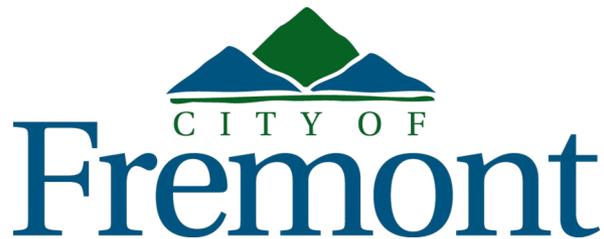




Climate Action Plan Update 2020

*Community Workshop: Visioning
a Sustainable Future*



Opening Remarks

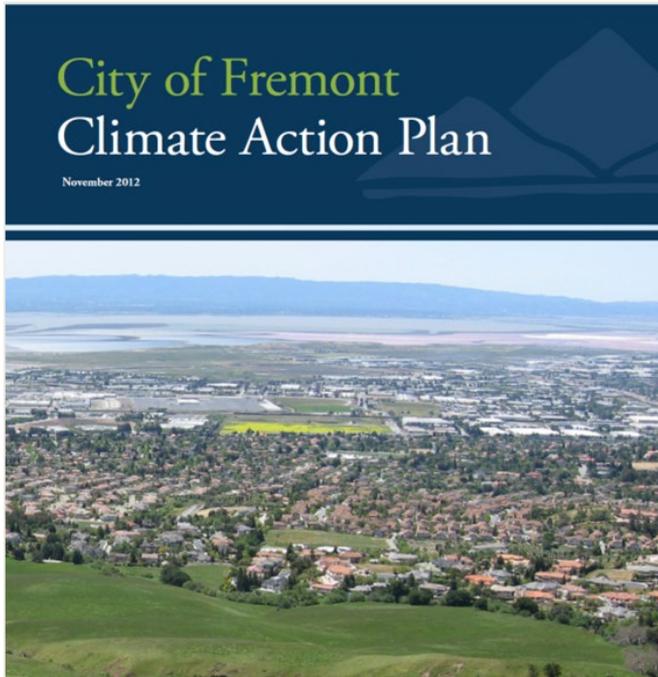


Fremont Mayor Lily Mei

History of Local Climate Action

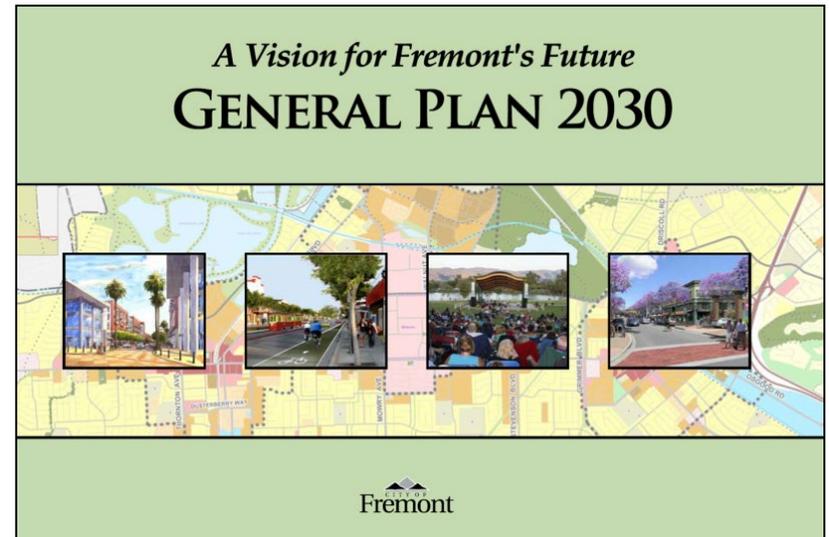
Fremont's Sustainability Vision &
Greenhouse Gas (GHG) Emissions

Sustainability / Climate Goals in City Plans



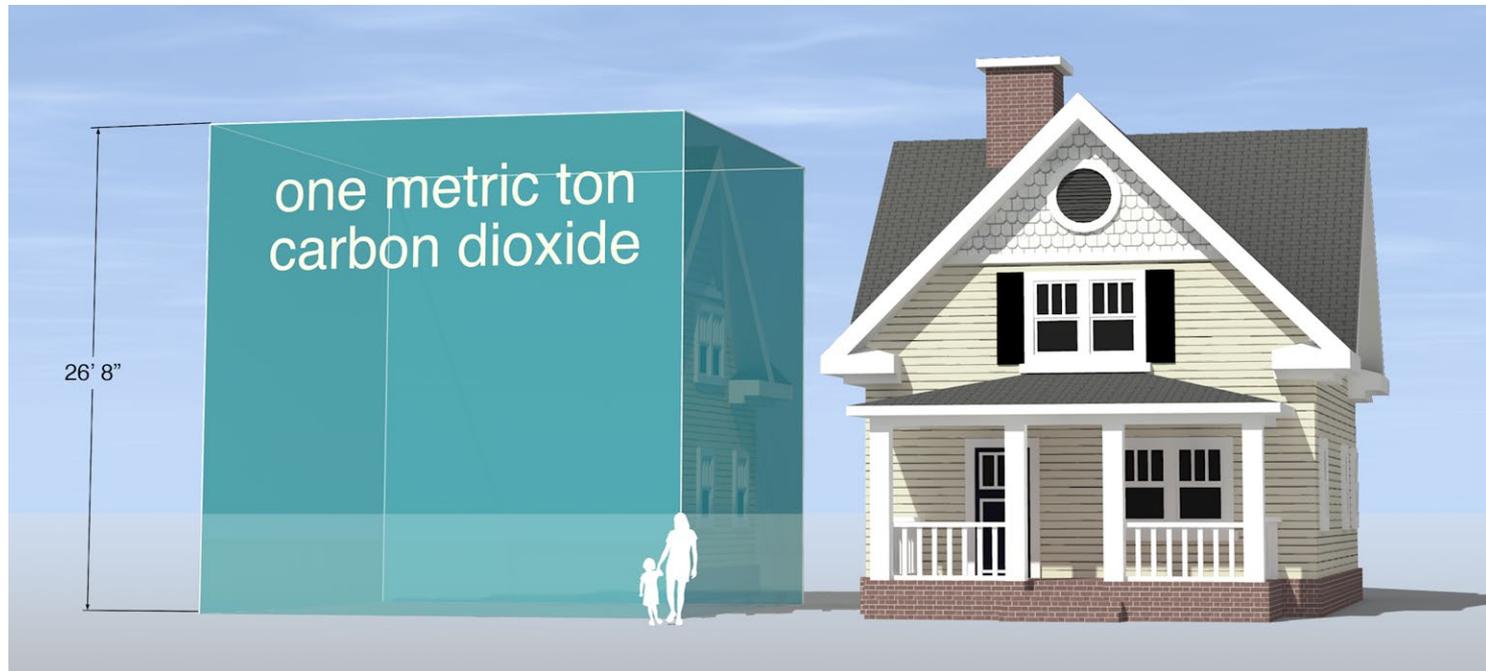
25% GHG emissions reduction by 2020 from 2005 baseline

From Auto-Oriented Suburb to Sustainable, Strategically Urban, Modern City



Measuring GHG Emissions

- GHGs are converted to metric tons of CO₂ equivalent (MTCO₂e) in the Climate Action Plan



1 MTCO₂e ~ 26' 8" cube or 33' sphere.

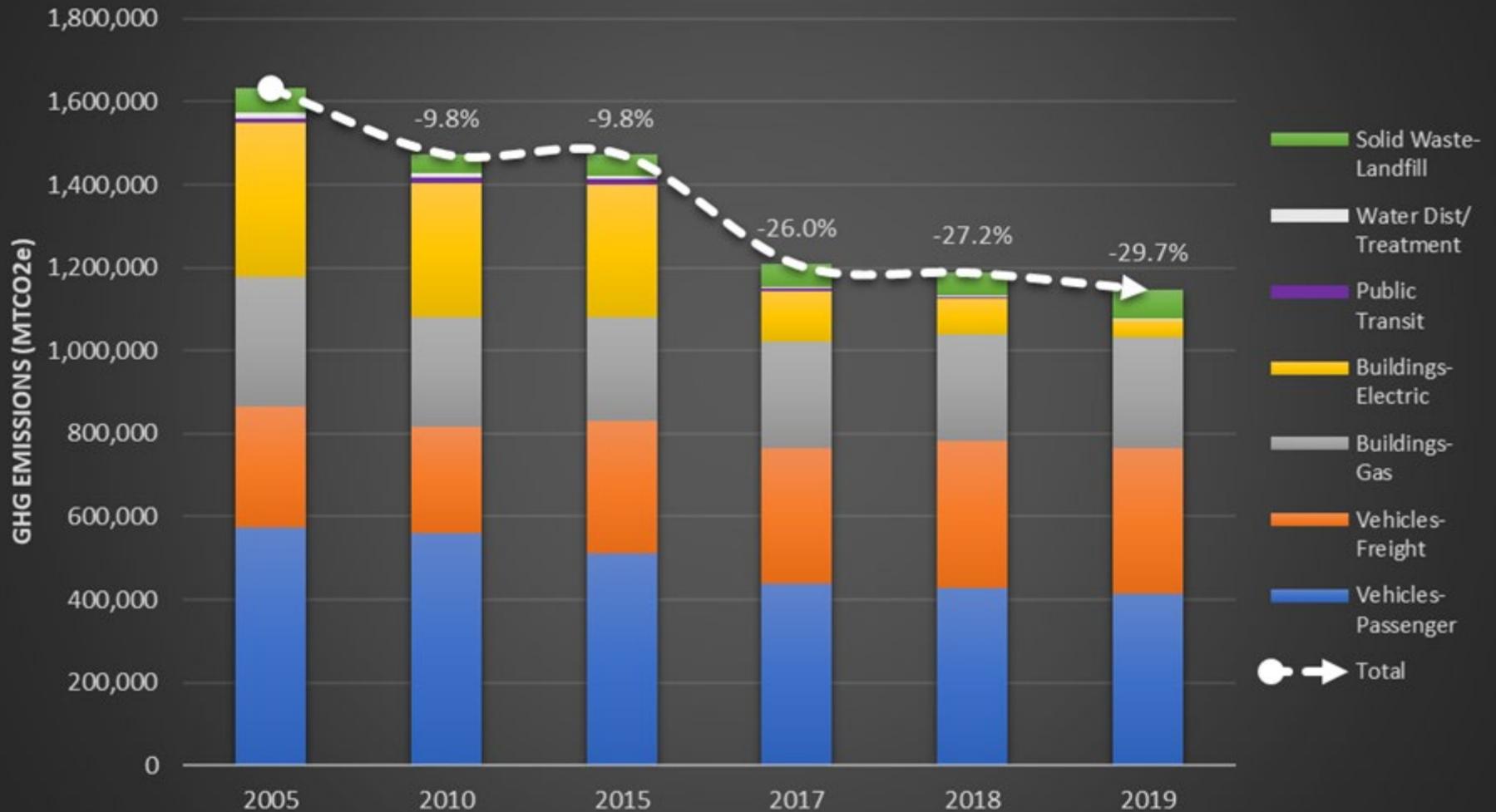
Greenhouse Gas emissions (GHGs) Drive Global Climate Change



- Electricity & natural gas use in homes & buildings
- Gasoline and diesel combustion from cars, trucks, and transit vehicles
- Industrial & factory emissions
- Waste and water transport & decomposition

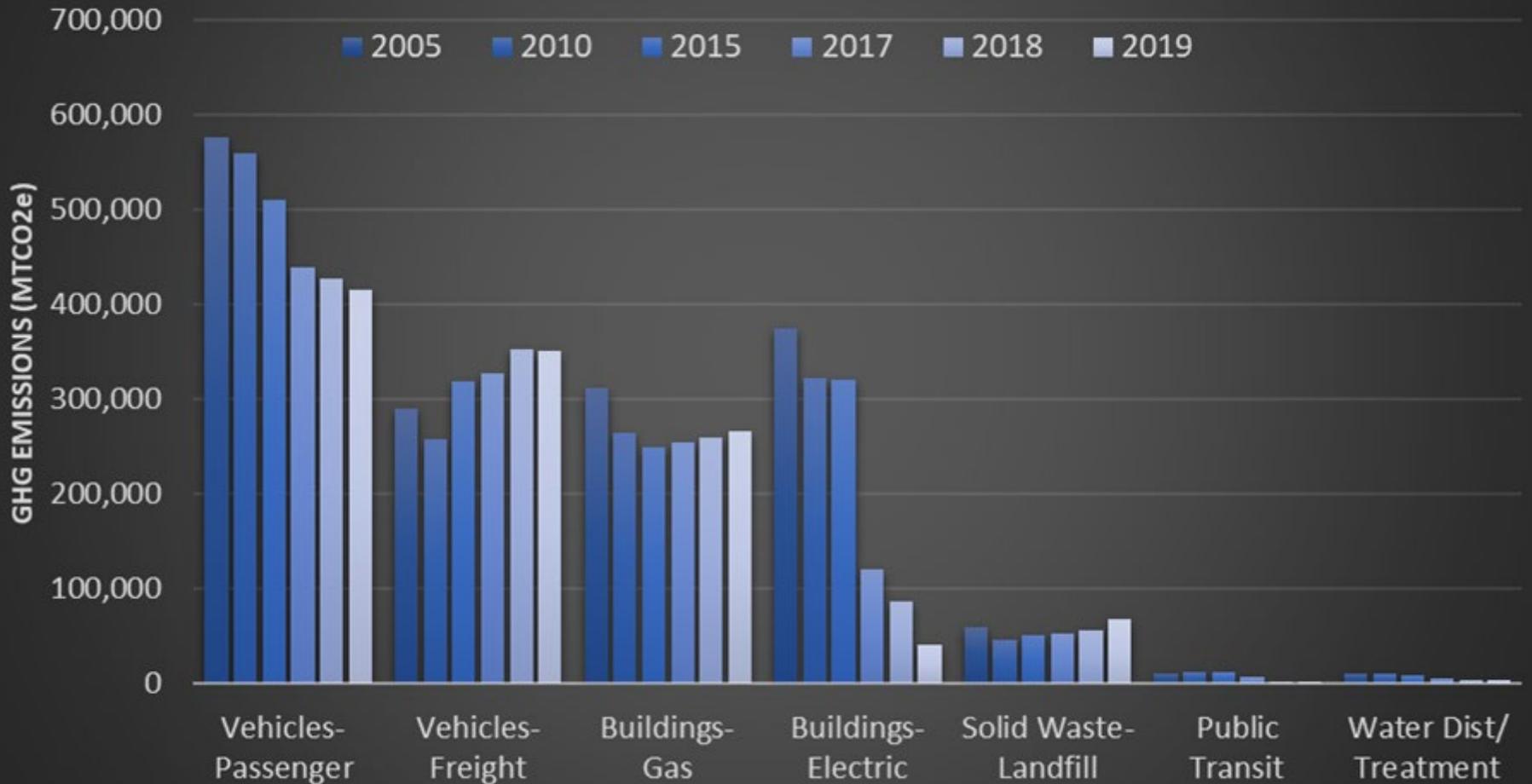
GHG Emissions by Inventory Year

Fremont Total GHG Emissions by Inventory Year



GHG Emissions by Sector / Fuel Type

Fremont Emissions by Sector per Inventory Year



CAP “1.0” Implementation

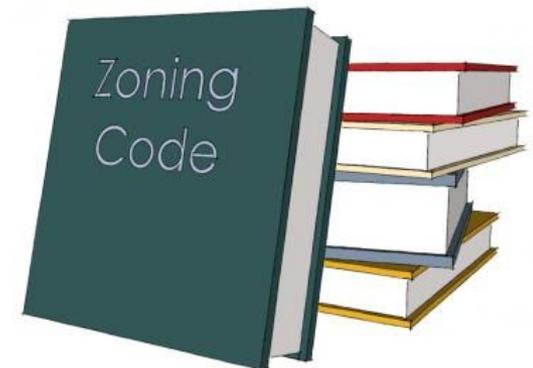
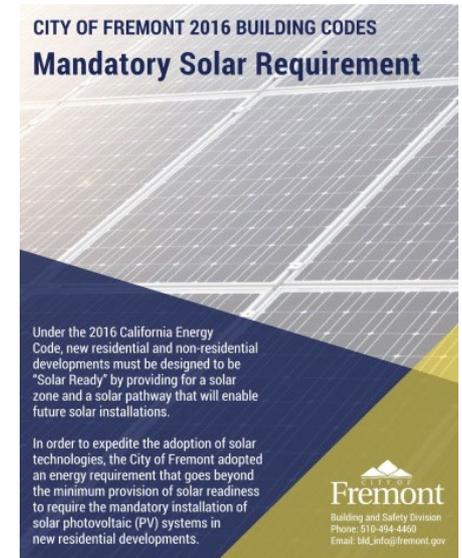
Plans, Projects, Programs, & Policies

Municipal Projects



City Codes & Policies

- Renewable Energy Ordinance
- Residential Solar Permit Streamlining
- EV Permit Streamlining
- Mandatory Recycling
- Mandatory Solar for Homes
- EV Readiness in New Developments
- Solar Preservation Ordinance
- Fossil Fuel Divestment Resolution
- Carbon Neutrality Resolution



Community Programs



City Commitments

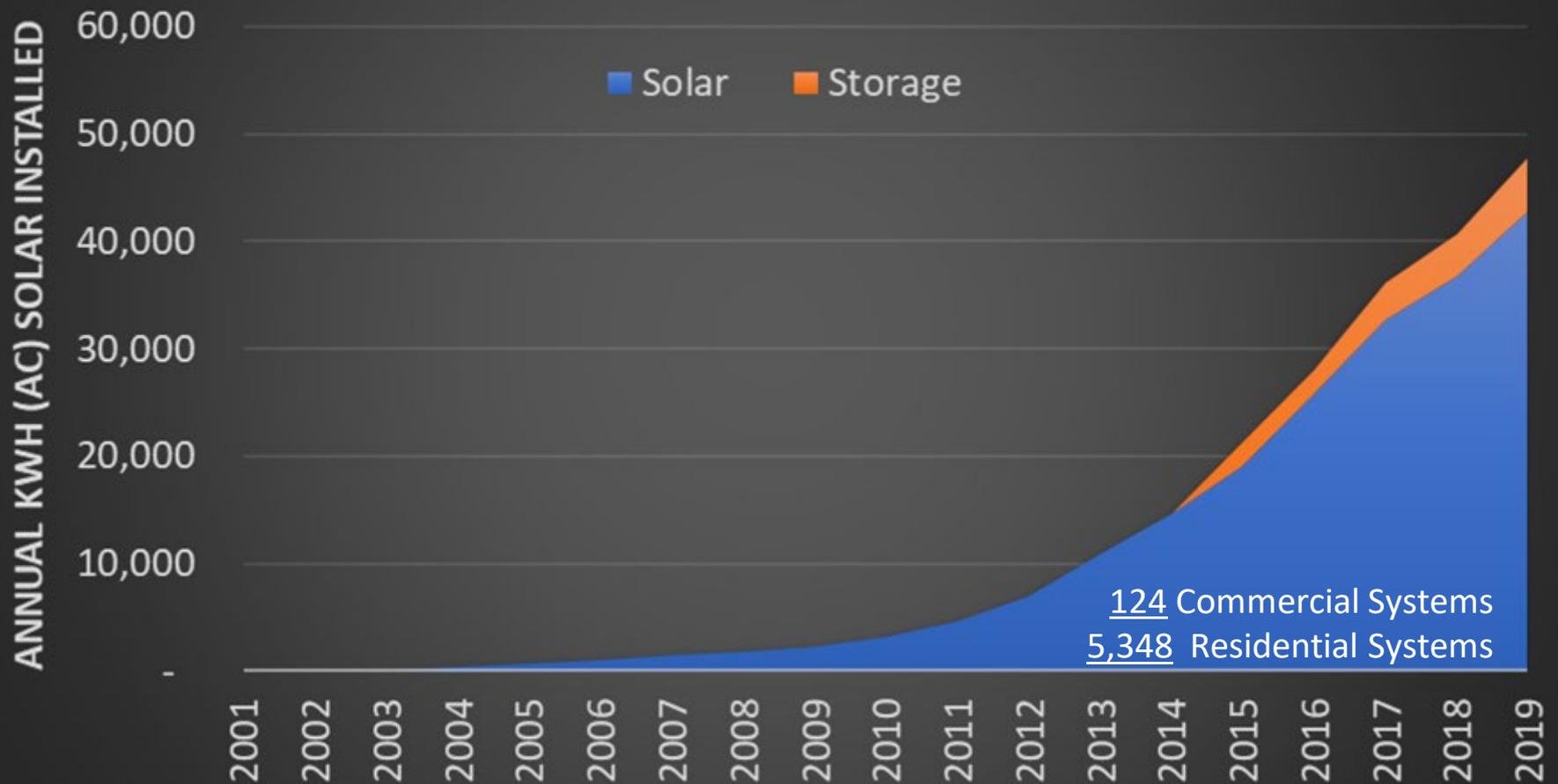


City Awards & Recognitions



Key Sustainability Indicator:

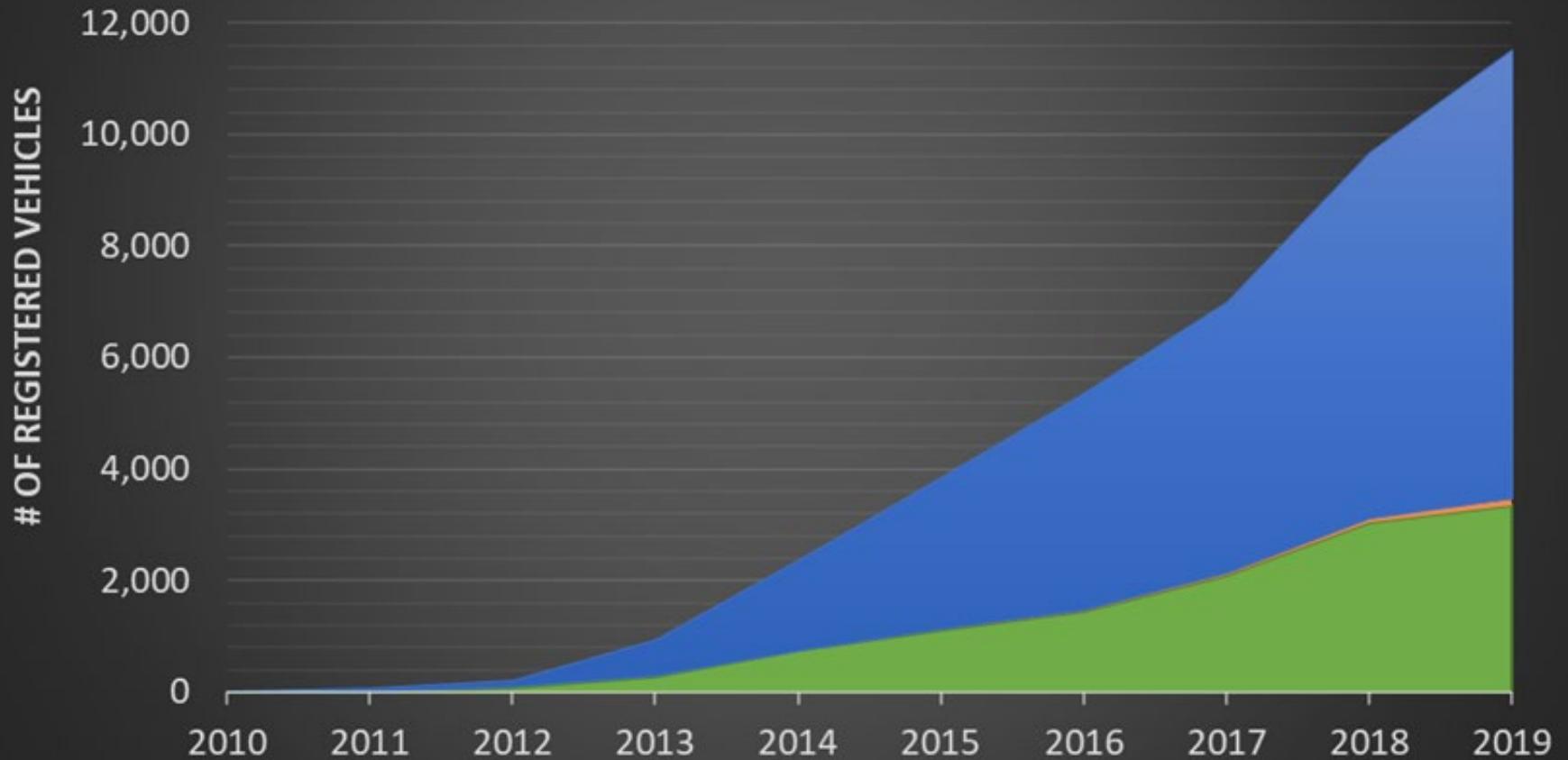
Total Installed Solar+Storage Capacity



Key Sustainability Indicator:

Total Clean Vehicles by Type

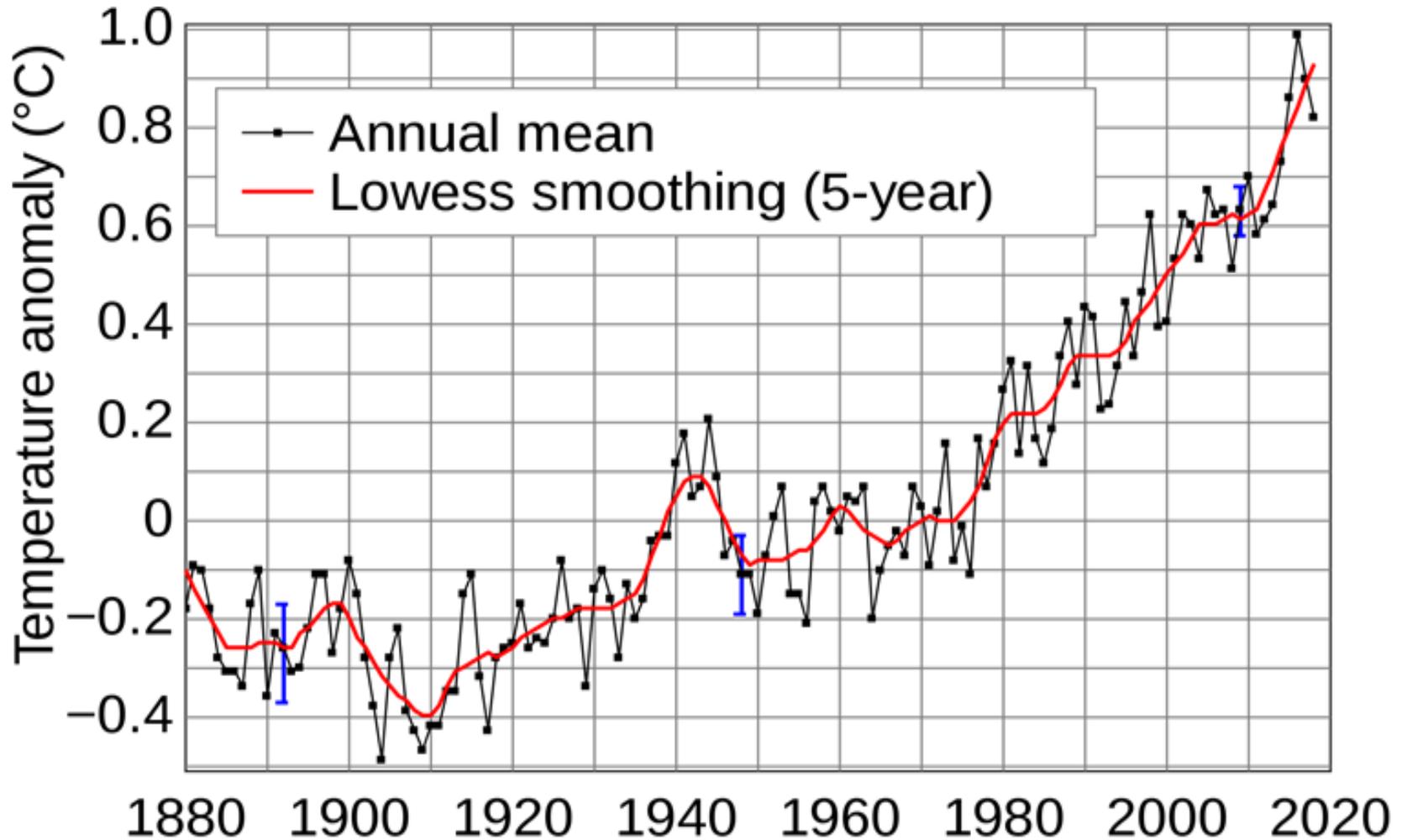
■ PHEV ■ FCEV ■ BEV



Changing Climate Context

& Why We Should Update Our CAP

Global Warming



Global-land temperature index. Source: NASA GISS

Global Climate Impacts

According to an IPCC 2018 Special Report on Global Warming, we will hit **1.5°C between 2030-2052** based on current rate of warming



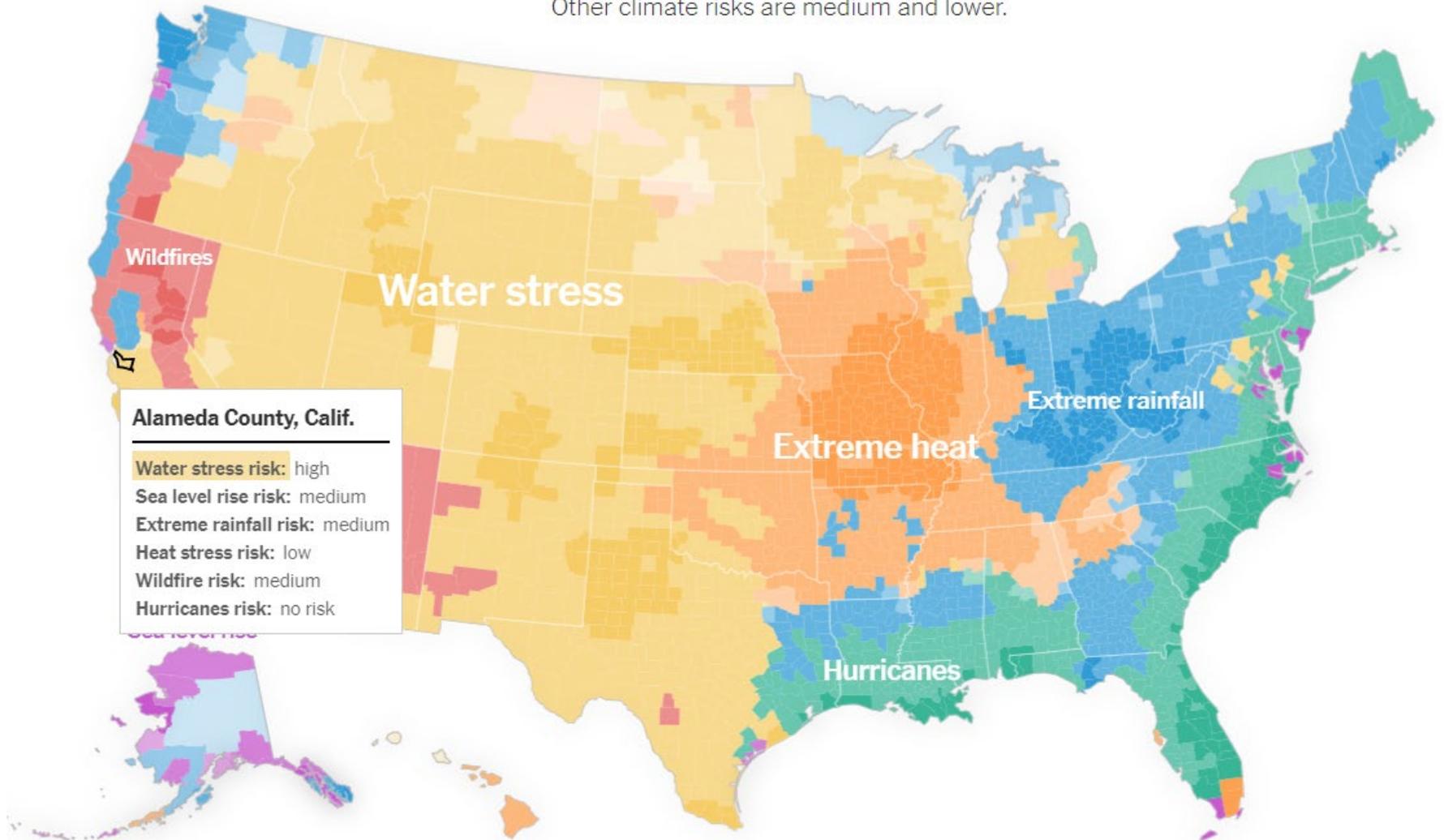
Planet	People
Extreme heat	Health
Heavy precipitation	Livelihoods
Drought	Food Security
Sea level rise	Water Supply
Ecosystem degradation	Human Security
Species loss	Economic Stability



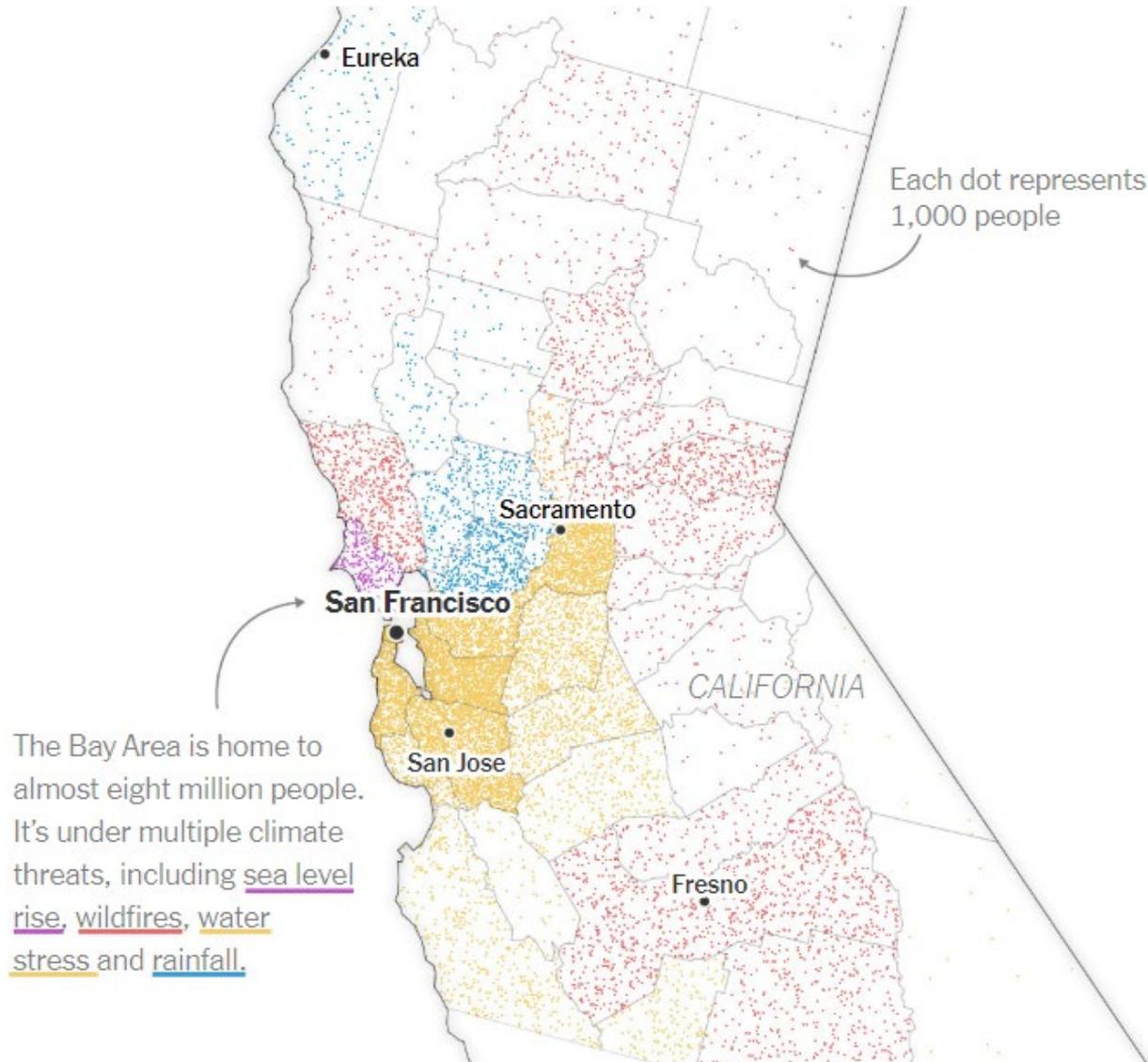
Climate Risks Across the Nation

The greatest climate threat in Alameda County, Calif. is **water stress.**

Other climate risks are medium and lower.



Climate Risks Bay Area



Regional Climate Changes

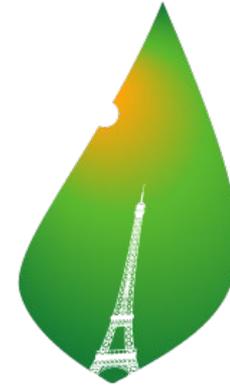
- Bay Area's average annual max. temp. increased by 1.7°F (0.95°C) from 1950-2005.
- Sea level in the Bay Area has risen over 8 inches (20 cm) in the last 100 years.
- The 2012-2016 California drought led to the most severe moisture deficits in the last 1,200 years



Source: California's Fourth Climate Change Assessment (2018)

Current Status of Climate Action

- Current plan sunsets this year
- Paris Agreement sets goal of staying below 1.5°C (2.7°F)
- Current federal inaction
- Ambitious CA goals for energy, climate, and carbon neutrality
- Growing global social movement for deep & rapid decarbonization

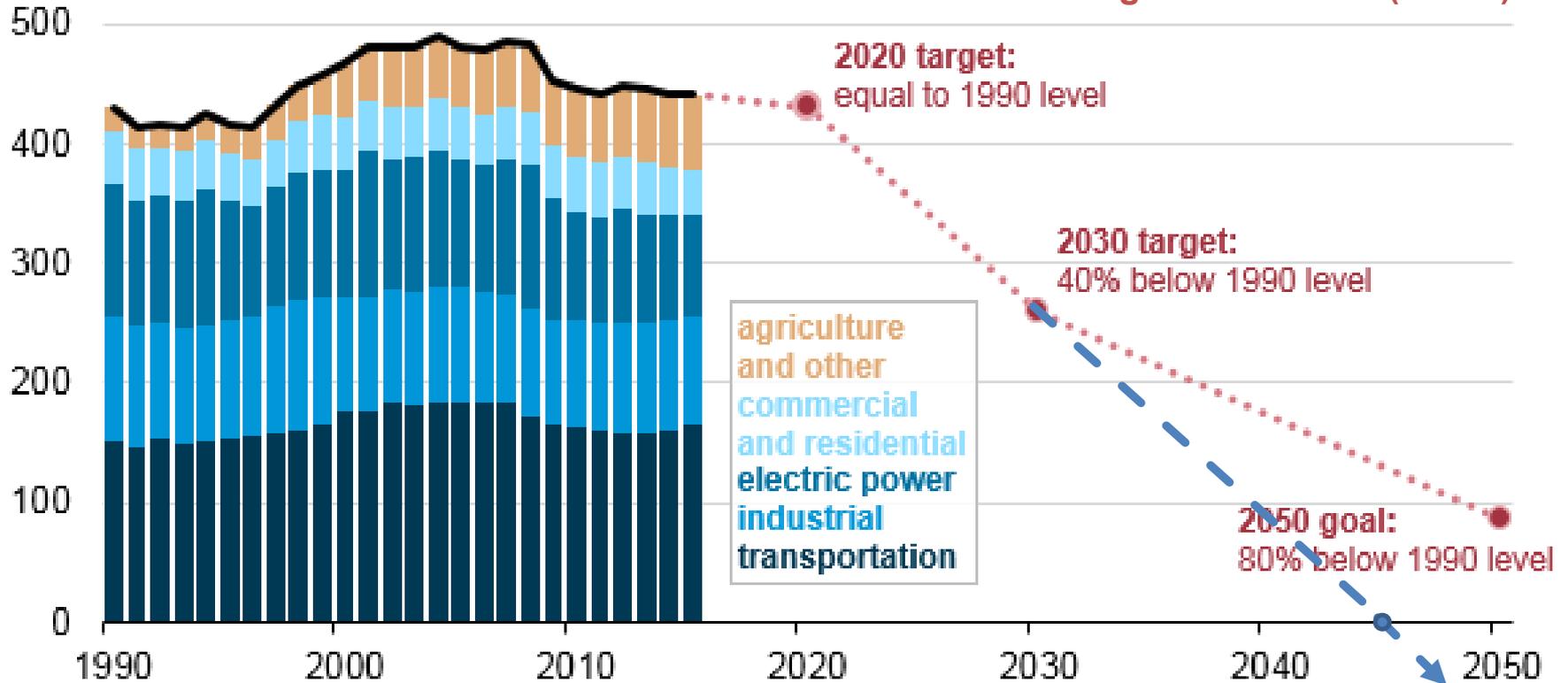


PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11



California Climate Goals

California greenhouse gas emissions by sector (1990-2015) and targets through 2050
million tons carbon dioxide (CO₂) equivalent



CA Executive Order B-55-18
2045 goal: Carbon Neutral;
2046 Carbon Negative

CALIFORNIA CLIMATE STRATEGY

An Integrated Plan for Addressing Climate Change



VISION

**Reducing Greenhouse Gas Emissions
to 40% Below 1990 Levels by 2030**

GOALS

**50%
reduction
in petroleum
use in vehicles**



**50%
renewable
electricity**



**Double energy
efficiency savings
at existing buildings**



**Carbon
sequestration
in the land base**



**Reduce
short-lived
climate pollutants**



**Safeguard
California**



Climate Action = A Common Cause

- We know the problem
- We already have many solutions
- We are all in this together
- Sustainability is our way to get there



CAP “2.0” Update

Framework, Vision, & Process

Carbon Neutrality Resolution: Adopted by Council Feb. 2019

By or before 2045

→ Carbon Neutral

2030 interim target

→ 55% emissions reduction

2045 forward

→ “Post-Carbon Community
Framework”

- 4 Overarching Values
- 7 Key Strategies



Defining Carbon Neutral

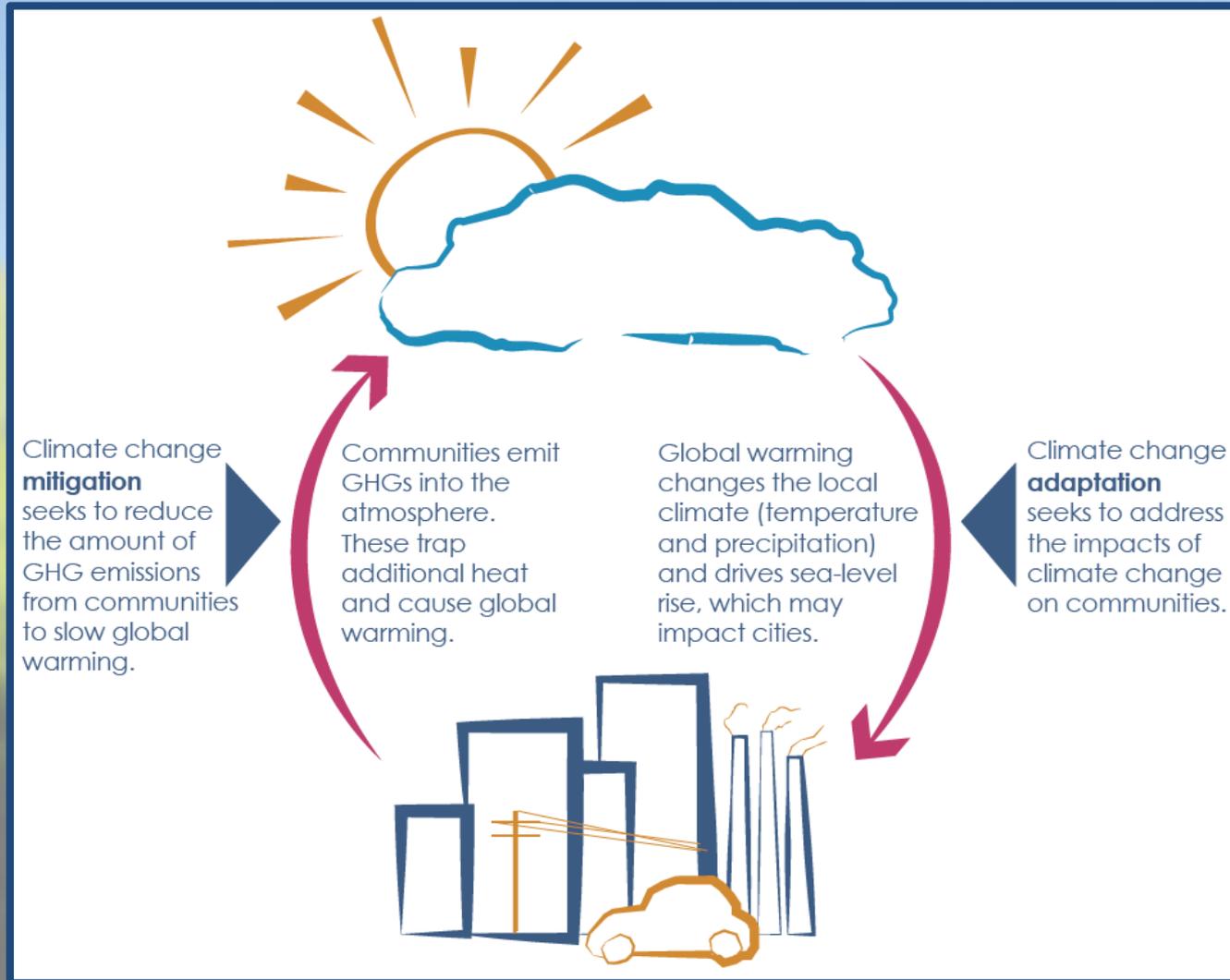
Achieving net zero emissions from all sources by balancing +’s and –’s



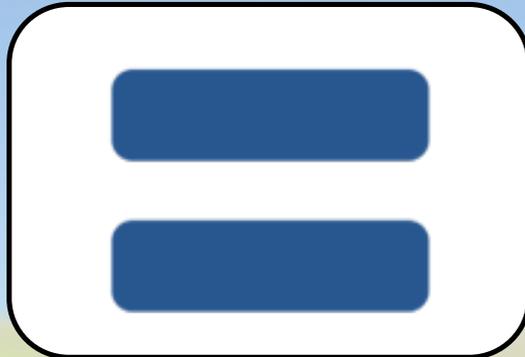
Gaseous Carbon
= Emissions

Solid Carbon
= Sequestration

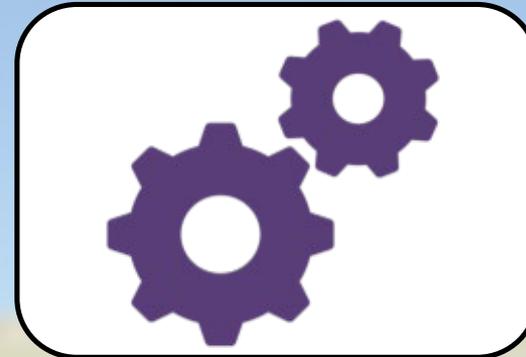
Mitigation + Adaptation



Post-Carbon Framework Values



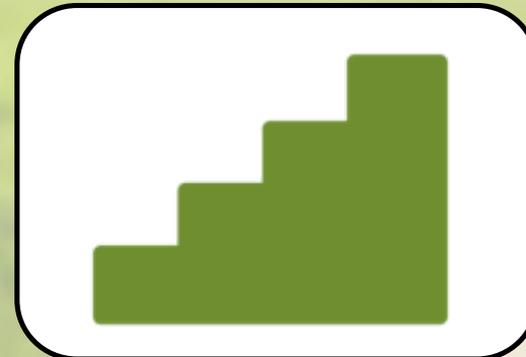
**Equity &
Access**



**Efficiency &
Innovation**



**Health &
Wellness**



**Resiliency &
Capacity-Building**

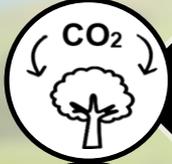
Post-Carbon Framework Strategies



Clean & Renewable Power



Electrification & Fossil Fuel Phase-Out



Carbon Sequestration



Mobility & Connectivity



Resource Conservation & Elimination of Waste



Restorative Ecology & Green Infrastructure



Climate Adaptation & Resilience

CAP 2.0 will:

- Use “Post-Carbon Framework” as foundation
- Build upon CAP 1.0 best practices/successes
- Incorporate job & housing growth projections
- Analyze impact of changing statewide policy & technology trends
- Identify opportunities for increased local action
- Focus on “deep-decarbonization” measures
- Include climate mitigation + adaptation strategies
- Streamline implementation measures with CEQA

Our Most Climate Vulnerable

- Medical baseline residents & disabled community members
- Non English-speaking residents
- Low-income households
- Homeless community members
- Youth and seniors



Alignment With Common Goals

- We all want to be healthy
- We all want to be safe
- We all want a good quality of life
- We all want economic stability & prosperity



CAP Update Project Timeline

WE ARE
HERE

SUMMER/
FALL 2020

Community
Engagement,
Visioning, and
Forecasting

FALL 2020/
WINTER 2021

Develop
Policies and
Measures

WINTER 2021

Prepare
Plan and
Review

SPRING 2021

Finalize Plan
and Present to
City Council

Closing Remarks

Next Steps

- **Additional Community Workshops (Fall)**
 - Workshop #2: Initial CAP Measure List Review/Feedback
 - Workshop #3: Resilience, Equity, & Community Connections
- **Outreach to key community sectors (Fall/Winter)**
 - Youth, Seniors, Environmental Organizations, Faith-Based & Cultural Organizations, Neighborhood Associations, Small Business, Industry, Healthcare Providers, School District, Water District, Energy Utilities, etc.
- **Online polling/surveying (Fall/Winter)**

Stay Connected

City Website:

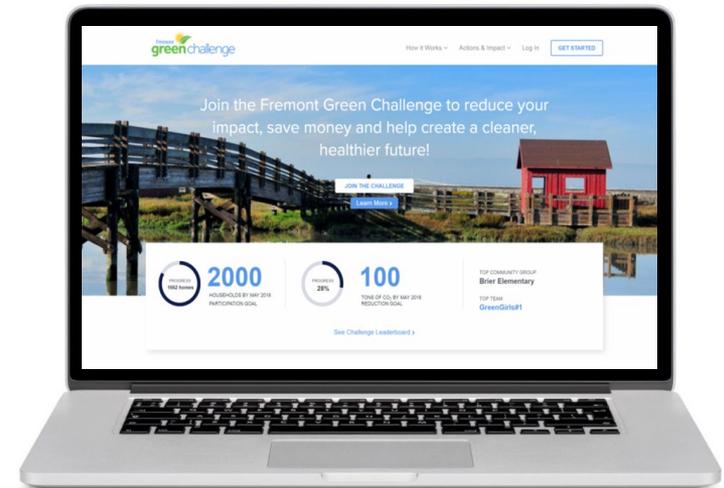
www.Fremont.gov/ClimateAction

Sustainability Newsletter:

www.Fremont.gov/FGCNewsletter

Climate Action Platform:

www.FremontGreenChallenge.org



Thank you!



Rachel A. DiFranco
Sustainability Manager
City of Fremont
RDIFranco@Fremont.gov
(510) 494-4451



Robbie Barton
Sustainability Assistant
City of Fremont
RBarton@Fremont.gov
(510) 494-4519