City of San José

Energy and Water Building Performance Ordinance
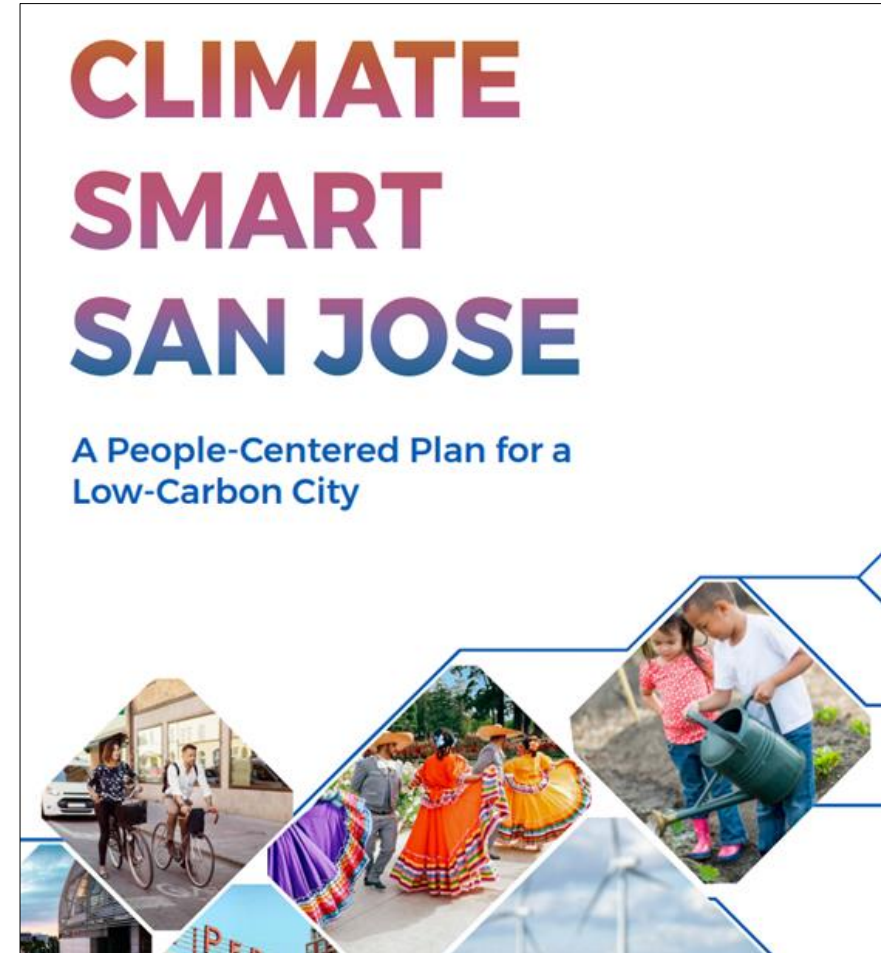
SAN JOSE
CITY OF
CAPITAL OF SILICON VALLEY
Environmental Services

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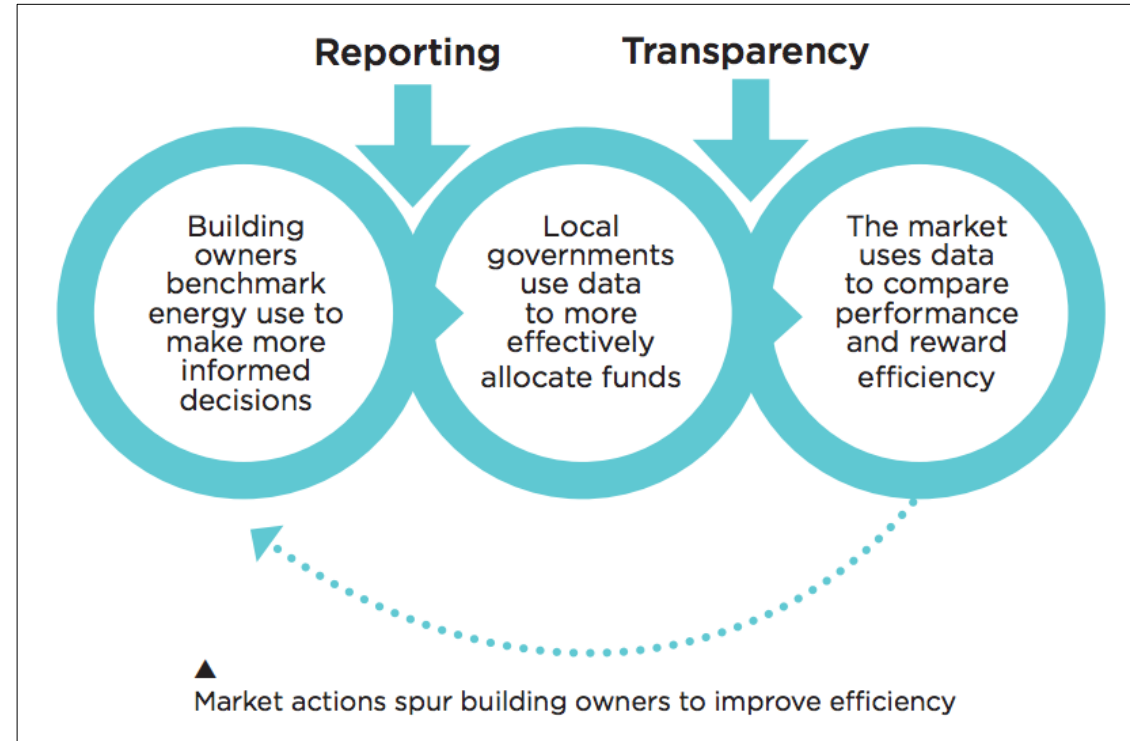
Background

- Ordinance approved by San José City Council on Dec. 11, 2018

- Aligned with Climate Smart San José

- Supported by the City Energy Project (CEP)

CLIMATE SMART SAN JOSE

A People-Centered Plan for a Low-Carbon City

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Environmental Services

Benchmarking Supports Market Transformation

Reporting   Transparency

Building owners benchmark energy use to make more informed decisions

Local governments use data to more effectively allocate funds

The market uses data to compare performance and reward efficiency

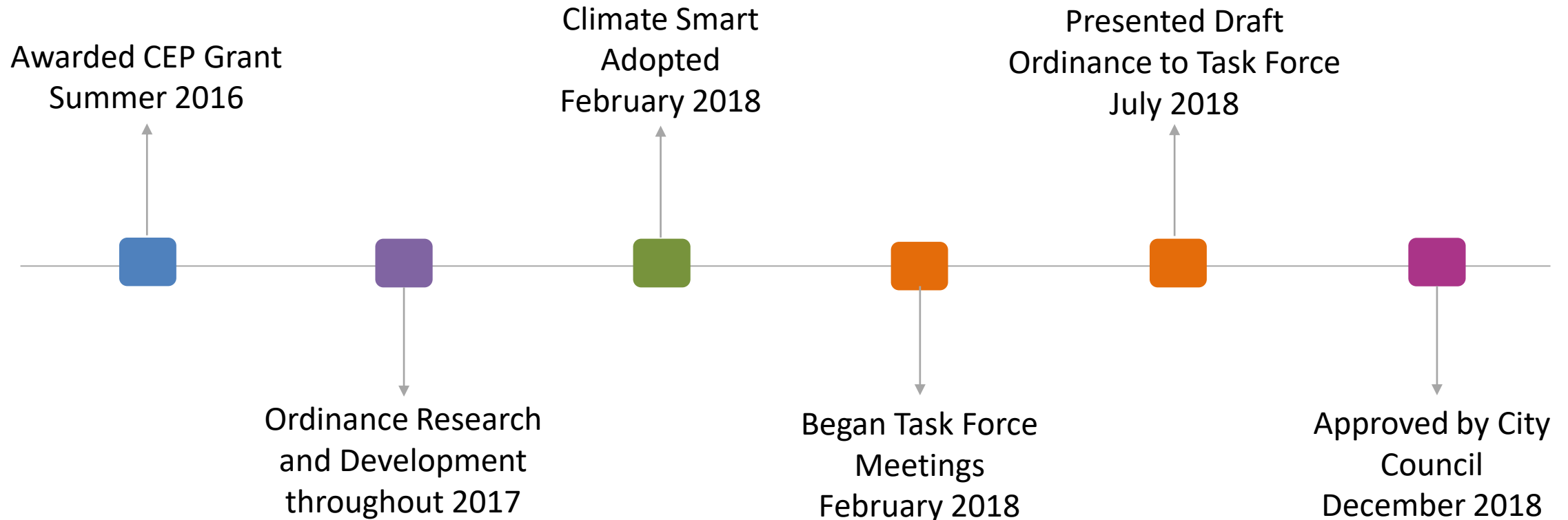Market actions spur building owners to improve efficiency

"Market transformation is a process of strategic intervention in the market to bring about widespread, permanent change"
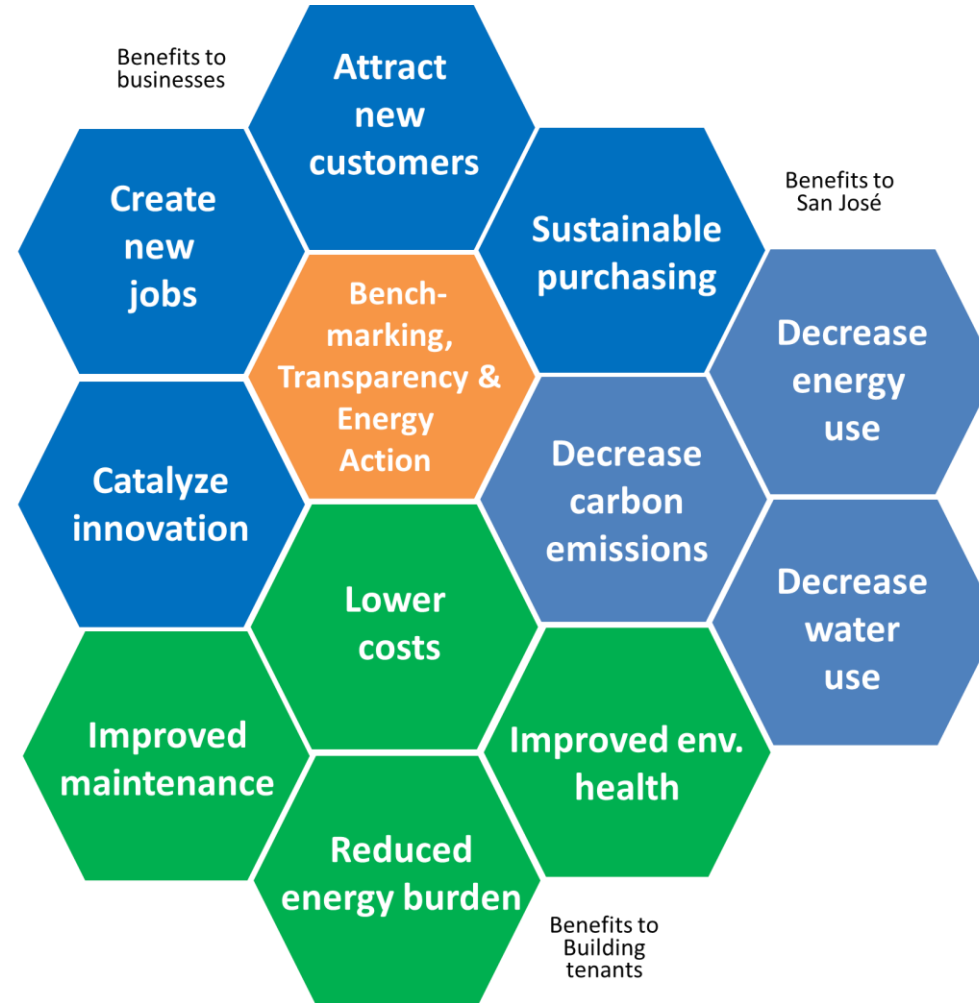
Institute for Market Transformation

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

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY
Environmental Services

Development Timeline

Awarded CEP Grant
Summer 2016

Climate Smart
Adopted
February 2018

Presented Draft
Ordinance to Task Force
July 2018

Ordinance Research
and Development
throughout 2017

Began Task Force
Meetings
February 2018

Approved by City
Council
December 2018

Building Performance Ordinance Benefits

Benefits to businesses

Benefits to San José

Attract new customers

Create new jobs

Sustainable purchasing

Bench-marking, Transparency & Energy Action

Decrease energy use

Catalyze innovation

Decrease carbon emissions

Decrease water use

Lower costs

Improved maintenance

Improved env. health

Reduced energy burden

Benefits to Building tenants

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

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY
Environmental Services

Ordinance Task Force

Engaged more than 50 organizations and 100 individuals over the course of 7 months

- **Meeting 1:** Introduction to benchmarking and transparency ordinances

- **Meeting 2:** Examining San José's building stock

- **Meeting 3:** Reporting and transparency

- **Meeting 4:** Examining ordinance components, reporting, and compliance

- **Meeting 5:** Implementation and enforcement, education and training

- **Meeting 6:** Final workshop, reviewing draft ordinance

GLOBAL GREEN®

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

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Environmental Services

Sample Presentation:
Building Stock Summary Analysis

THRESHOLD	# OF BUILDINGS	% OF BUILDINGS	% OF GROSS SQUARE FOOTAGE
50,000	1558	13%	70%
30,000	2280	19%	78%
25,000	2607	22%	80%
20,000	2930	24%	82%
10,000	4766	40%	90%

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

CITY OF
SAN JOSE
CAPITAL OF SILICON VALLEY
Environmental Services

Sample Presentation:
What Do Other Cities Publish?

IMT
INSTITUTE FOR MARKET TRANSFORMATION

Building Identification

Local Building ID/Portfolio Manager ID
Parcel Number/Tax Parcel/Tax ID/BBL ID
Property or Building Name
Parent Property Name
Owner
Address
Postal Code
Community/Neighborhood/Ward/Borough
Location (Latitude, Longitude)
Compliance Status

Property Characteristics

Property Floor Area (buildings) (ft^2)
Property Floor Area (buildings and parking) (ft^2)
Number of Buildings
Primary Property Type
Property Uses
Year Built

GHG Metrics

Total GHG Emissions (Metric Tons CO_2)
Total GHG Emissions Intensity ($kgCO_2e/ft^2$)
Direct GHG Emissions ($MtCO_2e$)
Indirect GHG Emissions ($MtCO_2e$)

Water Metrics

Water Use (kgal)
Municipally Supplied Potable Water, Indoor Intensity (gal/ft^2)
Water Intensity (gal/ft^2)
District Chilled Water Use (kBtu)

Energy Metrics

Energy Star Score
Energy Star Certified
Source EUI ($kBtu/ft^2$)
Weather Normalized Source EUI ($kBtu/ft^2$)
Site EUI ($kBtu/ft^2$)
Weather Normalized Site EUI ($kBtu/ft^2$)
Electricity Use - Grid Purchase and Generated Onsite (kWh)
Electricity Use - Grid Purchase and Generated Onsite (kBtu)
Natural Gas Use (therms)
Natural Gas Use (kBtu)
District Steam Use (kBtu)
Fuel Oil #2 Use (kBtu)
Other Fuel Use
Onsite Solar (kWh)
Total Site Energy (kBtu)
Total Site Energy - % Electricity
Total Site Energy - % Gas
Total Site Energy - % Steam
Percent Better than National Median Site EUI
Percent Better than National Median Source EUI

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

CITY OF SAN JOSE CAPITAL OF SILICON VALLEY
Environmental Services

Sample Presentation:
Discussion

Questions about the material covered or information presented?

What is a reasonable coverage threshold for San José?

      How will different thresholds impact the building stock and stakeholders?

What is a reasonable compliance timeline for San José?

      How will different compliance timelines or 'phasing' impact stakeholders?

What else do we need to consider about the building stock?

How can the City support benchmarking and reporting for building owners?

Do any working groups need to be designated?

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

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Environmental Services

Adopted Ordinance Framework

- Commercial and multifamily buildings over 20,000 square feet
- Includes both energy and water annual benchmarking
- Beyond Benchmarking
  - 5-year cycle, phased in based on parcel number
  - Buildings can "choose their own destiny," pursuing either a performance or improvement pathway
  - Exemption for multifamily

City of San José Benchmarking and Transparency Ordinance

EVERY 5 YEARS: Beyond Benchmarking 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: ASHRAE 2 Energy Audit	*or* OPTION 2: Energy Retro-Commissioning	*or* OPTION 3*: Choice of 2 Energy Efficiency Improvement Measures		*and*	**WATER*** OPTION 1: Water Audit	*or* OPTION 2: Water Retro-Commissioning	*or* OPTION 3*: Choice of 2 Water Efficiency Improvement Measures	

*For buildings without central cooling only

**Multifamily buildings under 50,000 sq. ft. without water submetering are eligible for exemption to this ordinance requirement

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

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY
Environmental Services

Status Update

- Approved by California Energy Commission
- Five-month implementation ramp up for first reporting deadline of May 1, 2019
- Approx. 645 reports received to date, with over 460 verified as in compliance
- Implementing a cost-recovery system for FY 2019-2020
  - Fee set at $150 per building

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

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Environmental Services

Outreach and Resources Developed

- Nine webinars
- Five half-day open office hour sessions
- Thousands of 1-1 assistance calls, screenshares, emails…

- General flyer
- FAQ's
- Compliance Checklist
- Extension and Exemption Request Form
- Published Covered Buildings List

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

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Environmental Services

Lessons Learned through Development

- Early and frequent interdepartmental engagement
- Leverage existing relationships to build stakeholder network
- Start mapping existing resources ahead of time
- Always ask "Who isn't here that should be?"
- Talk to other cities- don't recreate the wheel!
- Begin ordinance drafting early

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

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Environmental Services

Lessons Learned through Implementation

- Leverage industry and trade associations in outreach

- Low technical skill of building owners

- Misconceptions about data access

- Ensure fully dedicated staff are available in weeks leading up to and immediately after reporting deadline

- Covered buildings list data quality issues

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

CITY OF
SAN JOSE
CAPITAL OF SILICON VALLEY

Environmental Services

Helpful 3ʳᵈ Party Resources

https://www.buildingrating.org/policy-comparison-tool

https://www.imt.org/resource-library/

Questions?

Ariel.Carpenter@sanjoseca.gov
408.535.8560

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

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Environmental Services