



# Climate Change and The Bay Area

Joint Policy Committee  
Climate Change Workshops  
February 16<sup>th</sup> and 23<sup>rd</sup>, 2007

# Climate Summit: Key Messages

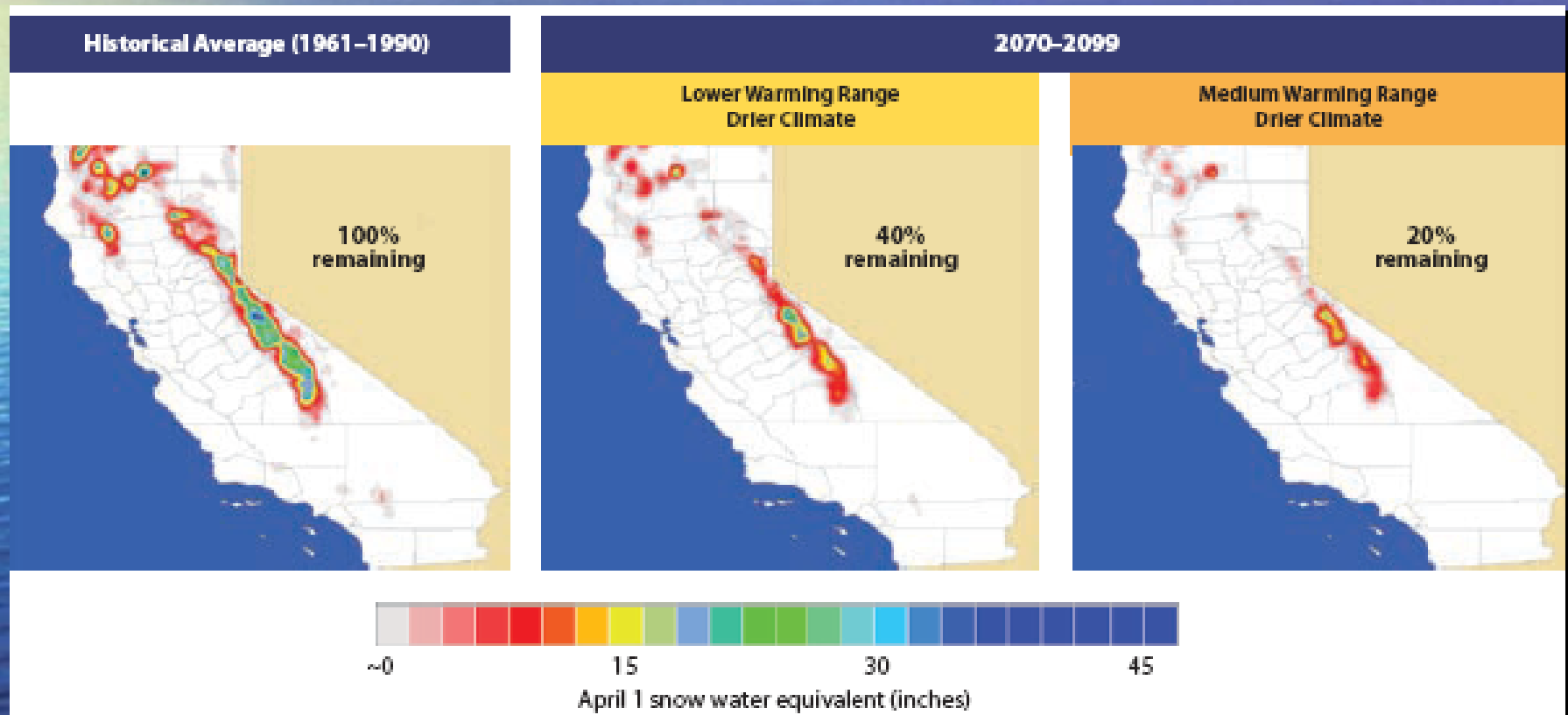
- Climate change is a serious problem globally and locally
- Our actions will affect how much the climate ultimately changes
- The Bay Area has been a leader and will continue to be a leader in climate protection
- Working together, the Bay Area will be a model for California, the nation and the world.

# Local Consequences: By the End of the Century...or Earlier

Emission Scenario	Lower (550 ppm)	Medium-High (830 ppm)	Higher (970 ppm)
Temperature rise	3.0-5.4°	5.5-7.9°	8.0-10.4°
Snow pack loss	30-60%	70-80%	90%
Sea level rise	6-14"	14-22"	22-30"
Heatwave days	1-2X	2-2.5X	3-4X
Increase in electricity demand	3-6%	11%	20%
Increase in large fire risk	10-35%	55%	NA

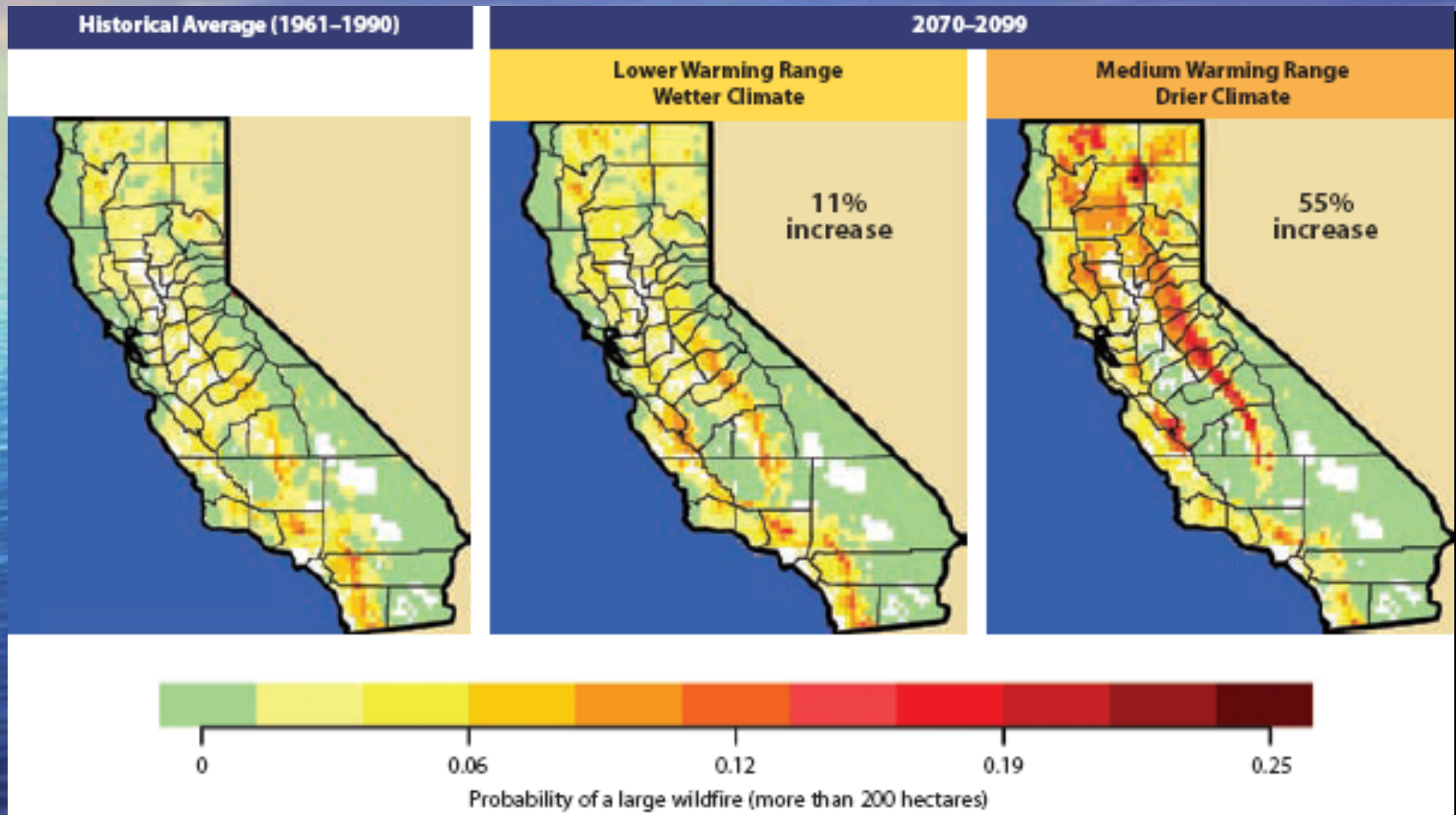
Source: California Climate Action Team

# Local Consequences: Decreasing Snow Pack



Source: California Climate Change Center

# Local Consequences: Wildfire Frequency



Source: California Climate Change Center

# Local Consequences: Sea-level Rise and the Bay

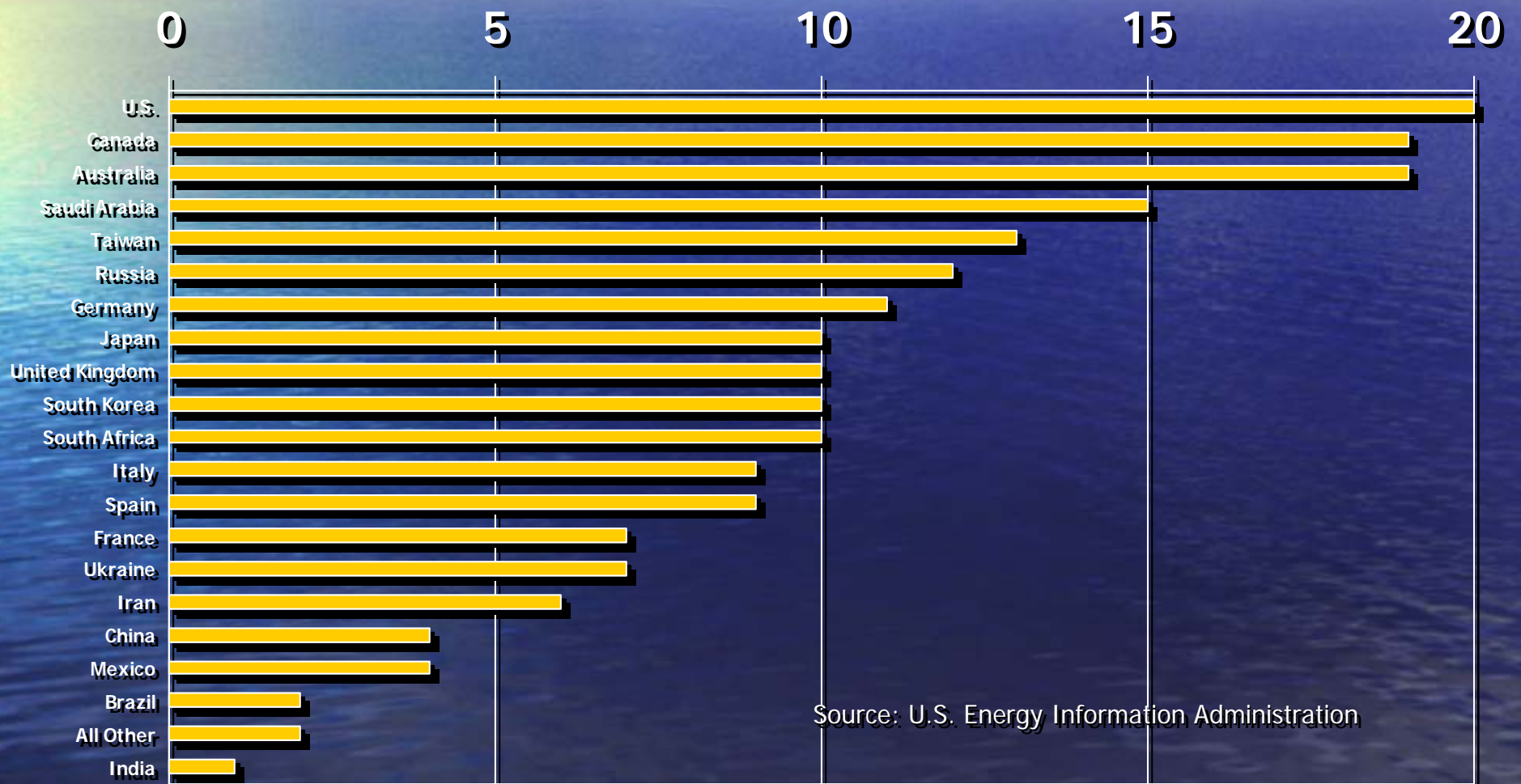


Source: BCDC

# Local Consequences: Sea-level Rise and the Bay



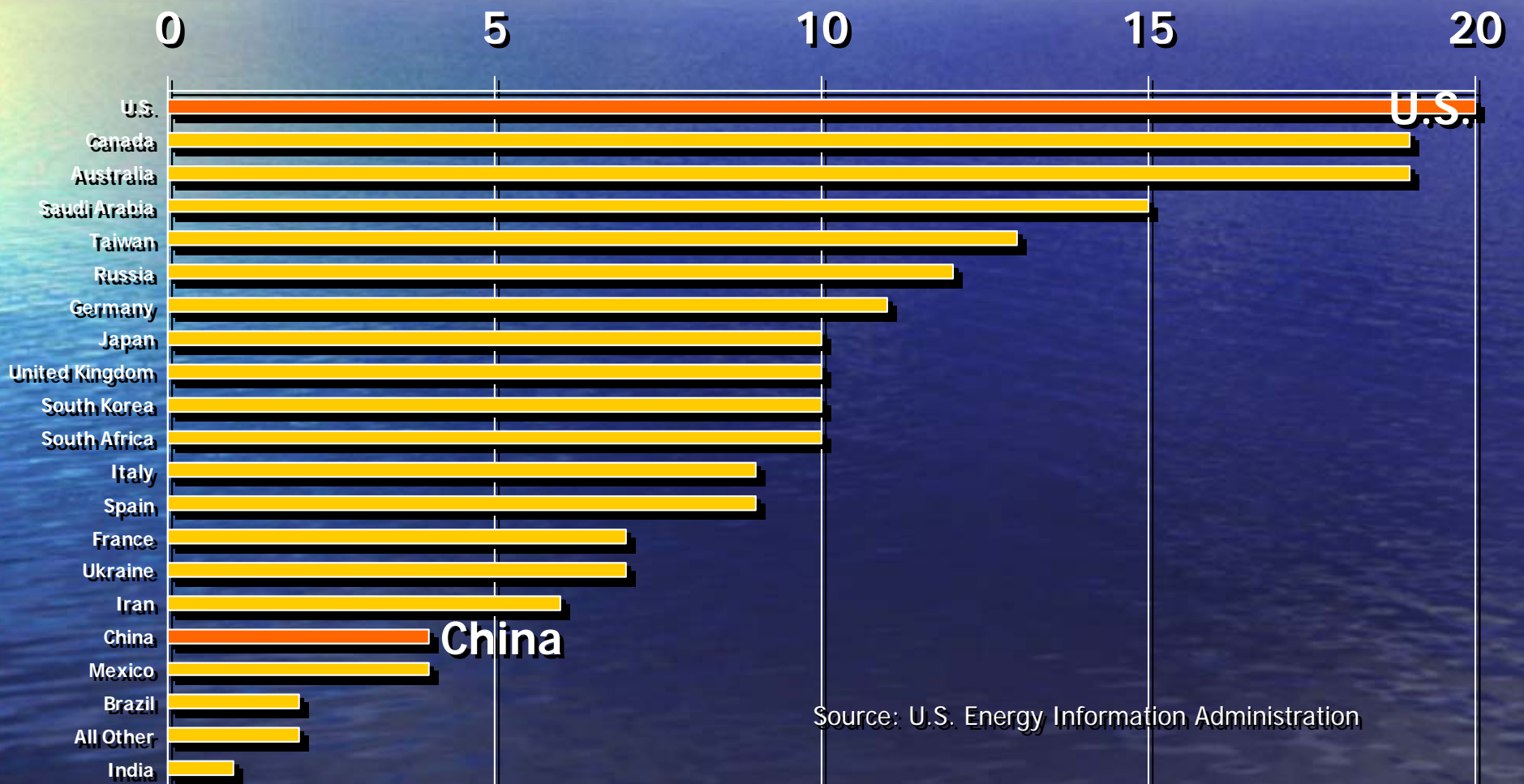
# Contributors: CO<sub>2</sub> Emissions per Capita Metric Tons/Year



Source: U.S. Energy Information Administration

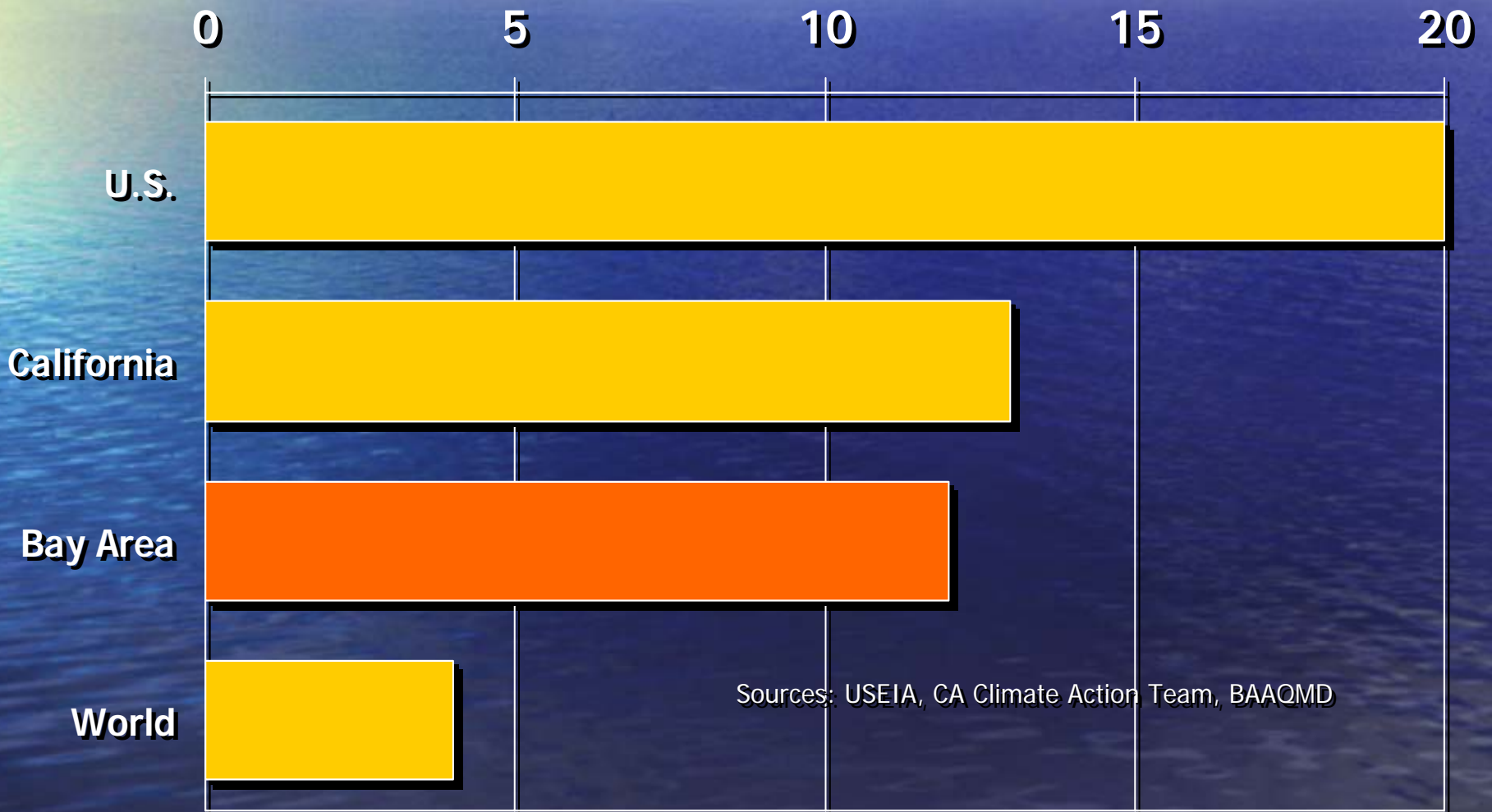


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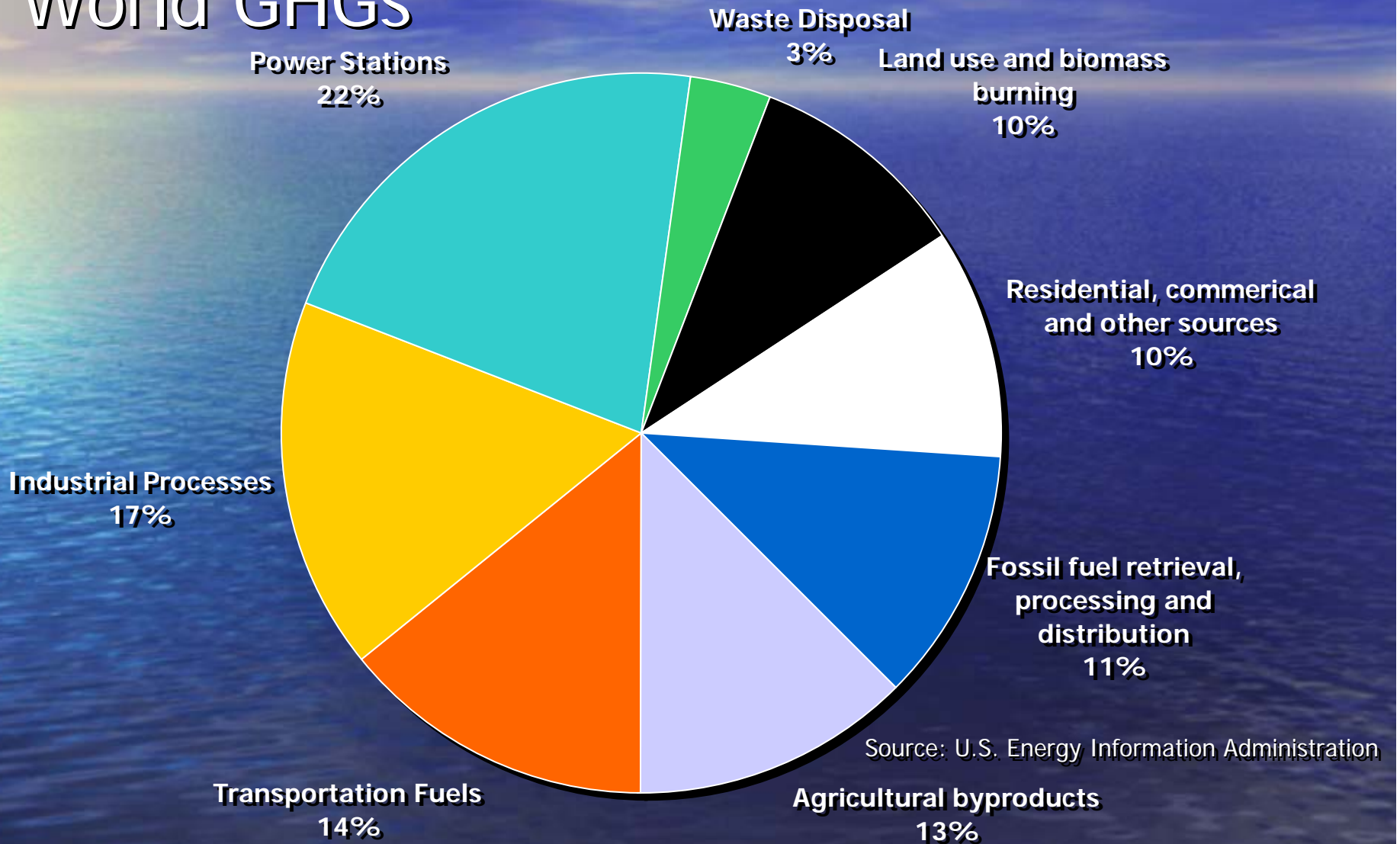
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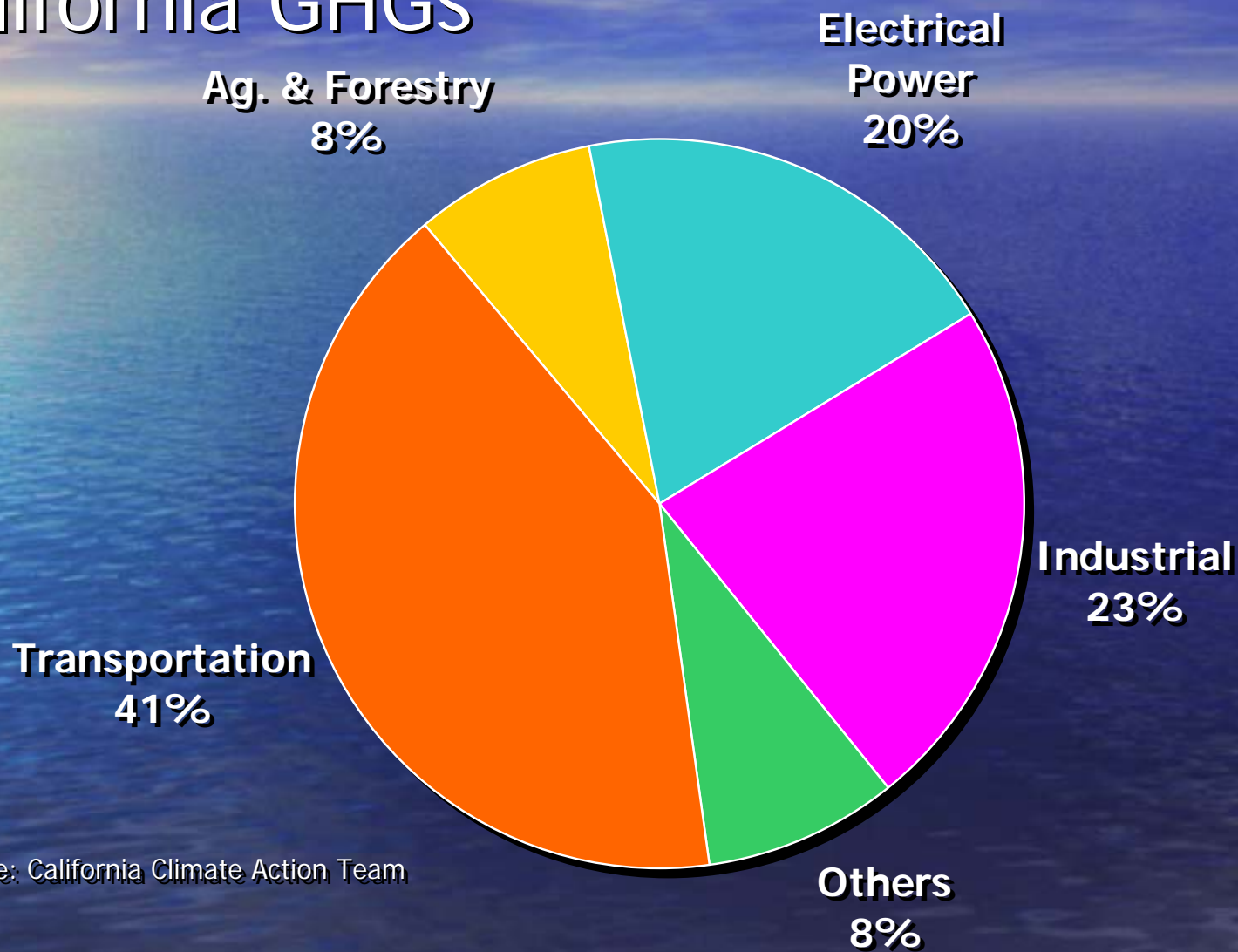


Sources: USEIA, CA Climate Action Team, BAAQMD

# Contributors: World GHGs

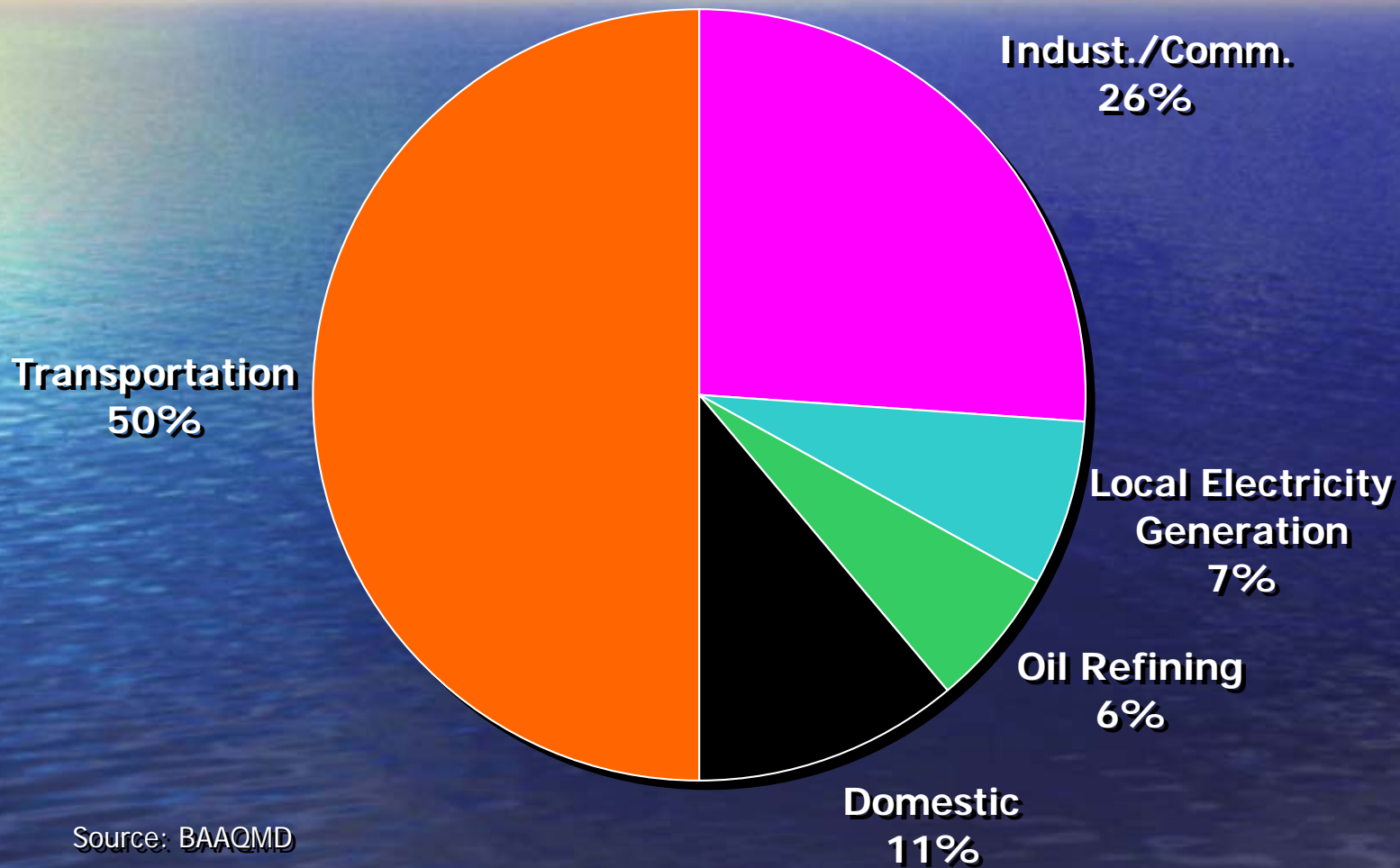


# Contributors: California GHGs



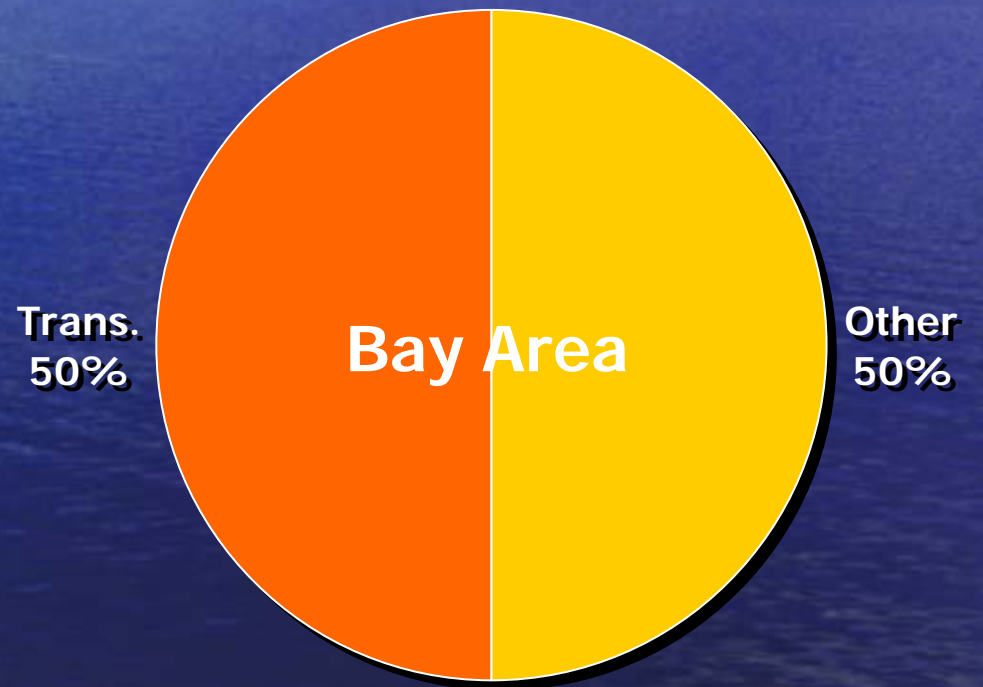
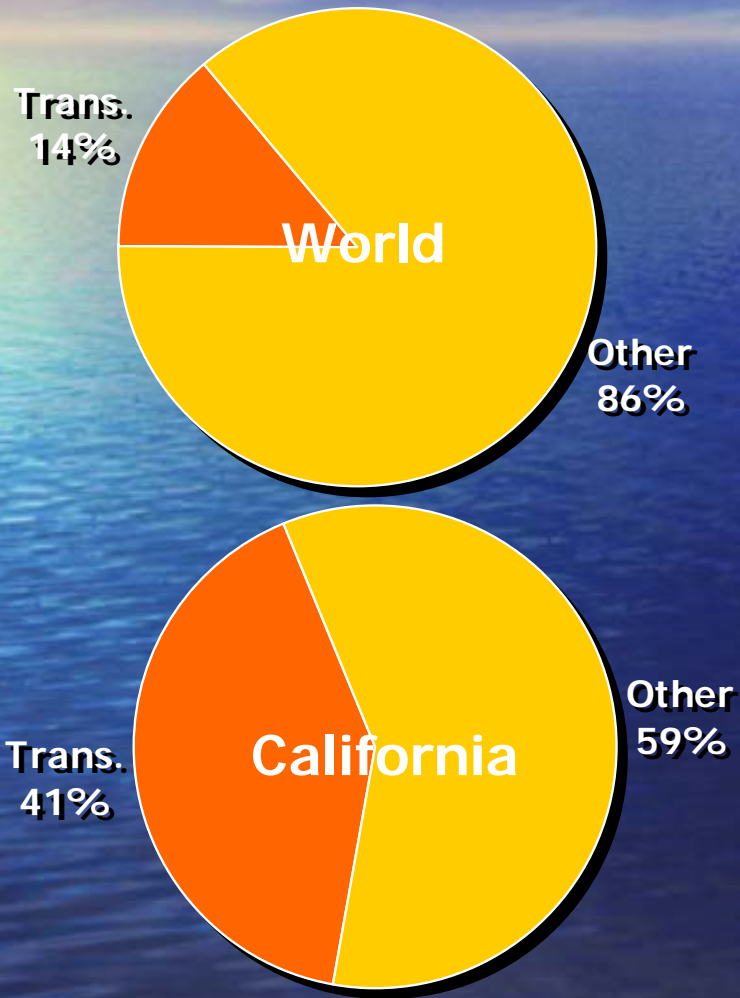
Source: California Climate Action Team

# Contributors: Bay Area GHGs



Source: BAAQMD

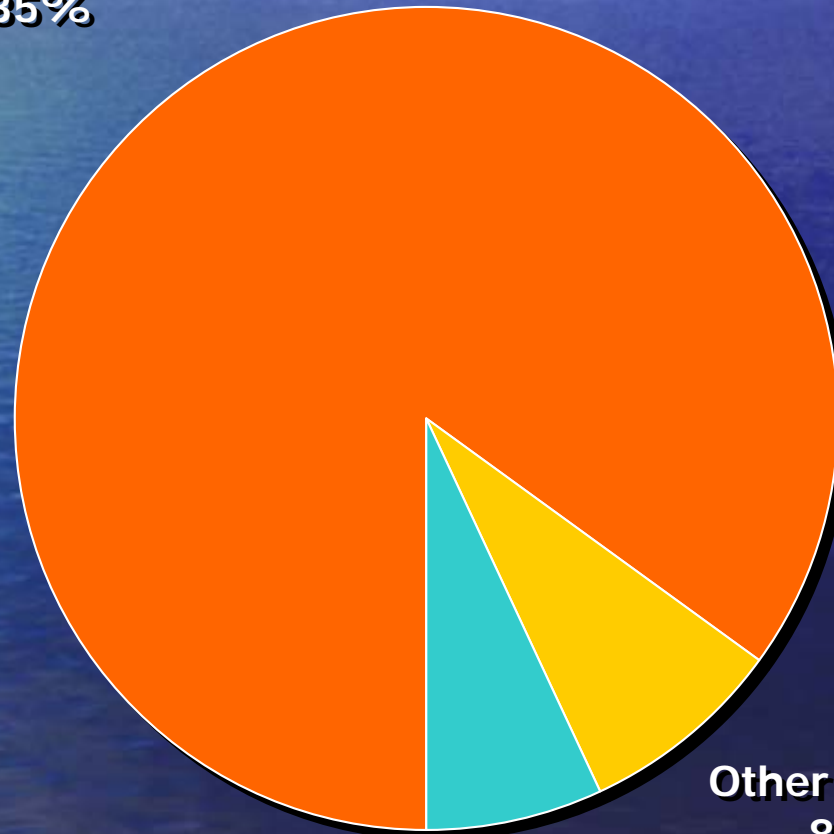
# Contributors: GHGs Compared



Sources: USEIA, CA Climate Action Team, BAAQMD

# Contributors: Bay Area Transportation GHGs

**On Road Vehicles**  
**85%**

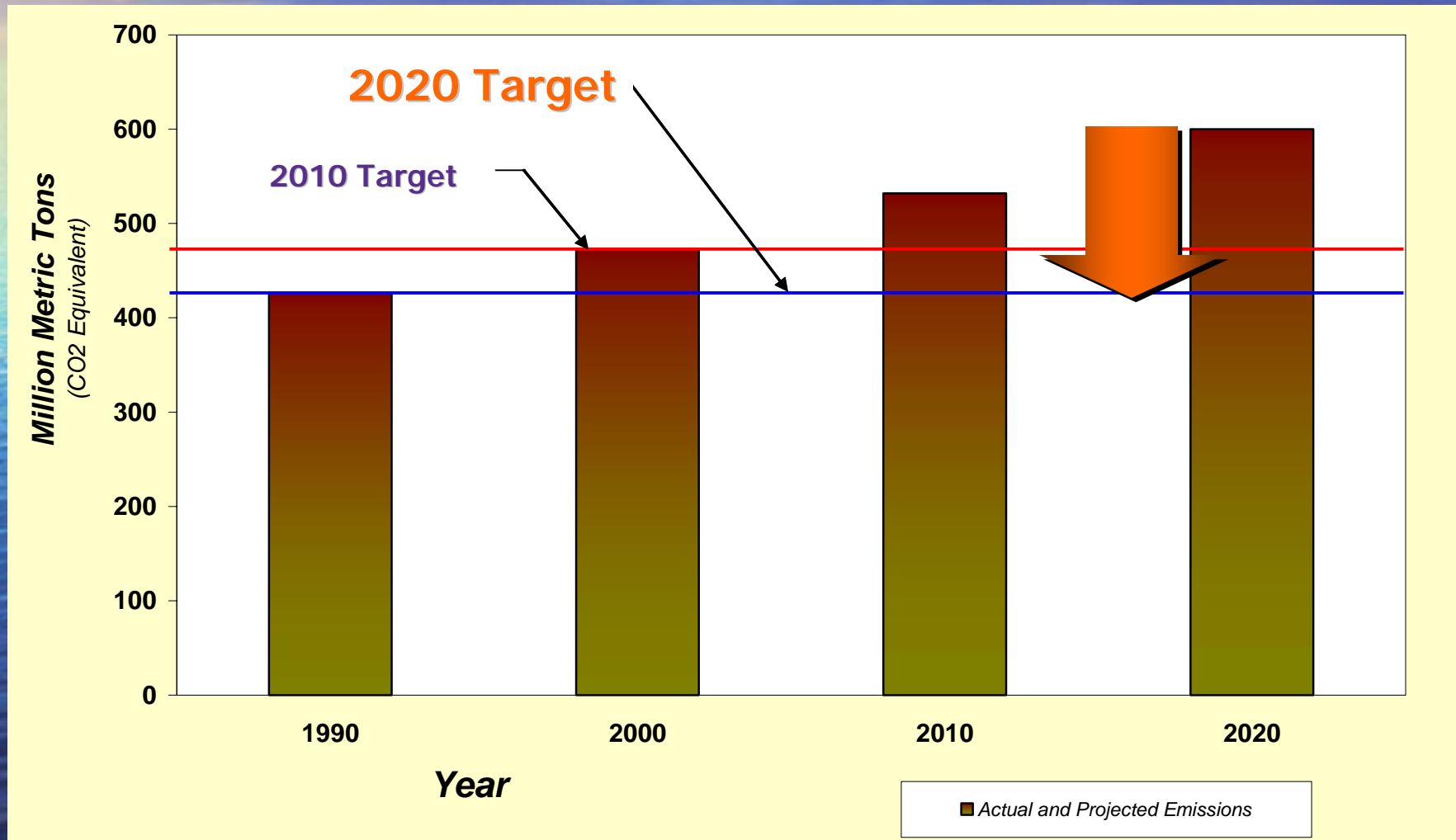


**Other Mobile**  
**8%**

**Aircraft**  
**7%**

Source: BAAQMD

# State Targets:



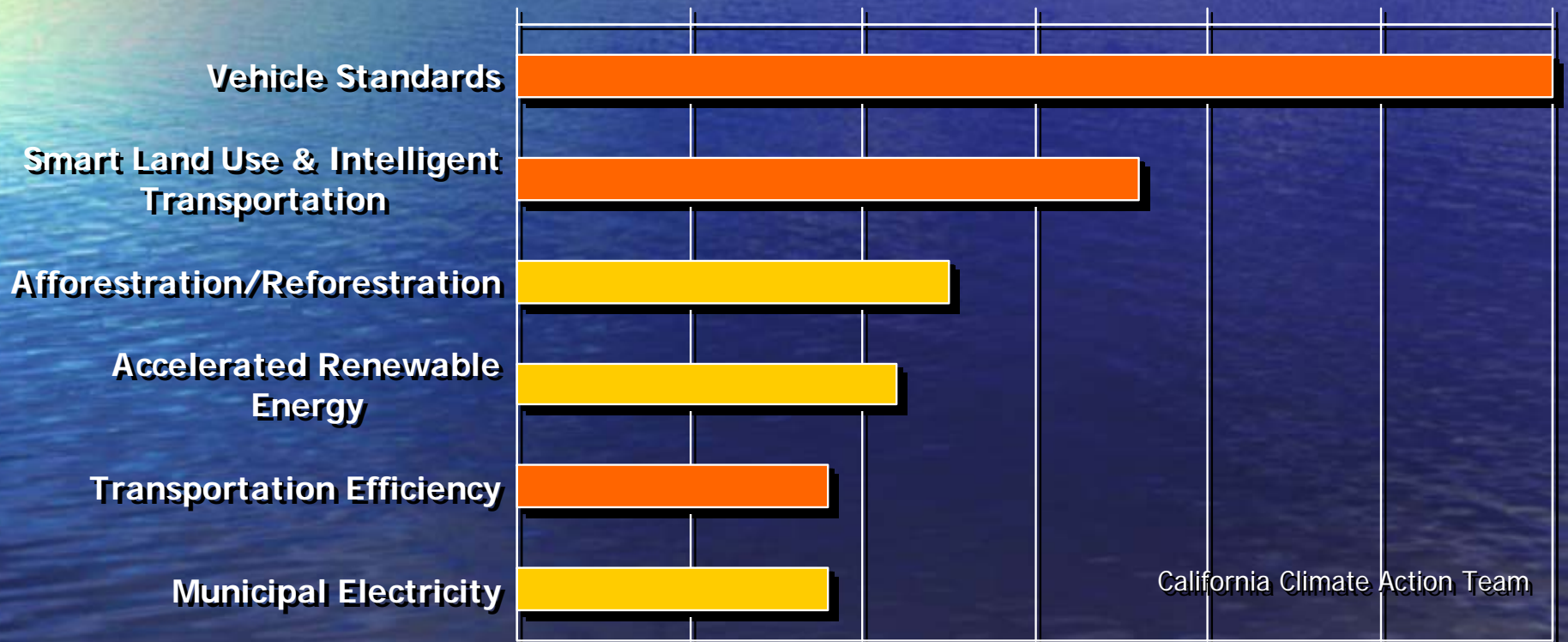
Source: California Climate Action Team



# Strategies: The State's Initial Top Six

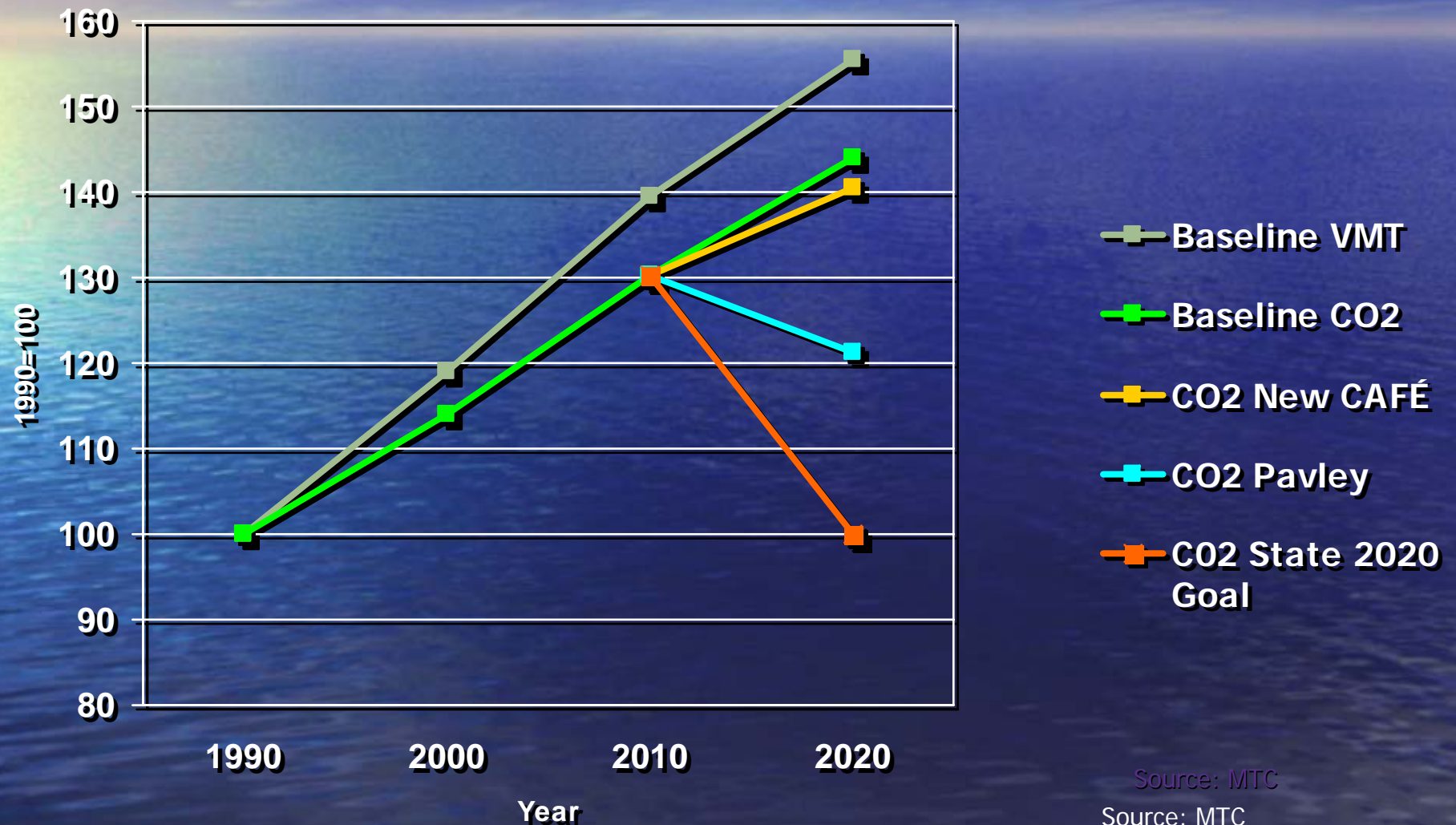
GHG Reduction (Millions of Metric Tons/Year)

0 5 10 15 20 25 30



California Climate Action Team

# Strategies: Beyond Emission Standards



Source: MTC  
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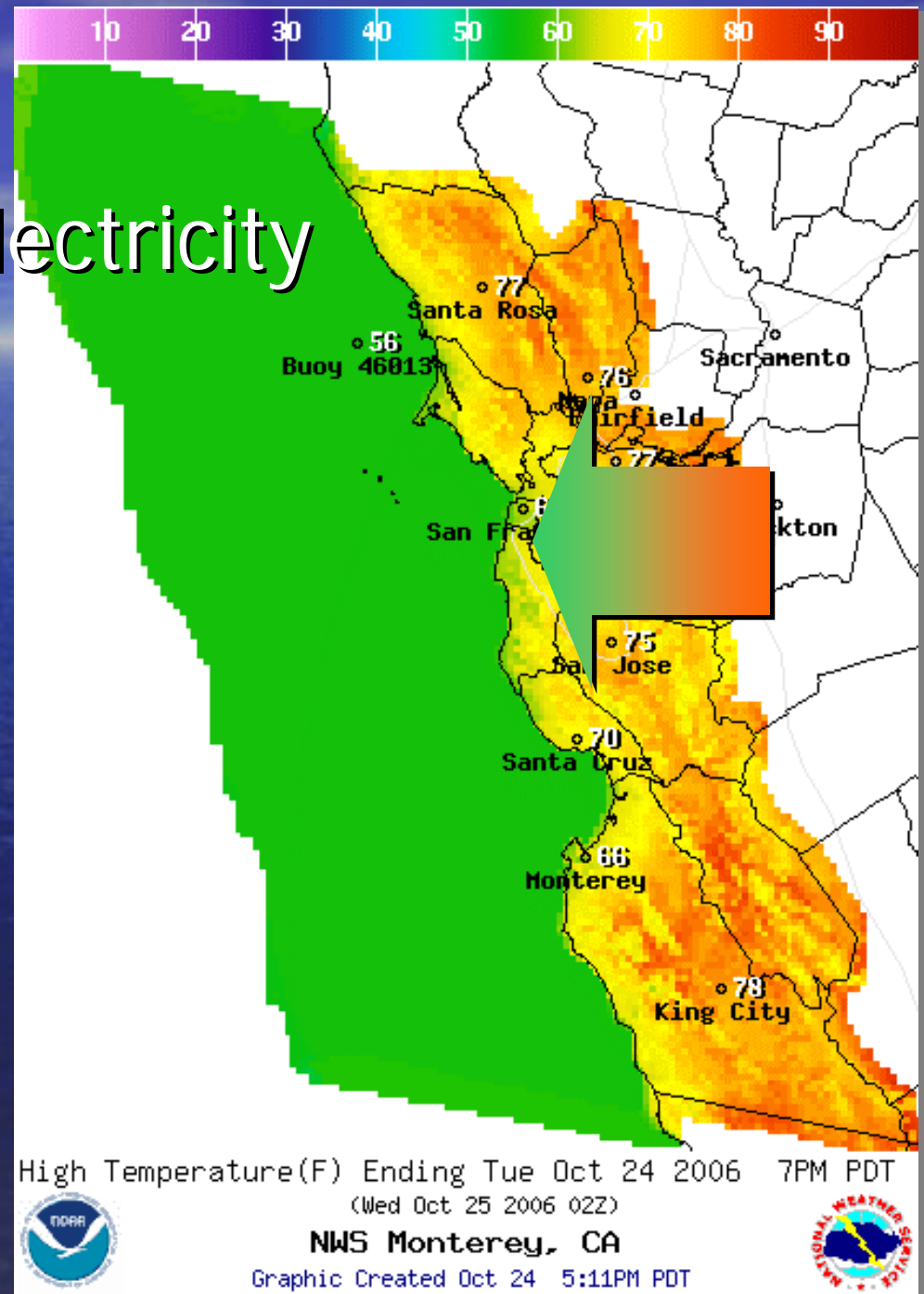
# Strategies:

## Smart Growth & Transportation

- Highly beneficial, and necessary
- But not sufficient—at least in the short term
- 1% annual growth
- In any year, 99% of development is a given
- Big difference in the long term
- But we will need more to meet 2020 target

# Strategies: Smart Growth & Electricity

- Temperature gradient: as much as a degree per mile
- Synergy: reduced energy for cooling + reduced energy for transportation



# Strategies:

## Real Innovation Required

- Targets are aggressive
- No silver bullet
- Will require multiple changes, some fundamental
- Business as usual will not be good enough
- Some strategies will be relatively painless
- Many will be difficult, costly, and contentious
- Either way, it will be a very different world
- Some impacts are inevitable
- It will be tough but doable

# Strategies: JPC Approach

- Complete by May 18, 2007
- Concentrate on regional solutions
- Consider both preventative and adaptive actions
- Do not limit actions to present authorities

# Four Regional Agencies:

1. Association of Bay Area Governments (ABAG)
2. Bay Area Air Quality Management District (Air District)
3. Bay Conservation and Development Commission (BCDC)
4. Metropolitan Transportation Commission (MTC)



# ABAG

## Regional Role:

- Provide comprehensive regional planning
- Strengthen cooperation and coordination among local governments
- Address issues that transcend local borders





ABAG

## Climate Initiatives:

- Smart Growth/FOCUS
- Energy Watch
- Green Business

# Air District

## Regional Role:

- Attain and maintain air quality standards
- Regulate stationary sources
- Administer incentive programs for mobile sources
- Coordinate regional air quality plans

# Air District Climate Initiatives:

- Climate Protection Summit (November 2006)
- Regional GHG Inventory (first in California)
- Climate Protection Grant Program
- Leadership Council
- Outreach Campaign
- Integration with District Activities

# BCDC

## Regional Role:

- Protect and enhance San Francisco Bay resources
- Require maximum feasible public access to and along shoreline
- Regulate development in the Bay and along the Suisun Marsh

The background of the slide is a photograph of a vast blue ocean under a clear blue sky with some light, wispy clouds. The horizon line is visible in the upper third of the image. The text is overlaid on the left side of the image.

# BCDC

## Climate Initiatives:

- Sea-level rise study
- Prevention and adaptation: evaluation and strategy

# MTC

## Regional Role:

- Plan, finance and coordinate regional transportation investments and programs
- Administer toll bridges through Bay Area Toll Authority (BATA)
- Provide transportation information through 511

# MTC

## Climate Initiatives:

- Smart Growth
  - TLC/HIP
  - TOD
  - FOCUS
- Transit Expansions
- Maintenance Emphasis
- New Regional Transportation Plan

# Climate Summit: Key Messages

- Climate change is a serious problem globally and locally
- Our actions will affect how much the climate ultimately changes
- The Bay Area has been a leader and will continue to be a leader in climate protection
- Working together, the Bay Area will be a model for California, the nation and the world.



# Five Areas for Discussion

1. Partnership
2. Leadership
3. Transportation and Land Use
4. Adaptation
5. Near-Term Actions

# 1. Partnerships

How can the four regional agencies specifically help your city, business or community group to move forward with climate protection? What do you need to succeed? What can you do on your own? What partnerships can we form to combine forces and work together?

## 2. Leadership

What is the most important kind of leadership that we need from the four regional agencies?

### 3. Transportation and Land Use

What role should the four regional agencies play to develop more climate-friendly communities and a more climate-friendly Bay Area? How can these agencies best work with local governments to advance these issues?

## 4. Adaptation

What is the proper balance of regional resources devoted to (a) reducing greenhouse gas emissions and (b) adaptation strategies? What role should the regional agencies play in adaptation work?

## 5. Near-Term Actions

What are your top near-term actions that the regional agencies could implement in the next one to three years? What are some of the first things we can do to implement these actions?