>	<ul style="list-style-type: none"><li>• Commercial and multifamily (not industrial)</li><li>• Responsibility for reporting falls on building owner, not tenants</li></ul>
<b>Building Coverage Threshold:</b>	<ul style="list-style-type: none"><li>• Buildings at 20,000+ sq. ft.</li><li>• City facilities at 15,000+ sq. ft.</li><li>• Covers ~2,500 buildings</li></ul>
<b>Transparency:</b>	<ul style="list-style-type: none"><li>• Include at least one formal report, an interactive map, or dashboard</li><li>• Incorporated into Climate Smart metric tracking</li></ul>
<b>Energy Action and Assessment (EAA):</b>	<ul style="list-style-type: none"><li>• Energy/water audit, retro-commissioning, or retrofit options</li><li>• All on 5-year cycle</li></ul>



Delivering world class utility services and programs to improve our health, environment, and economy.

# Performance and Improvement Pathways

MEET REQUIREMENTS FOR		ENERGY				and	WATER									
PERFORMANCE PATHWAY: OPTION 1	MEET TARGET METRICS	ENERGYSTAR Score of 75 or greater	or	Improve ENERGYSTAR Score by 15 pts	or	Energy Use Intensity (EUI) is 25% above median for use type	or	Improve EUI by 15%	and	ENERGYSTAR Water Score of 75 or greater	or	Improve ENERGYSTAR Water Score by 15 pts	or	Water Use Intensity (WUI) is 25% above median for use type	or	Improve WUI by 15%
PERFORMANCE PATHWAY: OPTION 2	LEED EBOM	LEED Existing Buildings Operations and Maintenance Certification, meeting compliance standards for both energy and water														
IMPROVEMENT PATHWAY		ENERGY	OPTION 1	OPTION 2	OPTION 3	and	WATER	OPTION 1	OPTION 2	OPTION 3						
		ASHRAE II Energy Audit	or	Energy Retro- Commissioning	or		Choice of 2 Energy Efficiency Improvement Measures	Water Audit	or	Water Retro- Commissioning	or	Choice of 2 Water Efficiency Improvement Measures				

Delivering world class utility services and programs to improve our health, environment, and economy.

# Ordinance Implementation Schedule

- **Reporting Year 1—On May 1, 2019**
  - Covered buildings 50,000+ sq. ft.
  - Muni building 15,000+ sq. ft.
  - Transparency
  - Transition buildings covered by AB 802 to reporting to the City
- **Reporting Year 2—On May 1, 2020**
  - Covered buildings 20,000+ sq. ft.
  - Transparency
- **Reporting Year 3—On May 1, 2021**
  - Beyond benchmarking pathway requirements implemented for buildings 50,000+ sq. ft.
- **Reporting Year 4—On May 1, 2022**
  - Beyond benchmarking pathway requirements implemented for buildings 20,000+ sq. ft.



Delivering world class utility services and programs to improve our health, environment, and economy.



# Implementation and Funding

## Timeline



- First reporting deadline on May 1, 2019
- Ordinance phased in by building square footage and requirement component through 2022

## Funding



- FY 18-19 – Use existing funding for implementation
- FY 19-20 – Propose budget for one-time City funding or fund through cost recovery fees
- FY 20-21 and beyond – Fund through cost recovery fees



Delivering world class utility services and programs to improve our health, environment, and economy.



# Next Steps

- January 2019:
  - Ordinance effective, pending Council approval
  - Initiate program implementation



Delivering world class utility services and programs to improve our health, environment, and economy.



# Questions?



*Environmental Services*



Delivering world class utility services and programs to improve our health, environment, and economy.

# Building Example 1

<b>Building</b>	<ul style="list-style-type: none"><li>• 20,000 square foot apartment building, with 20 units</li><li>• Tax Assessor Parcel Number ends in #2</li></ul>
<b>ENERGY STAR Portfolio Manager results</b>	<ul style="list-style-type: none"><li>• ENERGY STAR score: 55</li><li>• EPA Water score: 47</li></ul>
<b>2019</b>	<ul style="list-style-type: none"><li>• None, building is not 50,000 or more sq. ft.</li></ul>
<b>2020</b>	<ul style="list-style-type: none"><li>• Report benchmarking data for 2019 calendar year (CY), and annually thereafter</li></ul>
<b>2021</b>	<ul style="list-style-type: none"><li>• Report benchmarking data for 2020 CY</li></ul>
<b>2022</b>	<ul style="list-style-type: none"><li>• Report benchmarking data for 2021 CY</li></ul>
<b>2023</b>	<ul style="list-style-type: none"><li>• Since building's APN ends in #2, go through one of the Beyond Benchmarking pathways</li><li>• Since the ENERGY STAR score and the EPA Water scores are both under 75, the owner goes through the Improvement Pathway for both energy and water</li><li>• Owner chooses to hire a 3rd party consultant to perform an ASHRAE 2 audit, evaluating both energy and water efficiency improvement opportunities.</li></ul>

Delivering world class utility services and programs to improve our health, environment, and economy.

# Building Example 2

<b>Building</b>	<ul style="list-style-type: none"> <li>100,000 square foot office building</li> <li>Tax Assessor Parcel Number ends in #8</li> </ul>
<b>ENERGY STAR Portfolio Manager metrics</b>	<ul style="list-style-type: none"> <li>ENERGY STAR score: 90</li> <li>EPA Water score: 81</li> </ul>
<b>2019</b>	<ul style="list-style-type: none"> <li>Since building is over 50,000 square feet, will report benchmarking data for 2018</li> </ul>
<b>2020</b>	<ul style="list-style-type: none"> <li>Report benchmarking data for 2019 calendar year (CY)</li> <li>Since building's parcel number ends in #8, no further action (aside from yearly benchmarking reporting) is needed until 2025</li> </ul>
<b>2021</b>	<ul style="list-style-type: none"> <li>Report benchmarking data for 2020 CY</li> </ul>
<b>2022</b>	<ul style="list-style-type: none"> <li>Report benchmarking data for 2021 CY</li> </ul>
<b>2023</b>	<ul style="list-style-type: none"> <li>Report benchmarking data for 2022 CY</li> </ul>
<b>2024</b>	<ul style="list-style-type: none"> <li>Report benchmarking data for 2023 CY</li> </ul>
<b>2025</b>	<ul style="list-style-type: none"> <li>Report <u>3<sup>rd</sup> party certified</u> benchmarking data for 2024 CY</li> <li>The building owner was able to maintain ENERGY STAR and EPA Water scores over 75 through 2025, so the owner submitted performance verification reports for both energy and water that year, and no further action was needed</li> </ul>

Delivering world class utility services and programs to improve our health, environment, and economy.

# Building Example 3

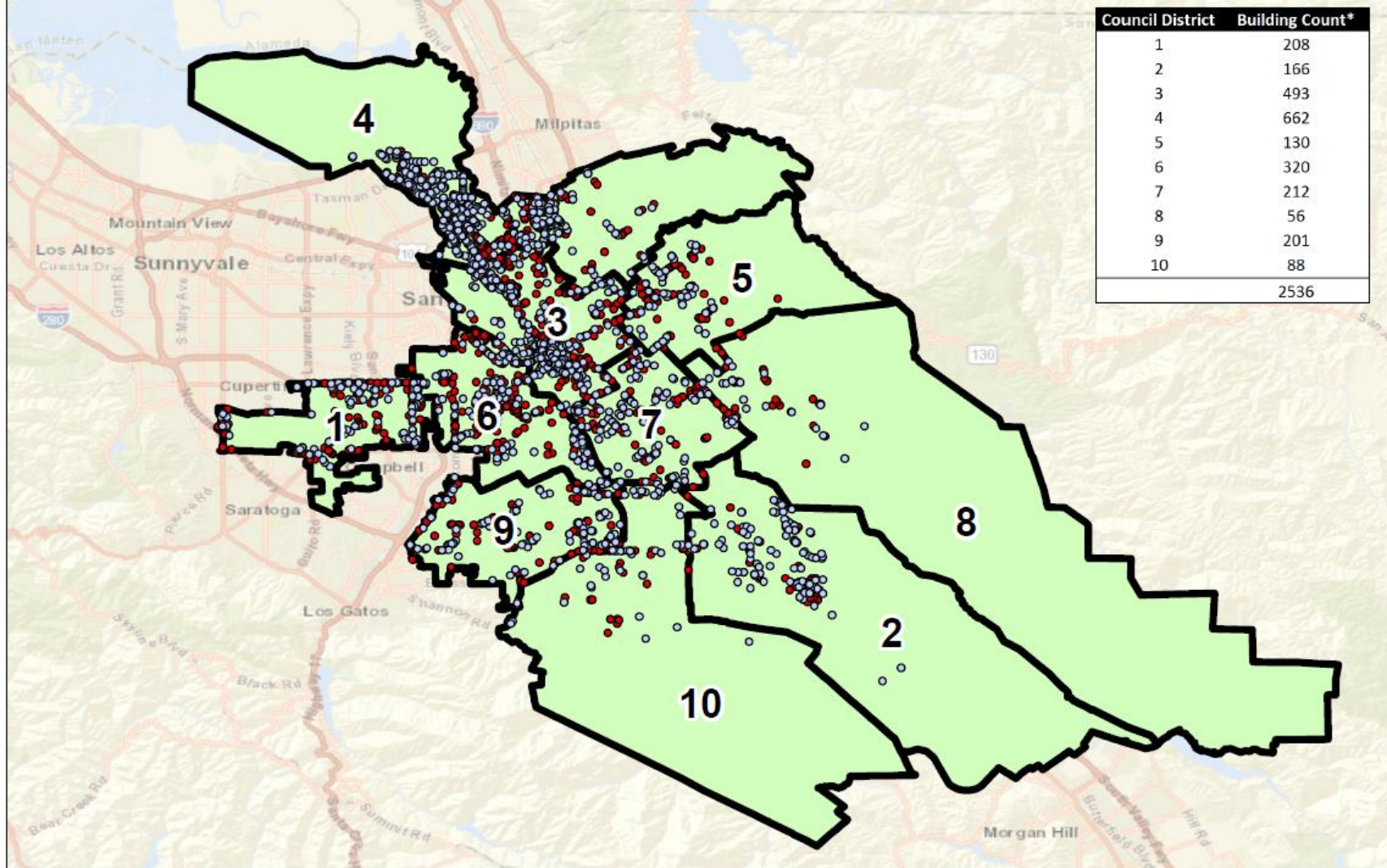
<b>Building</b>	<ul style="list-style-type: none"><li>• 25,000 square foot warehouse without a cooling system</li><li>• Tax Assessor Parcel Number ends in #4</li></ul>
<b>ENERGY STAR Portfolio Manager metrics</b>	<ul style="list-style-type: none"><li>• ENERGY STAR score: 39</li><li>• EPA Water score: 81</li></ul>
<b>2019</b>	<ul style="list-style-type: none"><li>• Since building is under 50,000 square feet, no reporting required first year</li></ul>
<b>2020</b>	<ul style="list-style-type: none"><li>• Report benchmarking data for 2019 calendar year (CY)</li><li>• Since building's APN ends in #4, no further action (aside from yearly benchmarking reporting) is needed until 2024</li><li>• If in 2024, the building owner has not improved their ENERGY STAR score by 15 points or more, they will go through the Improvement Pathway for energy</li></ul>
<b>2021</b>	<ul style="list-style-type: none"><li>• Report benchmarking data for 2020 CY</li></ul>
<b>2022</b>	<ul style="list-style-type: none"><li>• Report benchmarking data for 2021 CY</li></ul>
<b>2023</b>	<ul style="list-style-type: none"><li>• Report benchmarking data for 2022 CY</li></ul>
<b>2024</b>	<ul style="list-style-type: none"><li>• Report <u>3<sup>rd</sup> party certified</u> benchmarking data for 2023 CY</li><li>• The building owner was unable to improve the buildings ENERGY STAR score by 15 points by 2024, so went through the Improvement Pathway for energy</li><li>• The building maintained a EPA Water score over 75 through 2024, so the owner submitted a performance verification report, and no further action was needed</li></ul>



# Multifamily Building Information

- **MF Properties:** 422 are over 50,000 sq. ft., for total 86,700,000 sq. ft.
  - At 20,000 sq. ft. threshold, adds another 200 properties and another 6,300,000 sq. ft.
- **Rent-stabilized Buildings:** estimated 9 percent of buildings
  - Apartment Rent Ordinance (ARO): owners can increase rents by 5 percent annually
  - ARO allows pass-through of an additional 3 percent annually for 23 capital improvements
  - Four energy and/or water capital improvements included in ARO





### Legend

- Phase 1 Over 50K sq. ft. (1391 buildings)
- Phase 2: 20,000-49,999 sq. ft. (1144 buildings)
- Council Districts



### Energy and Water Building Performance Ordinance Covered Buildings

\*These are estimates based on RealQuest, Costar, and County Assessor Data. Building counts are subject to change with continued data cleansing.



Delivering world class utility services and programs to improve our health, environment, and economy.

# Proposed Municipal Building Participation

- Lower threshold of 15,000+ sq. ft.
  - Impacts 6 additional City buildings
- Will lead to improved operations efficiency, reduced cost, and better long-term public facility maintenance
- City leading by example



Delivering world class utility services and programs to improve our health, environment, and economy.