



Sustainability Workshop

January 25, 2022

ZOOM TOOLS

Mute or Unmute
Microphone



Start or Stop
Video

AGENDA

- | | |
|-----------------|-----------------------------------|
| 6:00pm – 7:00pm | Welcome, Presentation and Polling |
| 7:00pm - 7:25pm | Q&A and Feedback |
| 7:25pm – 7:30pm | Next Steps and Close |



GENERAL PLAN UPDATE

- Overarching document that guides the future growth and development of the town
- Articulates a community's vision for the future
- Update to the 2005 Plan
- Will plan for next 20 years
- Contains goals, policies, and implementing programs
- Approvals of new development projects, public projects, and capital improvements require findings of consistency with the General Plan



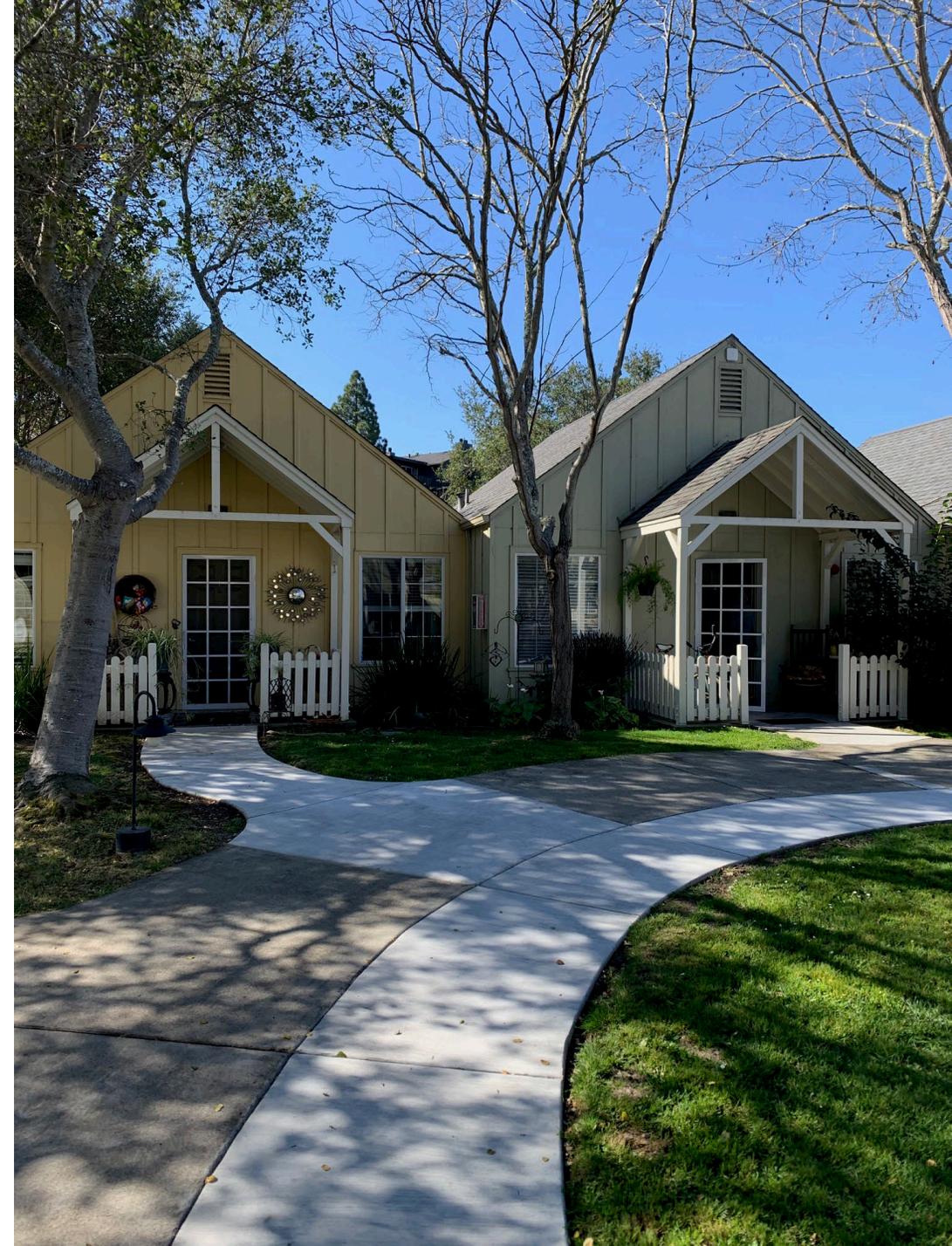
GENERAL PLAN ELEMENTS

Required Elements:

- Land Use
- Mobility
- Housing
- Open Space
- ✓ ■ Conservation
- Safety
- Noise

Additional Elements:

- Downtown
- Parks and Recreation

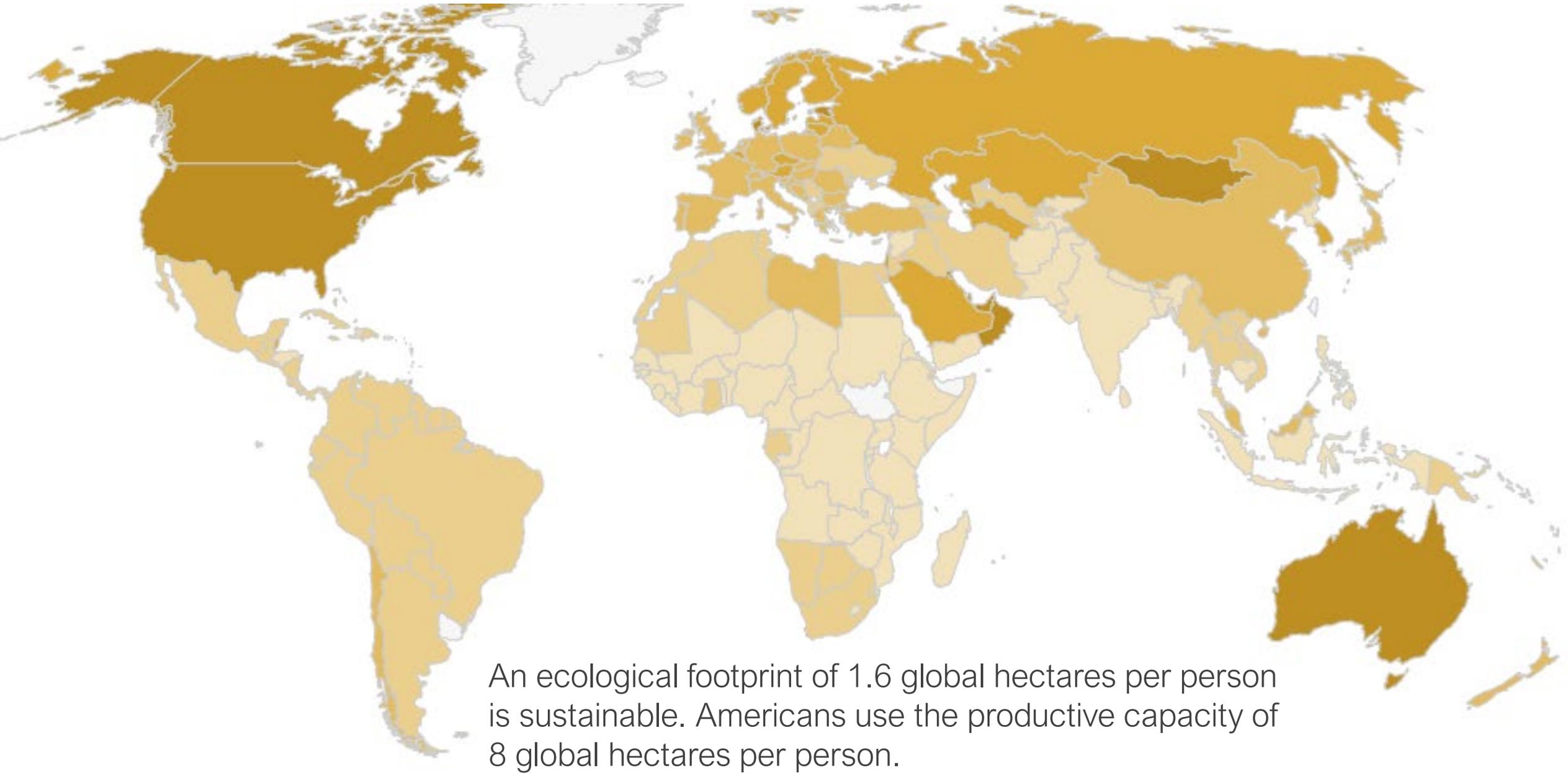


SUSTAINABILITY

Meeting the needs of the present without compromising the ability of future generations to meet their own needs



ECOLOGICAL FOOTPRINT



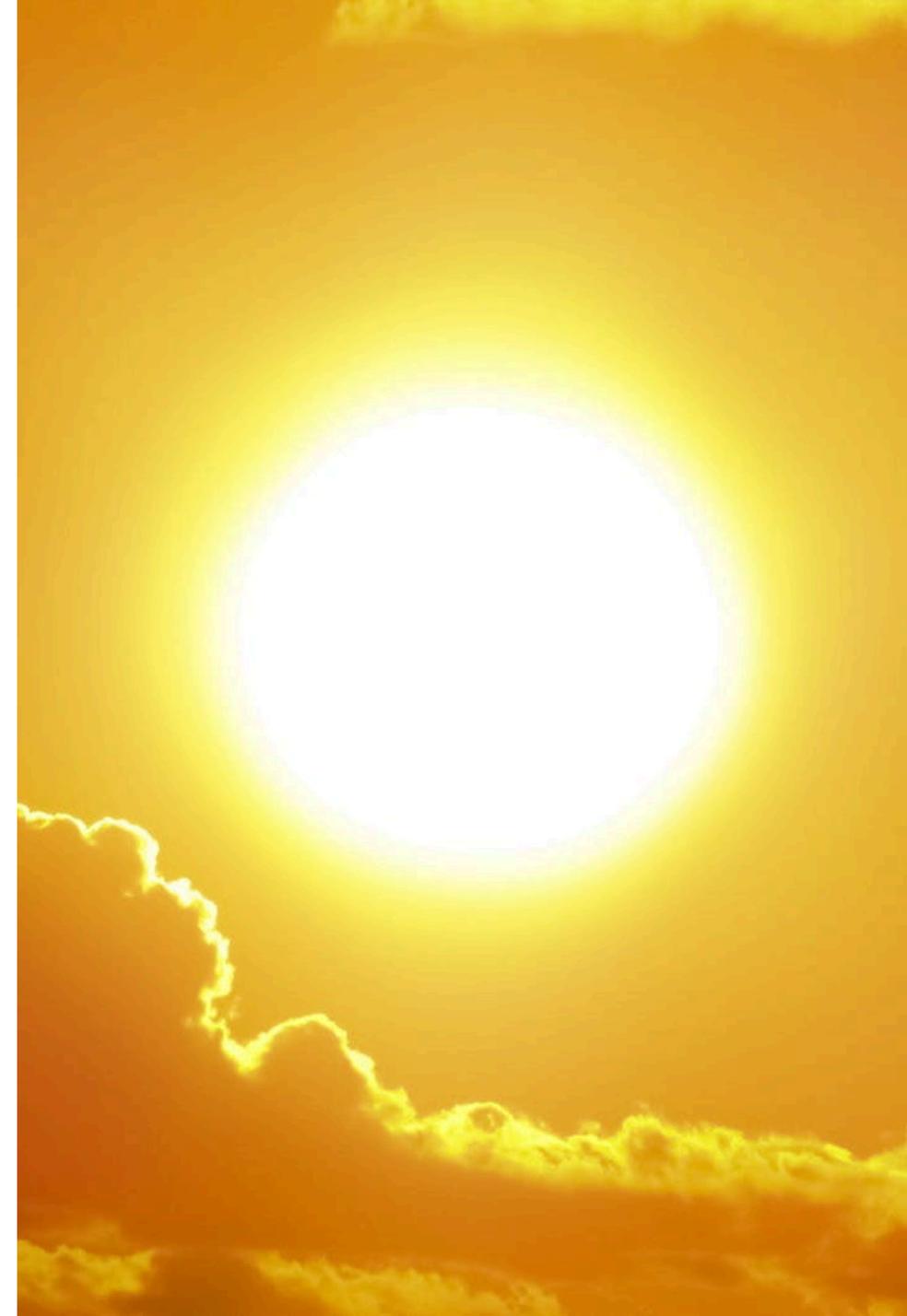
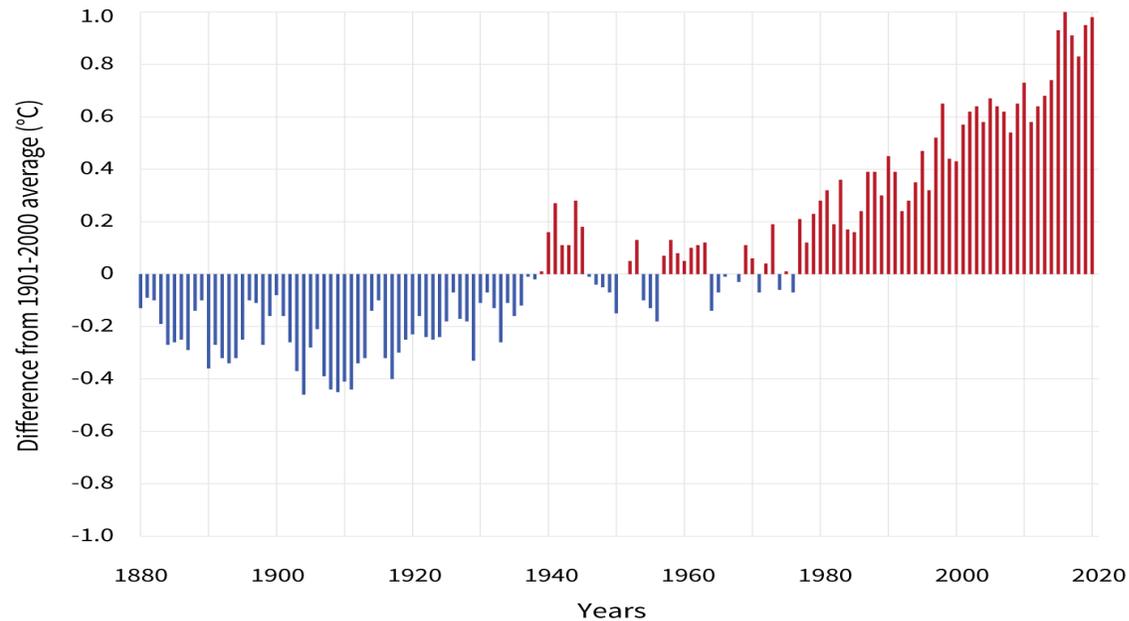


5 earths would be required if everyone earth lived like an American

ANOTHER RECORD YEAR

- 2020 was the second hottest year on record
- Average global temperature was 1.76°F (0.98°C) above pre-industrial levels

GLOBAL AVERAGE SURFACE TEMPERATURE



PROJECTED TEMPERATURES

- Statewide, average temperatures will increase 2-4 °F by 2100 under the medium emissions scenario and 4-7°F under the high emissions scenario
- In Tiburon, average maximum temperature will increase from 67°F to 74°F by 2100 under the high emissions scenario
- In Tiburon, extreme heat days projected to increase from 4 per year to 17



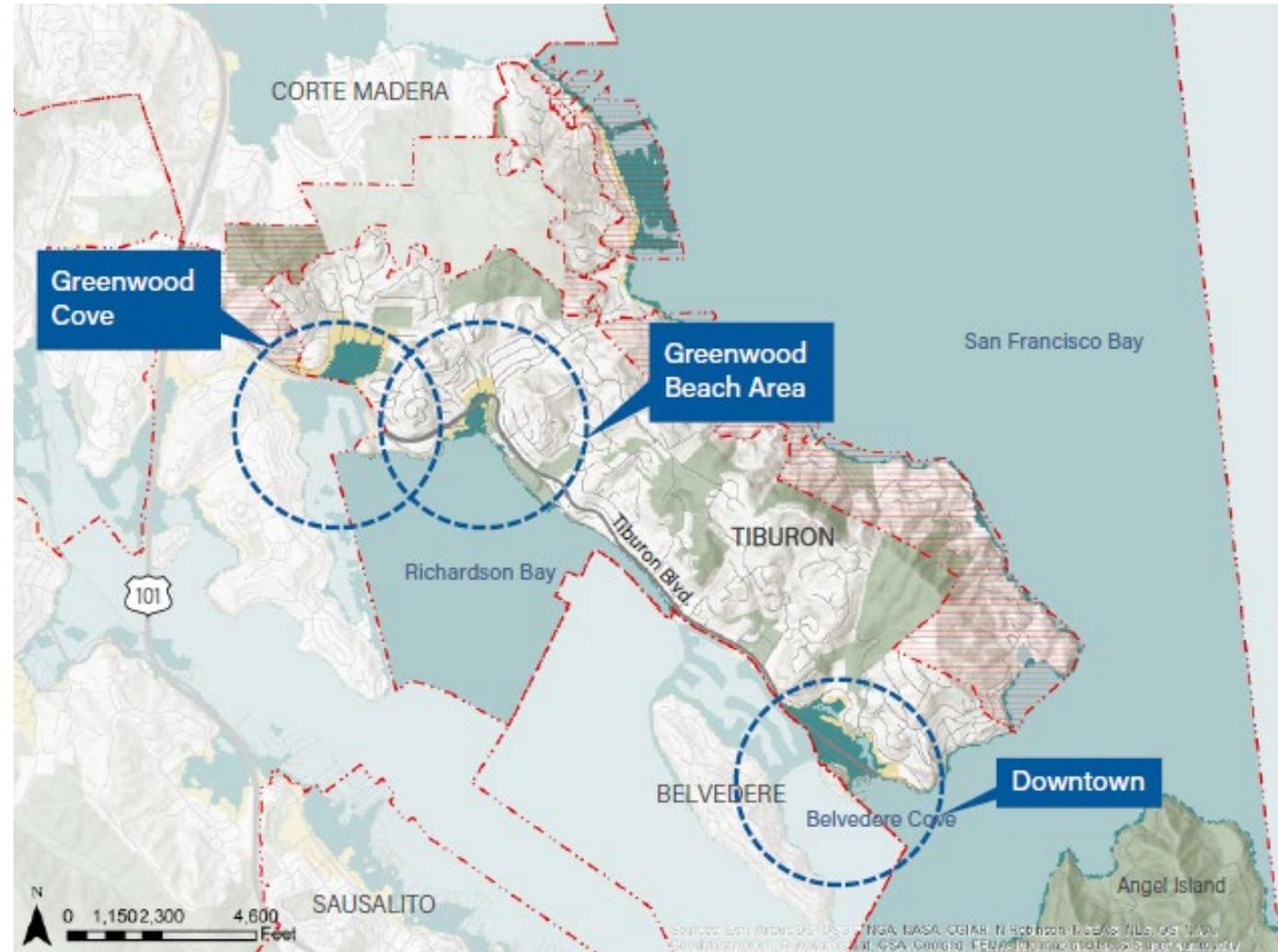
PROJECTED WILDFIRE RISK

- Average acres burned in Marin County increases 52% by 2100 under the high emissions scenario and 77% statewide

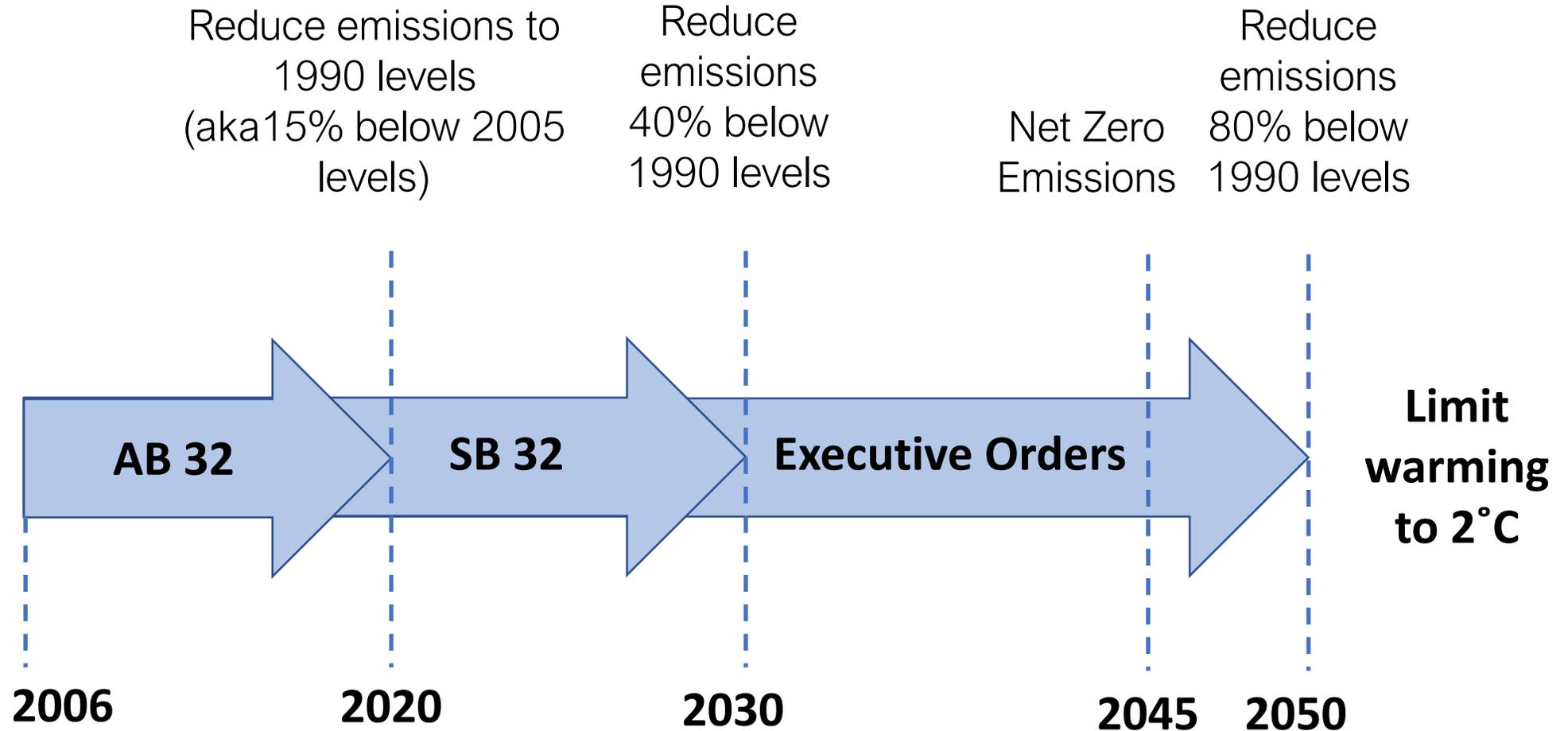


SEA LEVEL RISE

- Sea level has already risen 8" and Marin experiences flooding during king tides
- Sea level is likely to rise 1.6 to 3.4 feet by 2100
- Could rise by more than 10 feet
- Map shows vulnerable areas at 5 feet of sea level rise + 100-year storm

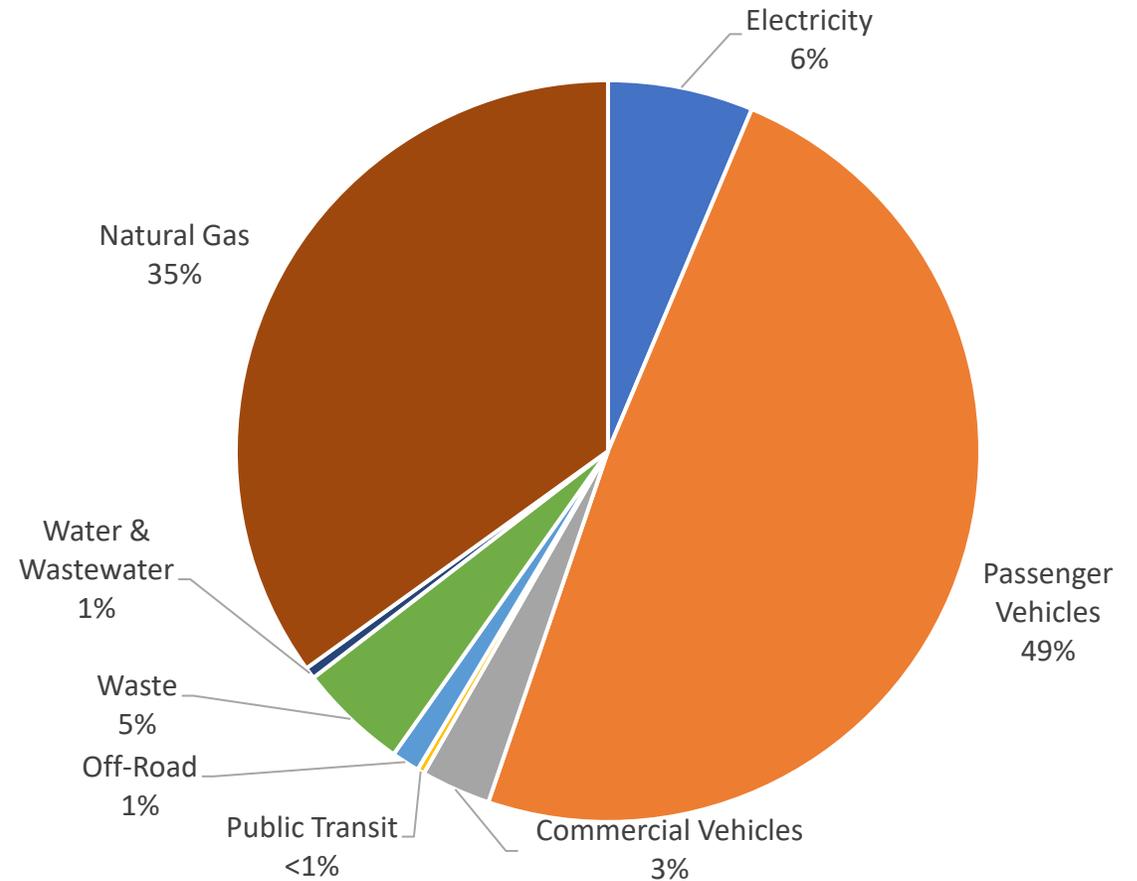


STATEWIDE GHG REDUCTION GOALS



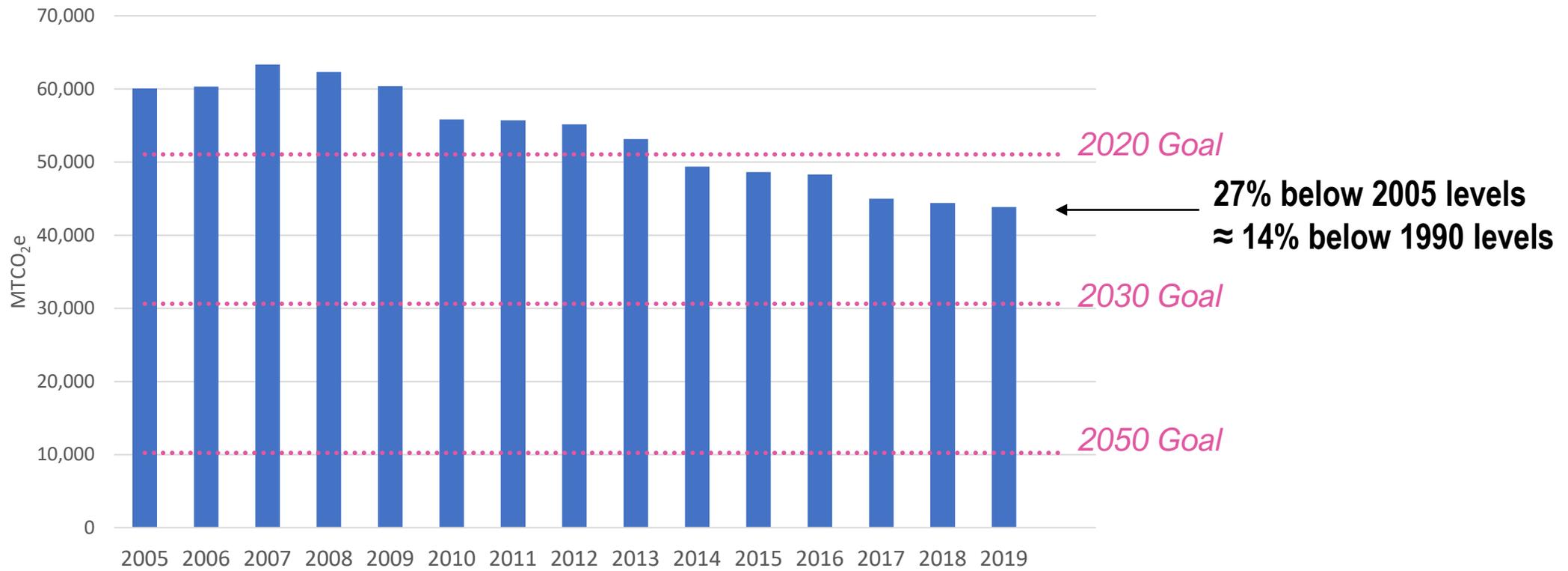
CLIMATE ACTION PLAN UPDATE OBJECTIVES

- Update the Town's 2011 Climate Action Plan, which was designed to meet 2020 emissions reduction target
- Reduce emissions consistent with the State's goal to reduce statewide emissions 40% below 1990 levels by 2030
- Utilize the MCEP Climate Action Plan template, already adopted in San Rafael, San Anselmo, Fairfax, Larkspur and County of Marin, to realize cost efficiencies and coordinate countywide action
- Identify the most impactful strategies to reduce emissions, based on achievable performance targets

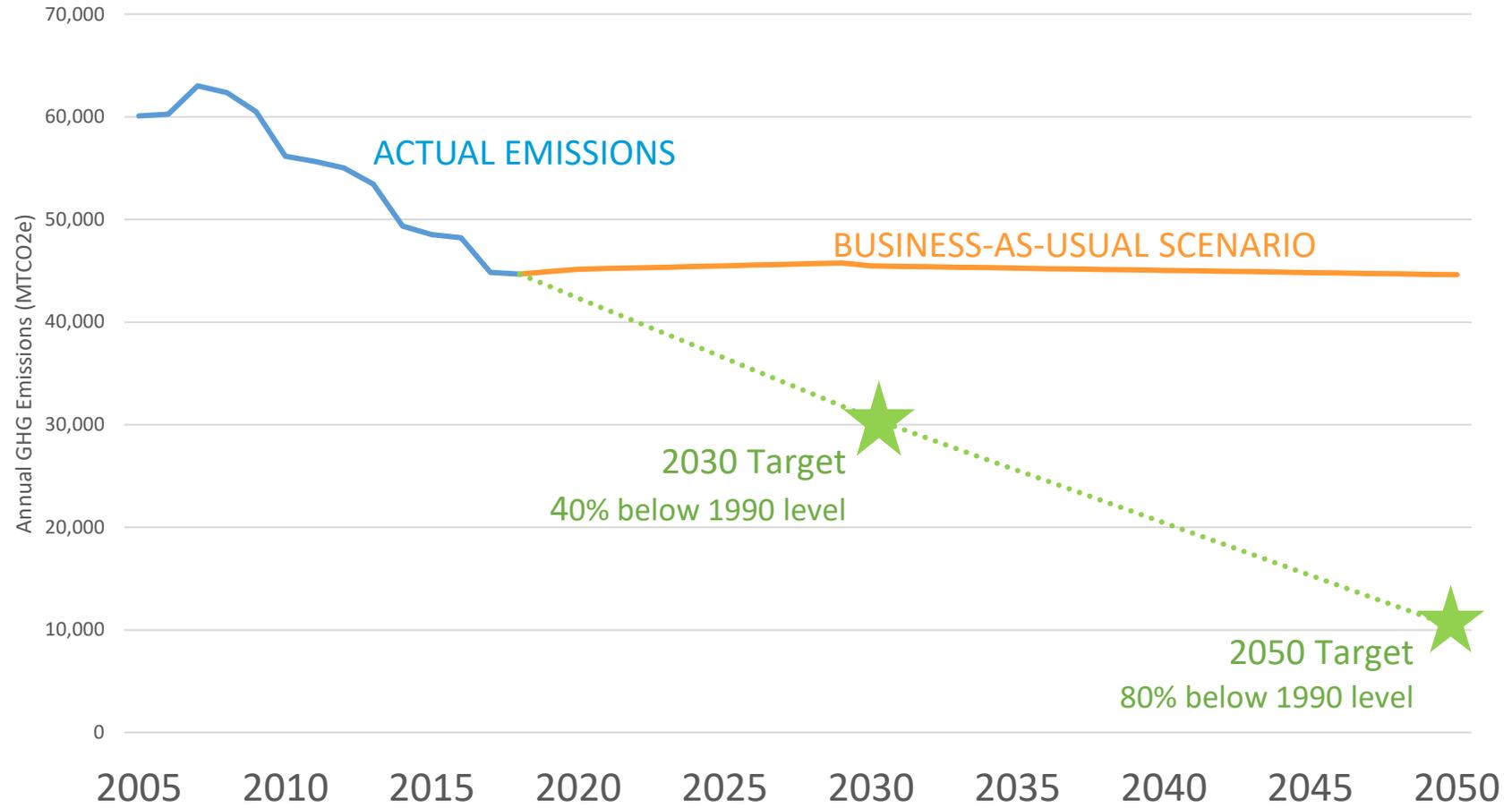


GHG emission sources, 2019

TREND IN TIBURON COMMUNITY EMISSIONS



BAU FORECAST AND REDUCTION TARGETS

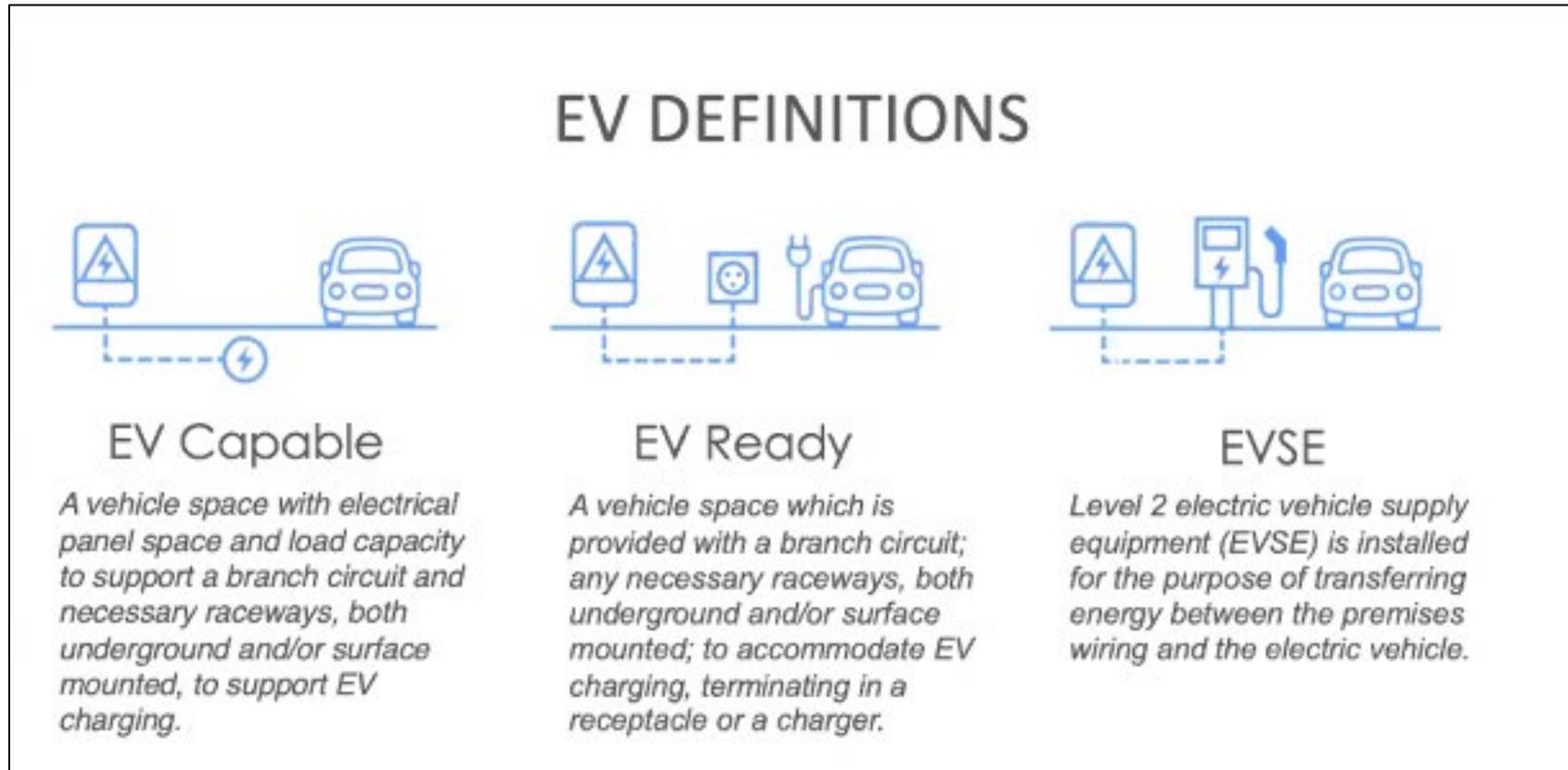


TRANSPORTATION: EVs

- State Goals
 - 5 million EVs by 2030, about 13% of registered vehicles
 - Require all new passenger vehicles sold in CA to be zero emission by 2035; medium and heavy-duty trucks by 2045
- Marin County has the second highest EV rate in the state
 - 4.7% of light duty vehicles registered in Marin County are ZEVs at end of 2020
 - 8.3% of registered light duty vehicles in Tiburon
- CAP Target: at least 25% of passenger vehicles in Marin are zero emission by 2030
 - Install public EV chargers and fast chargers
 - Require workplace and multi-family EV chargers and EV-ready parking spaces



NEW STATE BUILDING CODE REQUIREMENTS FOR EVs



- Single family, two-family and attached townhomes: 1 EV capable space per unit
- Multifamily and hotels: 10% EV capable, 25% ready, 5% chargers (20+ parking spaces)
- Non-residential: 20% EV capable, 5% chargers (25+ parking spaces)

The CAP is targeting at least 25% of passenger vehicles registered in Marin to be zero emission by 2030. Do you think this is achievable?

1. Yes
2. No
3. Not sure

Does Tiburon need more EV chargers in parking lots throughout town?

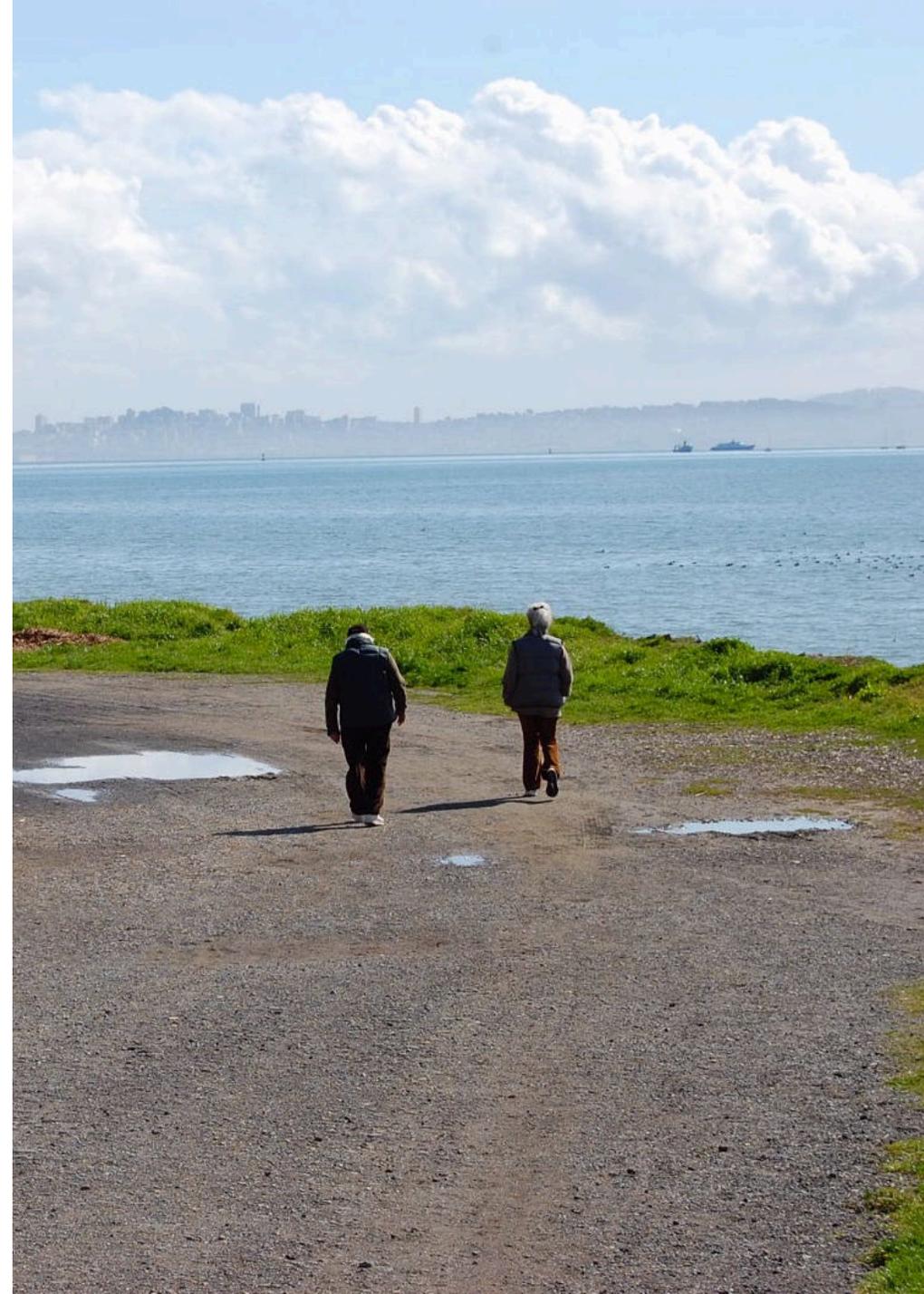
1. Yes
2. No
3. Not sure

Should the Town adopt higher EV infrastructure requirements for new buildings?

1. Yes
2. No
3. Not sure

TRANSPORTATION

- Increase biking and walking by building out the bike/ped network and providing facilities as identified in the Town's Bicycle and Pedestrian Master Plan
- Continue to support Safe Routes to School programs
- Encourage employers to provide transportation demand management programs
- Work with Marin Transit to expand ridership and electrify fleet
- Use renewable diesel in Town fleet
- Electrify Town fleet and small off-road equipment



RENEWABLE ENERGY AND ELECTRIFICATION

- Electricity is clean and getting cleaner
 - MCE expects to be 95% GHG-free by 2022
 - State law requires 60% of electricity to come from renewable sources by 2030 and to be GHG-free by 2045
- Solar PV installation is growing
 - Supplied approximately 8% of local electricity needs in 2018
 - We project solar PV will supply 16% of local electricity needs by 2030 at 2018 growth rate
- Programs to support solar installation, battery storage, and electrification of appliances



RENEWABLE ENERGY AND ELECTRIFICATION

- Electricity is significantly lower in GHG emissions than natural gas

Appliance	Electricity		Natural Gas		% Reduction
	kWh	pounds GHG	therms	pounds GHG	
Cooktop	71	9	28	328	97%
Water heater	1,382	178	163	1,911	90%
Clothes dryer	648	84	22	258	68%
Heating	3,096	369	213	2,498	85%

Note: Electricity emissions assume MCE Light Green electricity in 2018

- New ordinances to require residential buildings to be all-electric in 2023 and non-residential buildings to be all-electric in 2026
- New ordinance in 2024 to require efficient electric appliances (water heaters, cooktops, ranges, dryers, heating systems) are installed at time of replacement of appliances that use natural gas, as feasible

Should the Town require new residential and non-residential buildings to be all-electric?

1. Yes
2. No
3. Not sure

Should the Town require installation of high efficiency electric appliances when replacing appliances that use natural gas?

1. Yes
2. Yes, except for cooktops
3. No
4. Not sure

ENERGY EFFICIENCY

- Work with PG&E and MCE to promote programs, rebates, energy audits, financing alternatives, etc.
 - Continue to reduce energy use 1% per year
- Consider requiring energy efficiency audits at time of sale or major remodel
- Upgrade streetlights to LED
- Complete energy efficiency projects in Town facilities and implement energy conservation practices



Should the Town require a home or business energy audit at time of sale or major remodel?

1. Yes
2. No
3. Not sure

WASTE REDUCTION

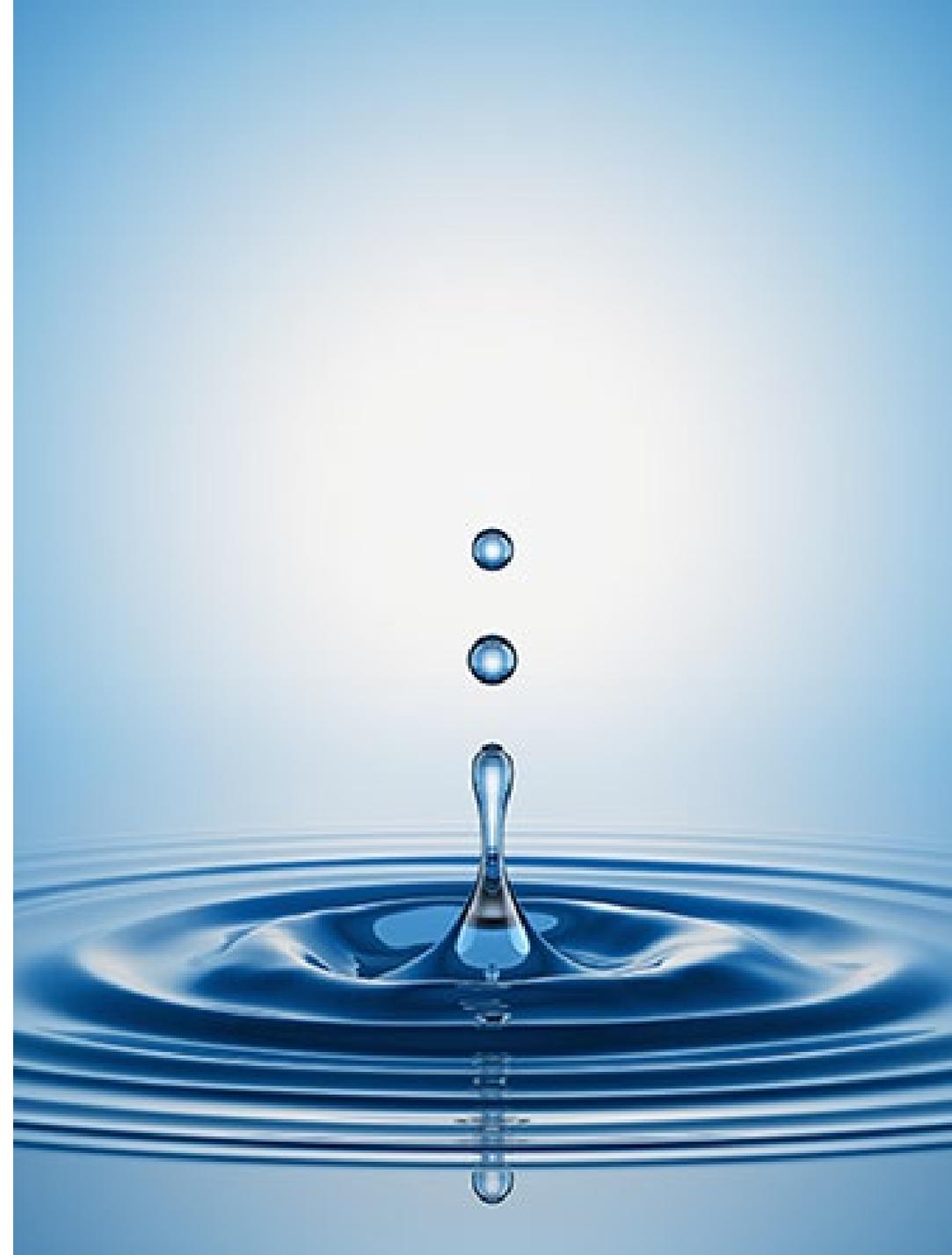
- State laws
 - Divert 75% of organic material and recover 20% of edible food by 2025
 - Require businesses to have organic waste recycling service
 - Require 65% of construction and demolition waste to be diverted
- Work with the City's waste hauler to increase recycling and composting and address SB 1383 requirements
- Adopt an ordinance requiring use of recycling and organic waste collection services
- Consider investing in new solid waste processing infrastructure to remove recoverable materials



*Tamra Peters, Executive Director
of Resilient Neighborhoods*

WATER CONSERVATION

- Water consumption is declining
 - Water consumption down 25% since 2005, approximately 1.8% per year
- Energy use is mostly GHG-free
 - MMWD uses MCE Deep Green electricity
 - Sonoma County Water Agency, which provides approximately 20-25% of MMWD's water, uses carbon-free electricity
 - Emissions from water treatment and delivery down 97% since 2005
- Programs to continue reducing water consumption 1% per year
 - Water efficient landscapes
 - Water efficient fixtures
 - Graywater systems
 - Water use prohibitions



CAP RESULTS

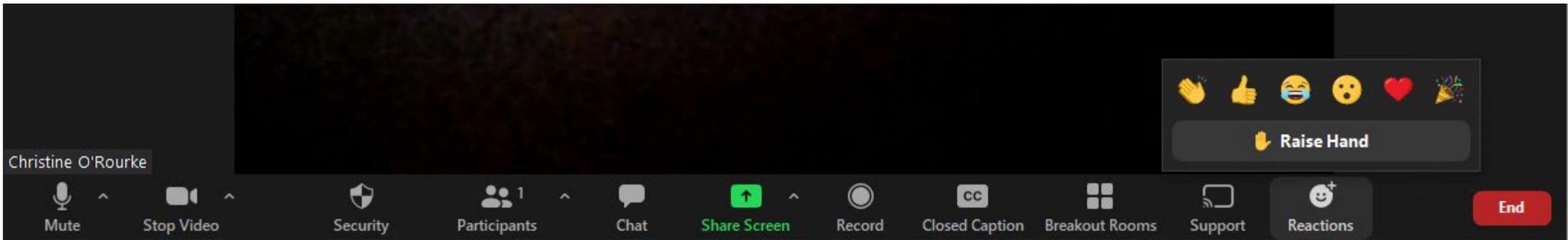
- If fully implemented, CAP will reduce emissions 42% below 1990 levels by 2030
- Consistent with SB 32
- Reflects minimum goals for Town actions and programs. The community can certainly do more by using more EVs and alternative transportation and making sustainable lifestyle choices.



Q & A and COMMENTS

FEEDBACK

- Are there any specific sustainability issues we should address in the General Plan Update?
- Are there any specific changes that should be considered for the draft CAP?



Christine O'Rourke

Mute

Stop Video

Security

Participants 1

Chat

Share Screen

Record

Closed Caption

Breakout Rooms

Support

Reactions

End

👏 👍 😂 😮 ❤️ 🎉

👏 Raise Hand

Type Your Question

Raise Your Hand

NEXT STEPS

Sustainability Element

- Survey will be posted on CreateTiburon2040.org
- Workshop presentation and video will be posted
- Submit questions/comments on Contact Us page

General Plan Update

- Check the website often for workshop registration, new surveys, draft documents
- Sign up for the mailing list at CreateTiburon2040.org

