California Air Resources Board: Cleaning the Air for a Healthier California

TRIBAL ADVISORY COMMITTEE MEETING

DECEMBER 17, 2018

CALIFORNIA
AIR RESOURCES BOARD

Overview

1. **Purpose**
2. **Agency Overview**
   - Structure
   - Mission and duties
   - Air pollution and Sources
   - Regulatory measures
   - Air pollution trends
3. **Climate Change**
   - Scoping Plan
   - Cap-and-Trade
   - California Climate Investments
4. **AB 617**
5. **SB 350 Barriers to Clean Transportation**
6. **Wood Smoke Program**
7. **Tribal Consultation Policy**
8. **Reference Materials**
   - Acronyms
   - Legal references

1. Purpose

California Native American Tribes

California Native American Tribes

- California has one of the largest tribal populations in the United States
- 109 federally recognized tribes and 57 non-federally recognized tribes in California
- Each tribe is different in geography, land, governing body, culture, language, history, environmental issues, and interests
- Tribes have inherent tribal authority – they are governments predating the United States
- They have their own power to exclude, punish, regulate, and tax
- Sovereignty can only be waived by the tribe or United States either through contract, agreement, or legislation

New Era in State-Tribal Relations

- State government-to-government relationships have taken on increasing awareness and importance
  - Under Governor Brown's leadership
  - In light of environmental challenges
  - During the current federal Administration
- California recognizes the importance of this relationship through legislation, executive orders, and state policies

Purpose

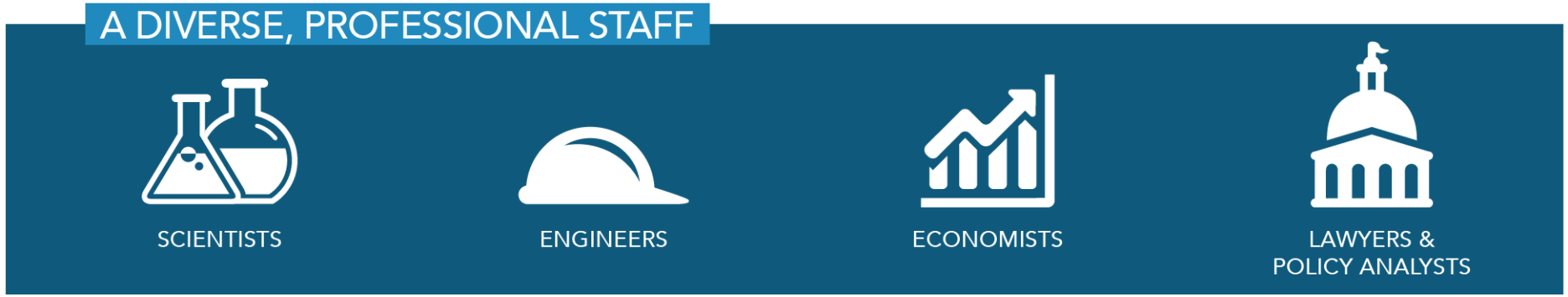
- Give tribes an overview of the agency and air pollution trends
- Inform tribes of specific CARB programs that may be of interest
- Provide contacts so tribes may obtain additional information
- *Disclaimer*: This is not an exhaustive list of all CARB programs. The programs contained within were selected based on interest from the Tribal Advisory Committee. This PowerPoint does not create, expand, limit, waive, or interpret any legal obligations or rights and it does not extend or impose any requirements on any person, agency, or tribe

2. Agency Overview

Organizational Structure, Regulatory Measures, and Air Pollution Trends

CALIFORNIA
AIR RESOURCES BOARD

The Board Directs Policies and Adopts Regulations



Mission Statement

To promote and protect public health, welfare and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering the effects on the economy of the state

What CARB Does

- Leads California's fight against air pollution and climate change
- Protects public health
- Promotes clean, energy-efficient fuels and technology

Who Does What in Air Pollution?

FEDERAL

US EPA

Sets & enforces national air quality standards.
Regulates interstate transportation.

TRAINS PLANES SHIPS

STATE

CALIFORNIA AIR RESOURCES BOARD

Regulates mobile sources of air pollution, greenhouse gases & consumer products.

CARS TRUCKS BUSES

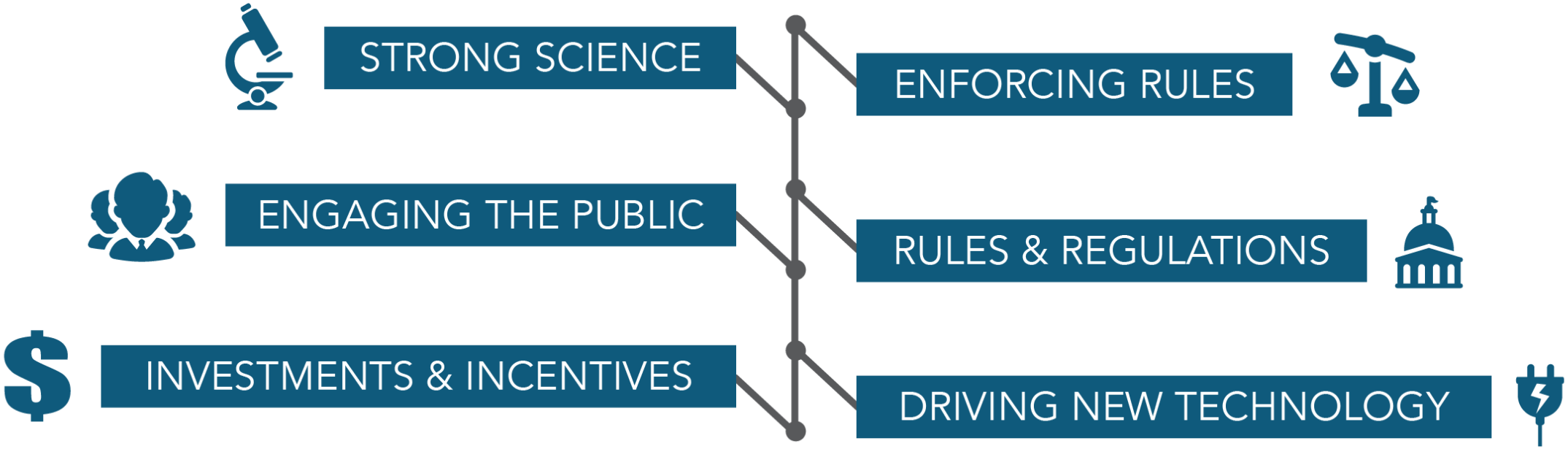
LOCAL

Local Air Districts

Regulates stationary & local sources of air pollution.

FIREPLACES FACTORIES REFINERIES POWER PLANTS

California's Path to Clean Air



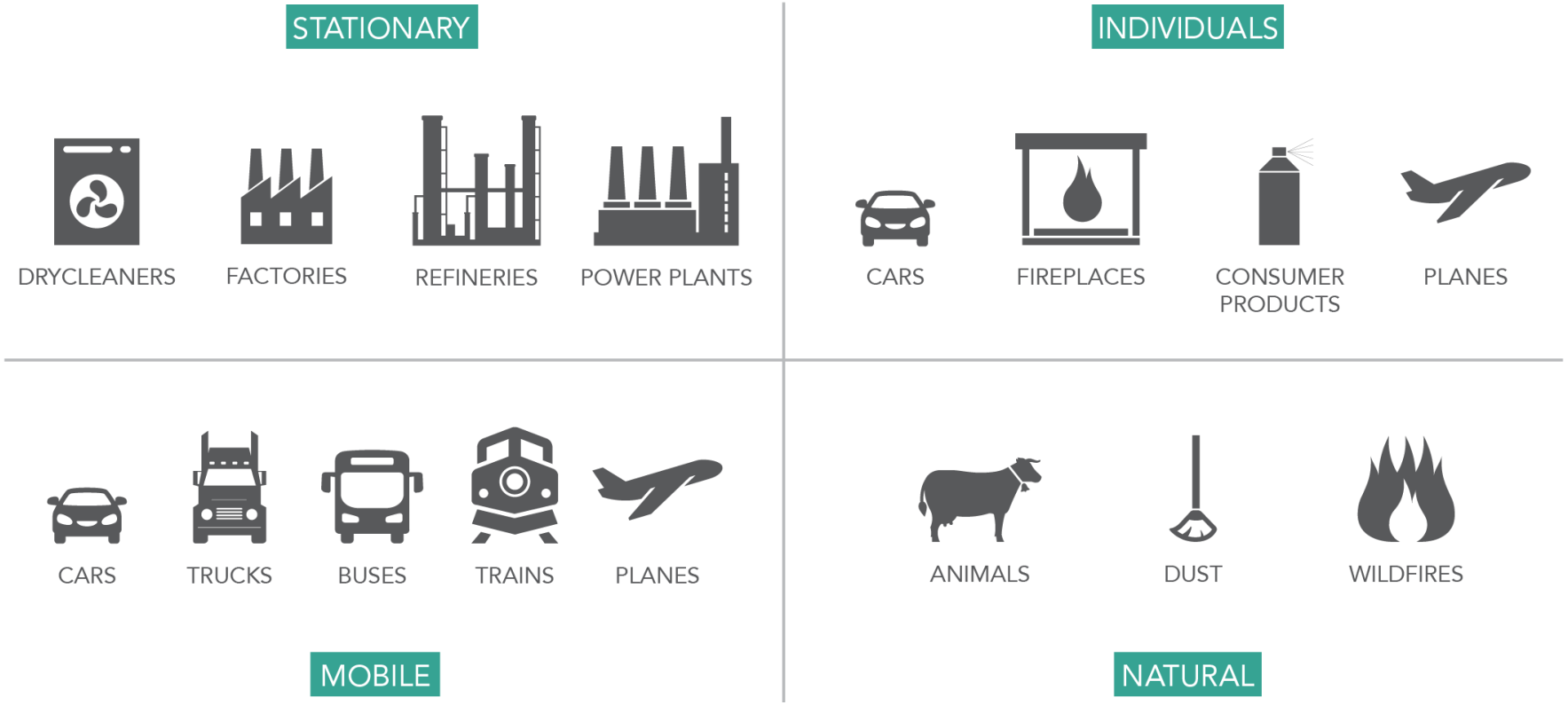
What is an Air Pollutant?

- **Criteria Pollutants:** Ozone, particulate matter, nitrogen oxides, carbon monoxide, sulfur oxides, lead, hydrogen sulfide, sulfate, vinyl chloride, visibility reducing particles

- **Toxic Pollutants:** CARB has listed over 200 chemicals as toxic

- **Greenhouse Gases:** Carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, perfluorocarbons, nitrogen trifluoride

Air Pollution Comes from a Variety of Sources



Los Angeles, 1957

Los Angeles Smog Crisis

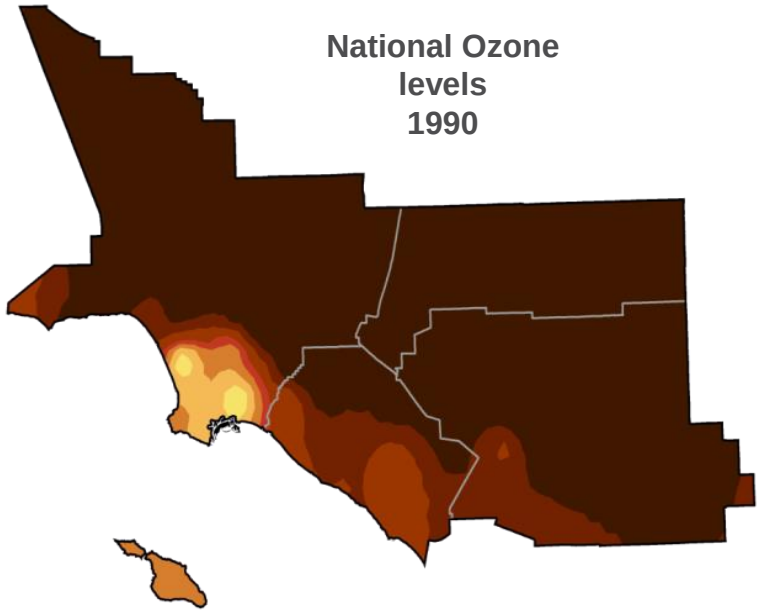
- Unhealthy levels of lead, NO_2, SO_2, carbon monoxide, ozone, particulate matter, and air toxics
- In Los Angeles:
  - Over 100 air pollution alerts annually
  - Over 200 days with unhealthy air annually
  - Ozone peaks were five times the allowable level

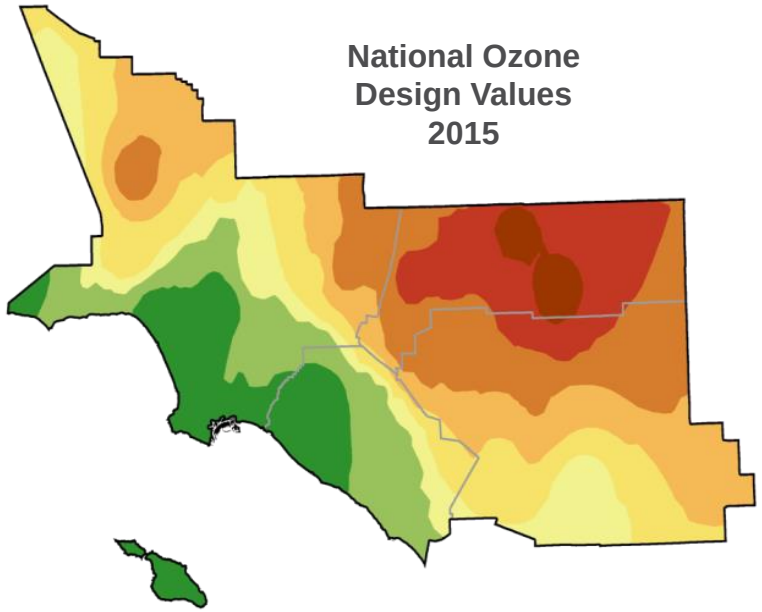
Los Angeles Today

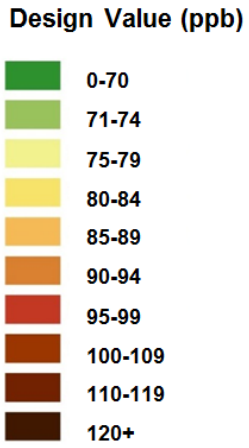
Levels of nitrogen oxide, Sulphur dioxide, and carbon dioxide: National Standards:

- Ozone: Los Angeles peak cut over 60%, hours of exposure reduced 90%
- PM10: Annual levels cut in half
- Toxics: Nearly 50% risk reduction

Clean Air Progress: Dramatic Improvement in Los Angeles



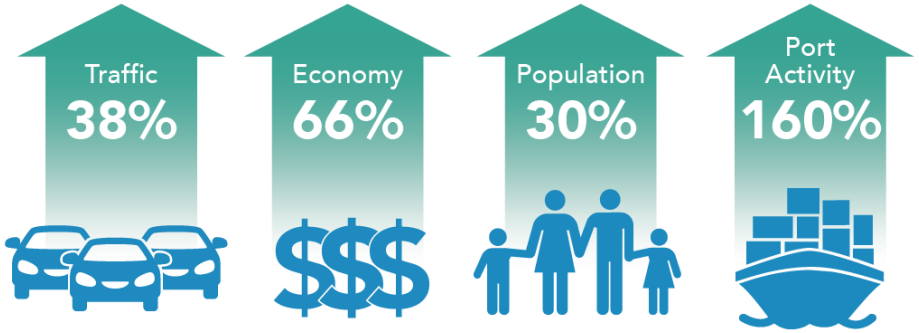




Policy Changes Lead to Cleaner Air

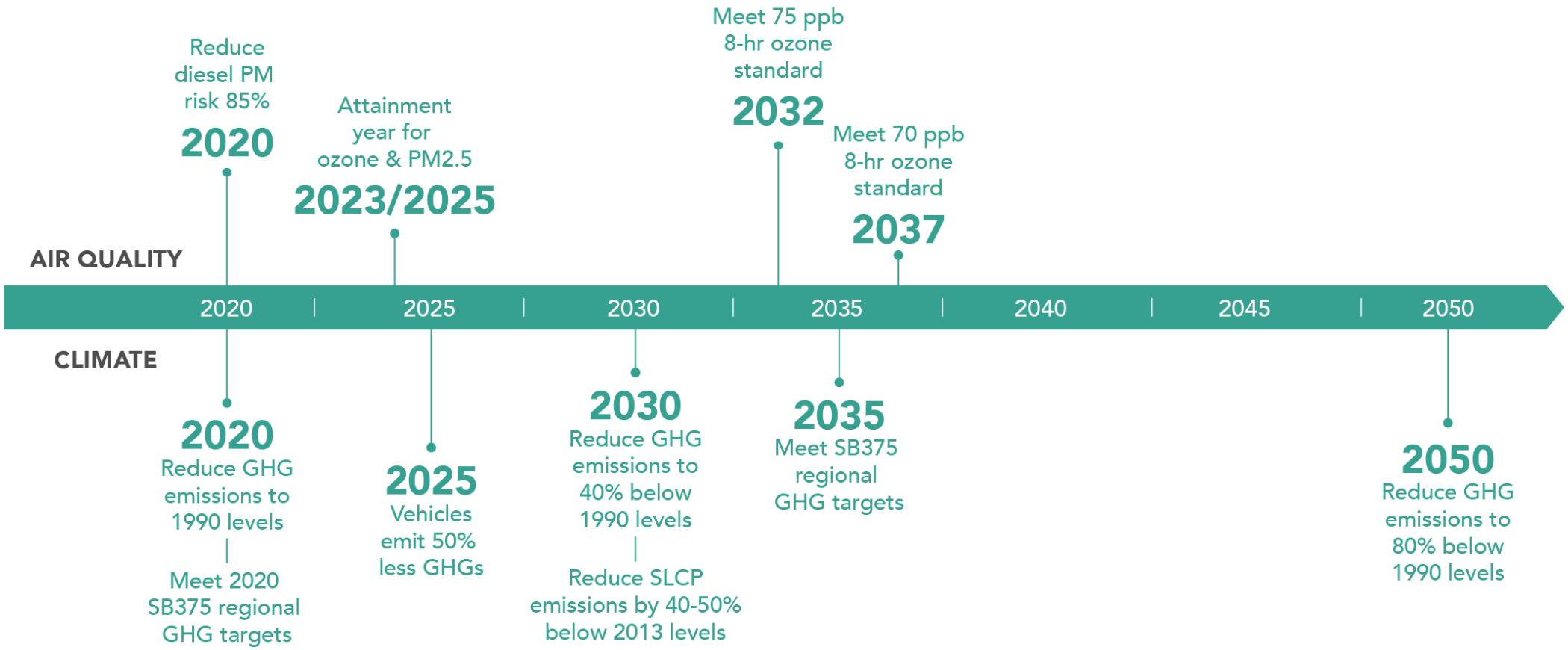
USC Children's Health Study

Despite Increases Across the Southern California Region (1994-2011)...



Pollution Levels Dropped (1993-2015)

California's Key Air Quality and Climate Change Goals Through 2050



How CARB Meets its Goals

- Regulations
  - Mobile sources: Cars, trucks, buses, construction equipment, ships, locomotives, engines, and more
  - Stationary sources: industrial facilities and electricity generation
  - Fuels
  - Consumer products
- Incentives and voluntary programs

Car, Truck, and Equipment Measures

ON-ROAD

- Emission standards for cars and trucks
- Zero emission vehicles
- Fleet clean-up requirements
- Idling prohibitions
- Smoke limits
- Smog check
- Accreditation of air pollution control devices

OFF-ROAD

- Construction equipment
- Off-highway rec vehicles
- Large spark ignition engines
- Small off-road engines and equipment
- Spark-ignition marine engines
- Portable engines and equipment

Sustainable Freight Strategy

- Locomotives
- At-Berth Ship Requirements
- Cargo Handling Equipment
- Drayage Trucks
- Transportation Refrigeration Equipment
- Ground Support Equipment
- Harborcraft

Cleaner Fuels

- Eliminated lead from gasoline
- Cleaner formulations for gasoline
- Cleaner, low-sulfur formulations for diesel
- Clean fuel requirements for ships
- Gasoline vapor recovery at gas stations
- Cap and Trade regulation
- Low-Carbon Fuel Standard

Industrial and Electricity Measures

- Cap-and-Trade Regulation
- Oil and Gas Regulation
- Landfill Methane
- Refrigerant Management
- Chrome Platers

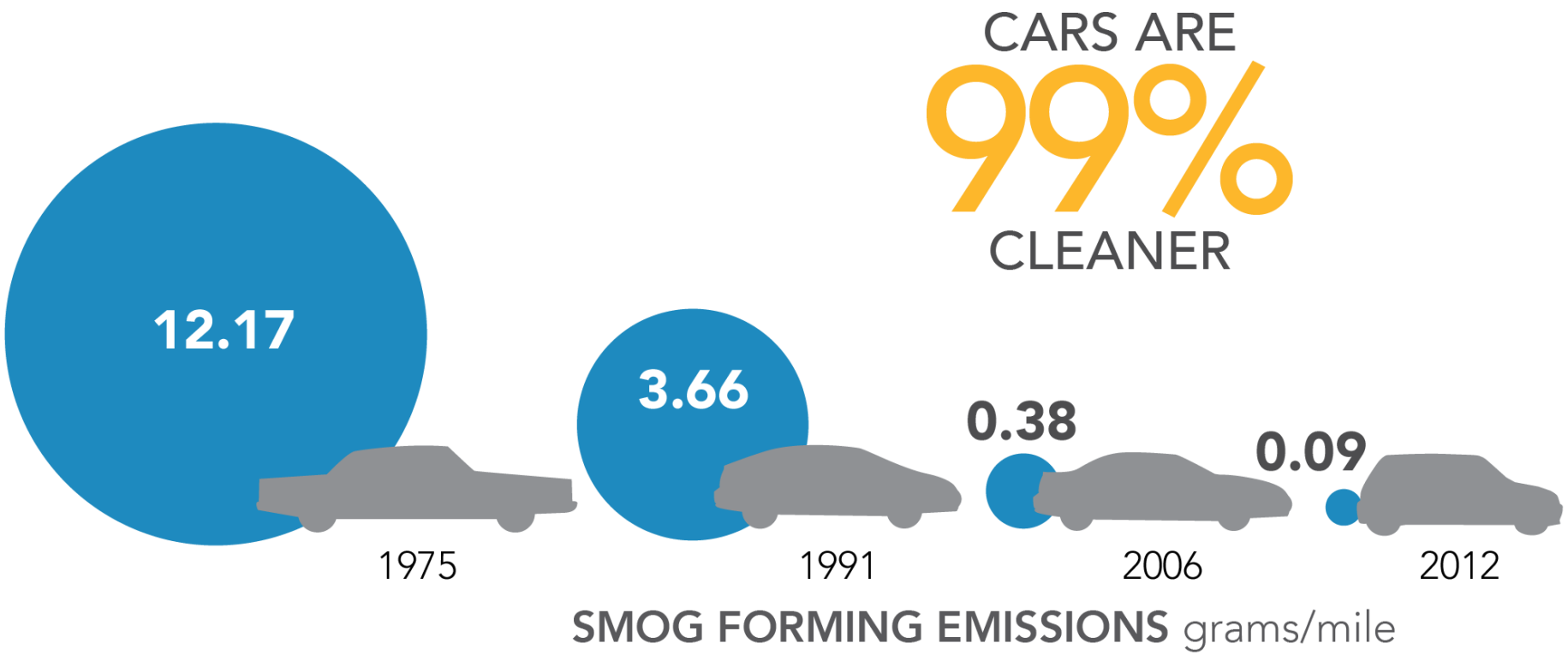
Consumer Product Measures

- Composite Wood Products
- Personal care products
  - Hairsprays
  - Antiperspirants and deodorants
- Adhesives
- Automotive products
- Cleaners
- Sealants

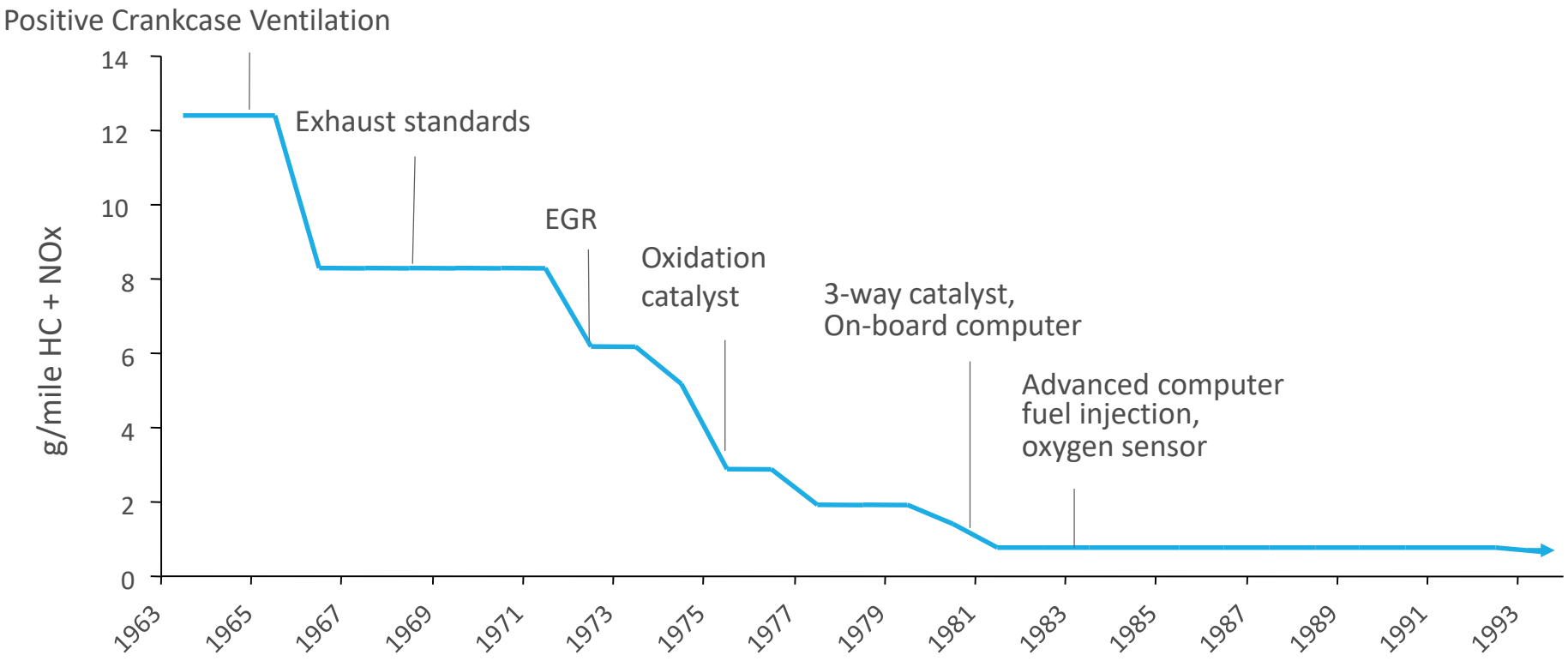
Incentives and Voluntary Programs

- Carl Moyer Program
- AB 617 Community Air Grants
- Clean Vehicle Rebates
- Hybrid and Zero Emission Truck Vouchers
- FARMER agricultural incentives

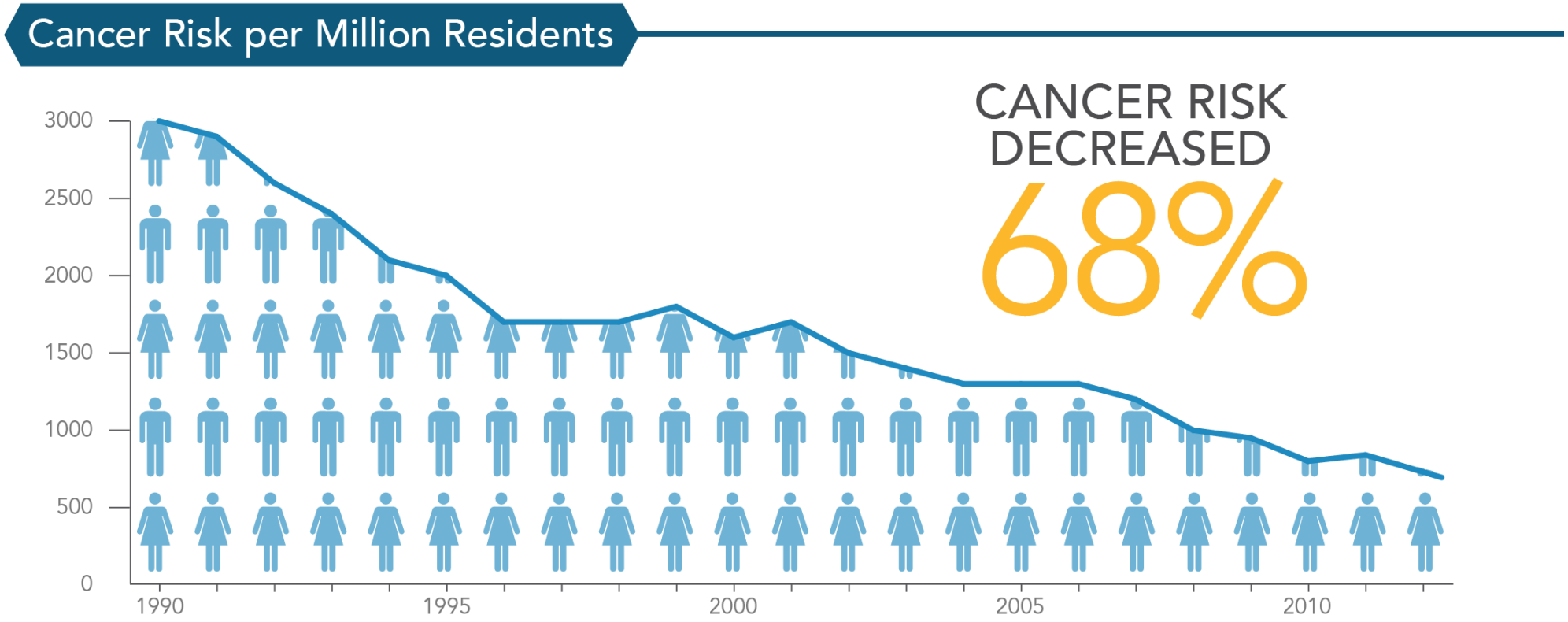
Clean Air Progress: Cleaner Cars



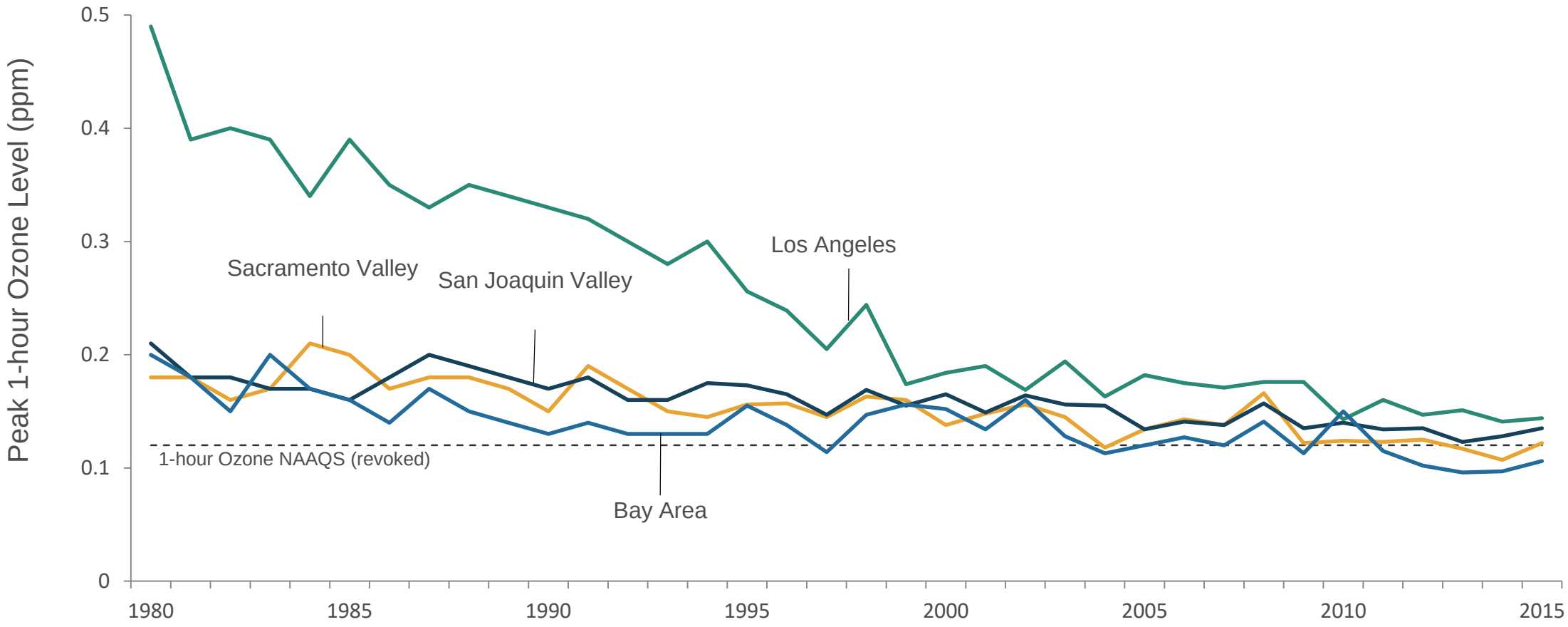
Vehicle Rules Cut Ozone-Forming Emissions



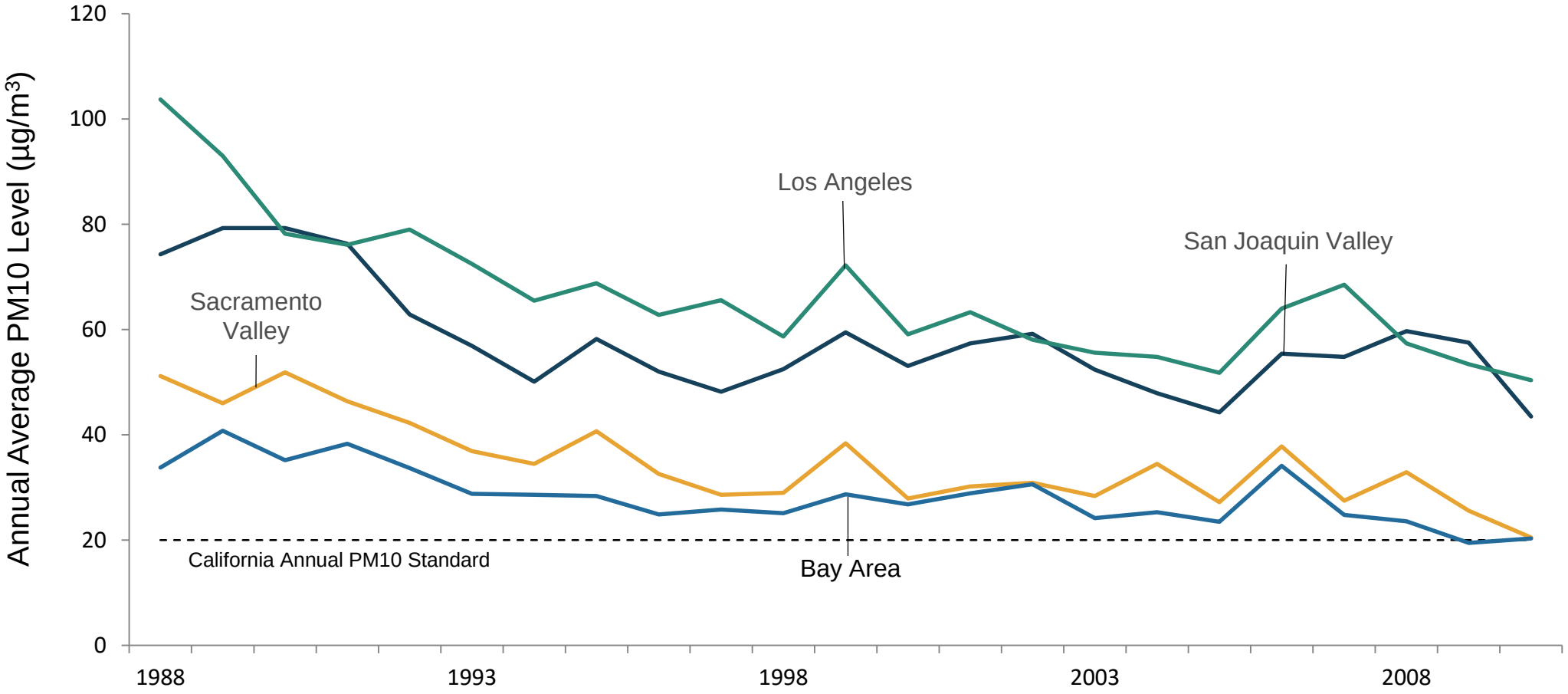
Clean Air Progress: Reduced Risk



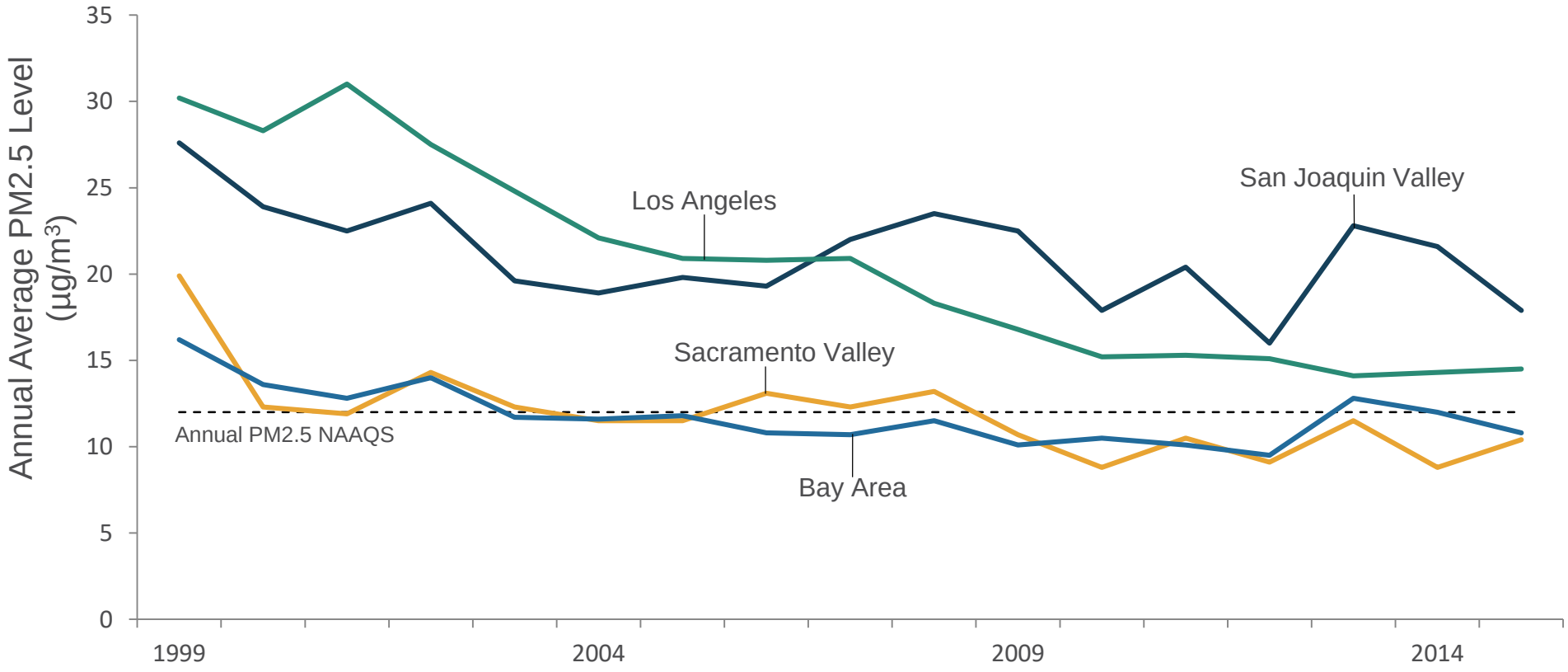
Clean Air Progress: Peak Ozone Levels Decline



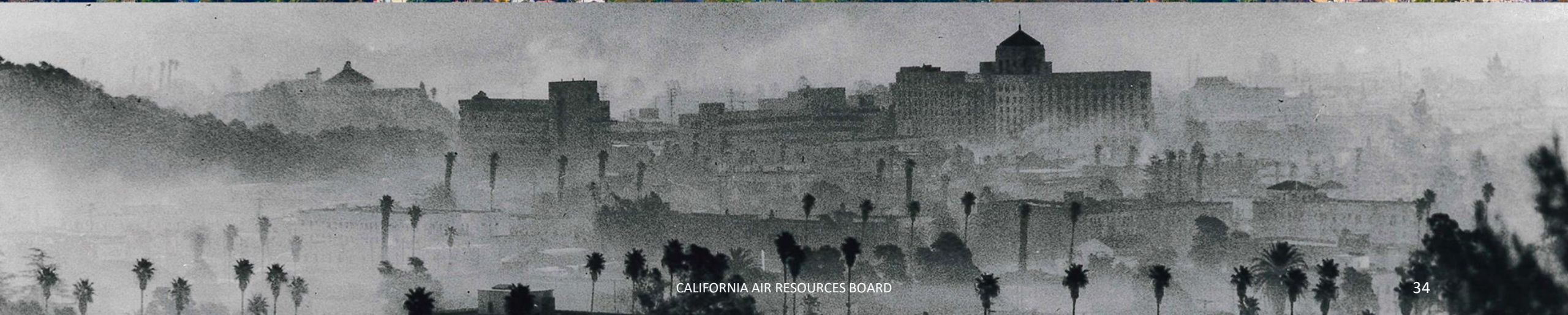
Clean Air Progress: Annual Average PM10 Levels Drop



Clean Air Progress:
Annual Average PM2.5 Levels Drop



Californians now breathe the cleanest air since the first air pollution monitors were installed more than 50 years ago



...But Work Still Remains

Most Polluted Cities in U.S.

As of April 2018

California city

BY OZONE POLLUTION		BY YEAR ROUND PARTICLE POLLUTION		BY SHORT-TERM PARTICLE POLLUTION	
1	Los Angeles-Long Beach	1	Fairbanks, AK	1	Bakersfield
2	Bakersfield	2	Visalia-Porterville-Hanford	2	Visalia-Porterville-Hanford
3	Visalia-Porterville-Hanford	3	Bakersfield	3	Fresno-Madera
4	Fresno-Madera	4	Los Angeles-Long Beach	4	Fairbanks, AK
5	Sacramento-Roseville	5	Fresno-Madera	5	Modesto-Merced
6	San Diego-Carlsbad	6	Modesto-Merced	6	San Francisco Bay Area
7	Modesto-Merced	7	El Centro	7	Los Angeles-Long Beach
8	Phoenix	8*	Pittsburgh	8	Salt Lake City
9	Redding-Red Bluff	8*	Lancaster, PA	9	El Centro
10	New York-Newark	10*	Cleveland	10	Pittsburgh
		10*	San Francisco Bay Area		

Source: American Lung Association

*A tie

Information

CARB Website: https://ww2.arb.ca.gov/our-work

Rulemaking Documents: https://ww2.arb.ca.gov/rulemaking

Board Meetings: https://ww2.arb.ca.gov/our-work/programs/board-meetings

Contact Person: Shannon Dilley, (916) 322-3940, shannon.dilley@arb.ca.gov

3. Climate Change

ASSEMBLY BILL 32, THE SCOPING PLAN, CAP-AND-TRADE, AND CALIFORNIA CLIMATE INVESTMENTS

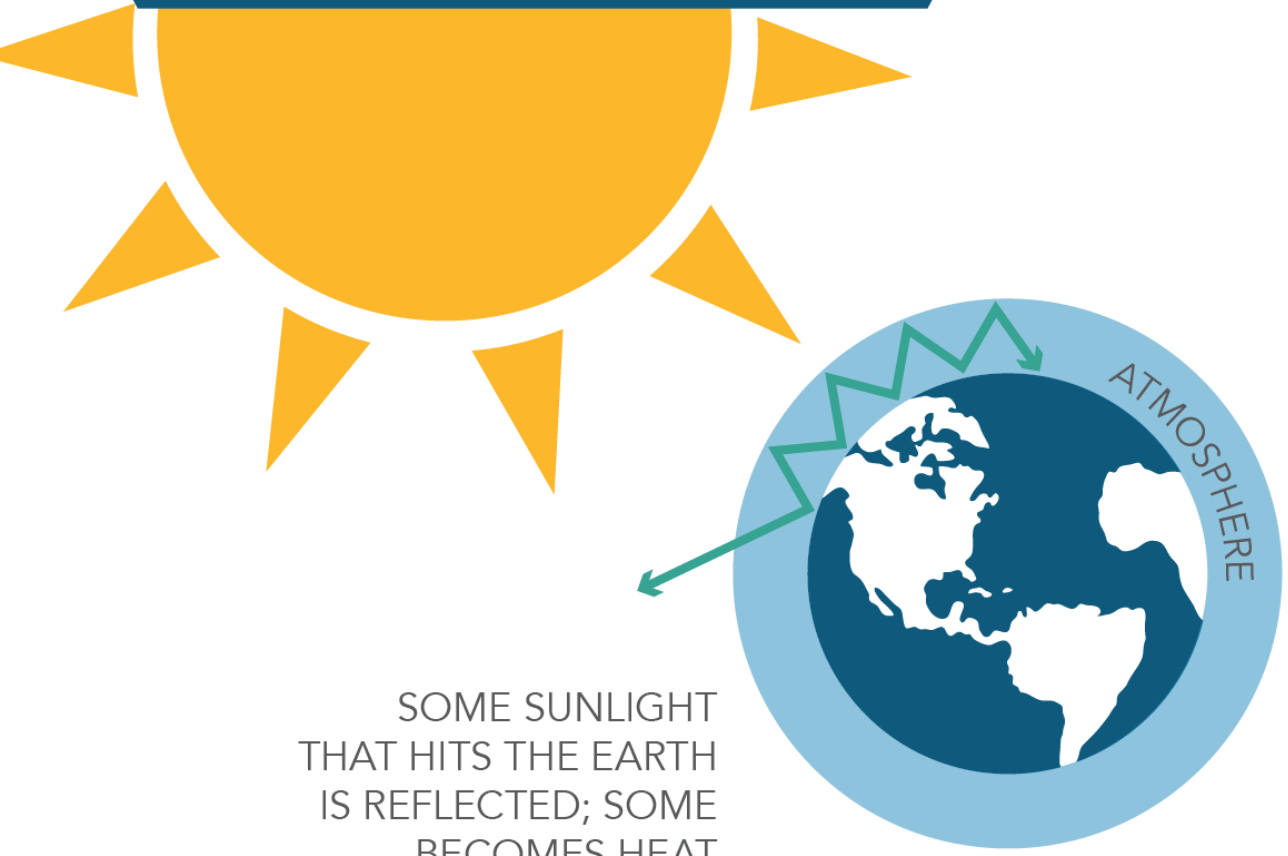
CALIFORNIA
AIR RESOURCES BOARD

AB 32 and the Scoping Plan

PATH TO 2030

Climate Change

The Greenhouse Gas Effect



SOME SUNLIGHT THAT HITS THE EARTH IS REFLECTED; SOME BECOMES HEAT

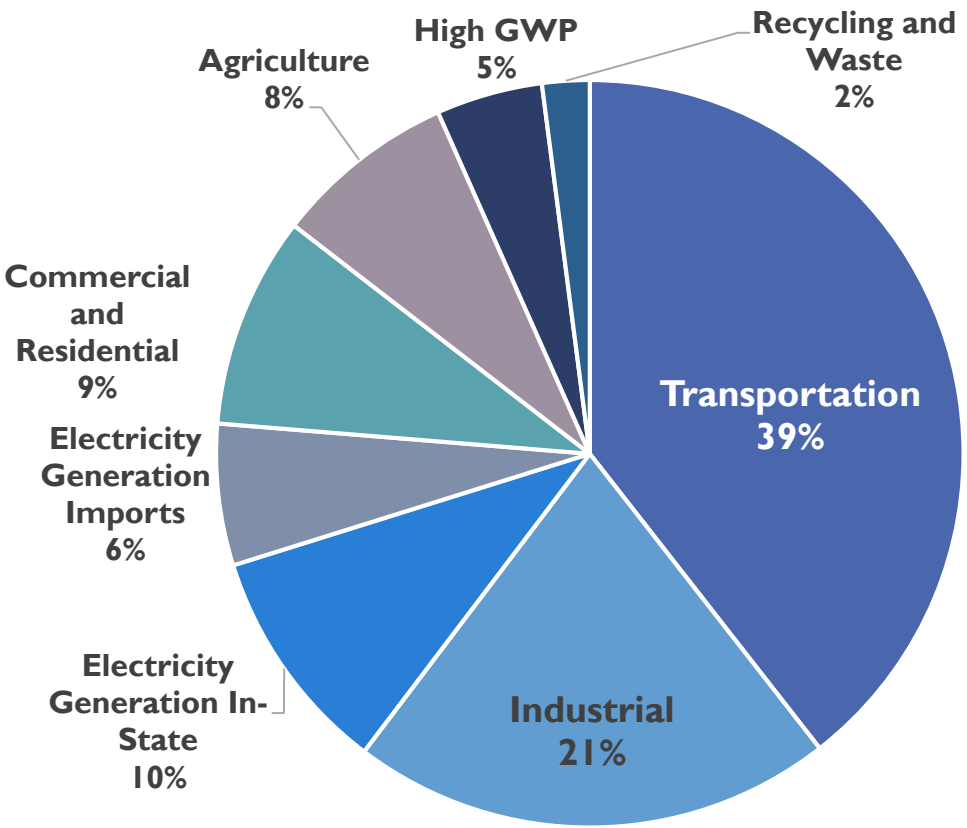
CO_2 AND OTHER GASES IN THE ATMOSPHERE TRAP MORE HEAT FROM THE SUN, RAISING GLOBAL TEMPERATURES

CLIMATE CHANGE
is caused by a build up of
GREENHOUSE GASES
in the atmosphere generated primarily by
BURNING FOSSIL FUELS
and other human activities

CALIFORNIA
is already experiencing the impacts of CLIMATE CHANGE

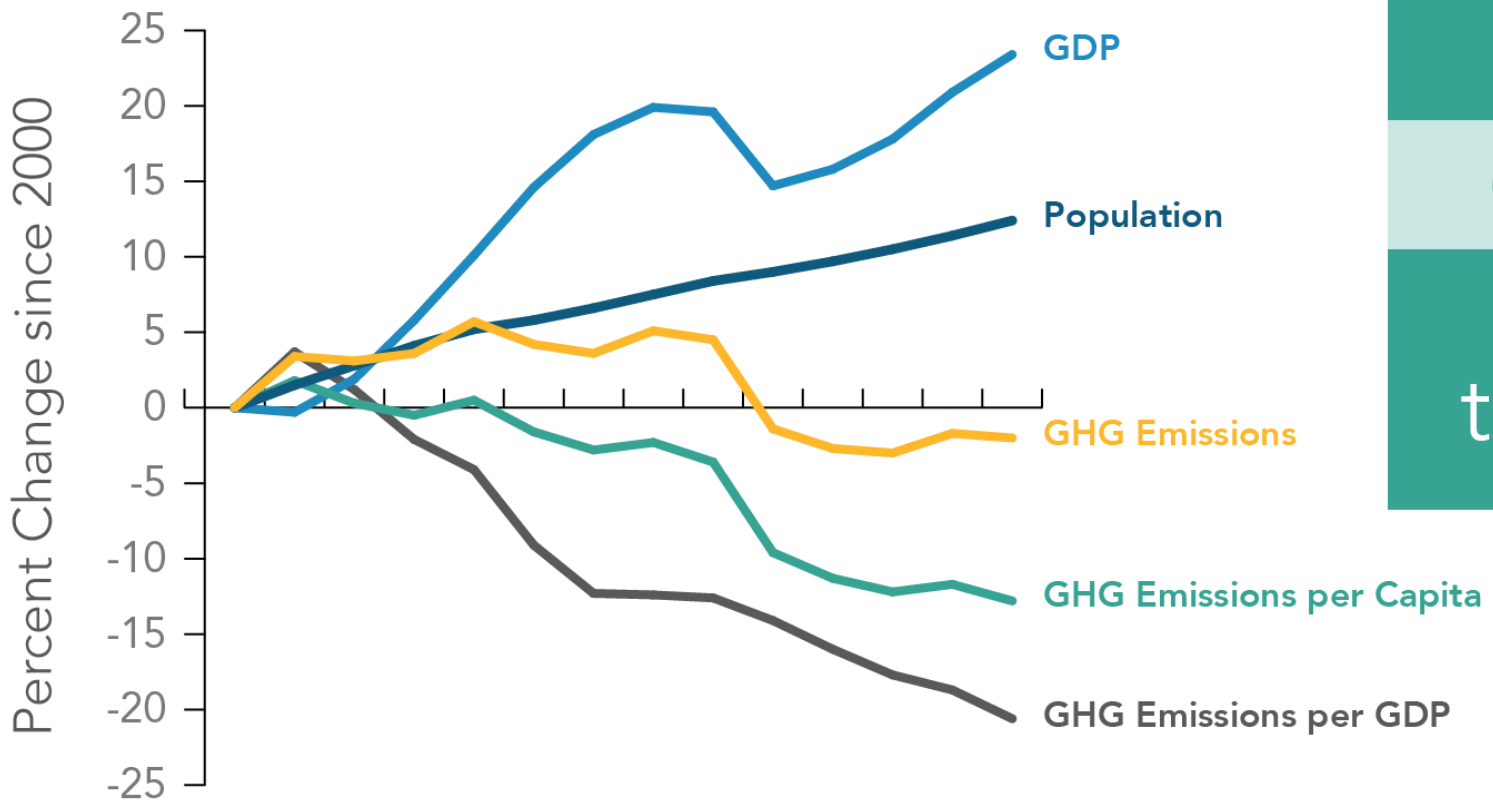
IN 2015 THE DROUGHT COST THE AGRICULTURE INDUSTRY IN THE CENTRAL VALLEY AN ESTIMATED $2.7 BILLION & 20,000 JOBS

California's Greenhouse Gas Emissions



2016 Total CA Emissions: 429.4 MMTCO2e

Growing Economy and Cleaner Energy



California is
ON TRACK
to achieve
the goals of AB 32

California's Climate Policy Portfolio

- Double building efficiency
- 50% renewable power
- More clean, renewable fuels
- Cleaner zero or near-zero emission cars, trucks, and buses
- Walkable/bikeable communities with transit
- Cleaner freight and goods movement
- Slash potent "super-pollutants" from dairies, landfills and refrigerants
- Cap emissions from transportation, industry, natural gas, and electricity
- Invest in communities to reduce emissions
- Protect and manage natural and working lands

Scoping Plan Alternatives Considered

- No Cap-and-Trade (Prescriptive Regulations)
  - Need new statutory authority
  - Fewer options to minimize leakage and higher cost than Scoping Plan
- Carbon Tax
  - No firm emissions limit and difficulty in setting right price to incent reductions
  - Difficult to make up unrealized reductions
- All Cap-and-Trade
  - No enhancement to LCFS may impede transportation fuel diversification
- Cap and Tax
  - Highest direct costs resulting in loss of industry, jobs, and GDP

Climate Plan Provides Health Benefits in 2030

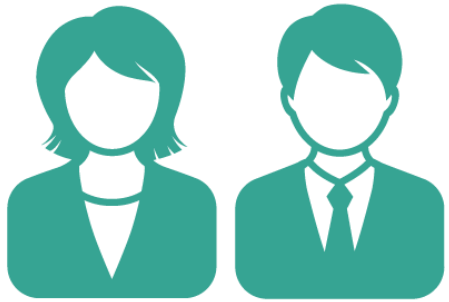
AVOIDED PREMATURE DEATHS

~ 3,300

VALUE OF AVOIDED HEALTH IMPACTS

$1.2-1.8 billion

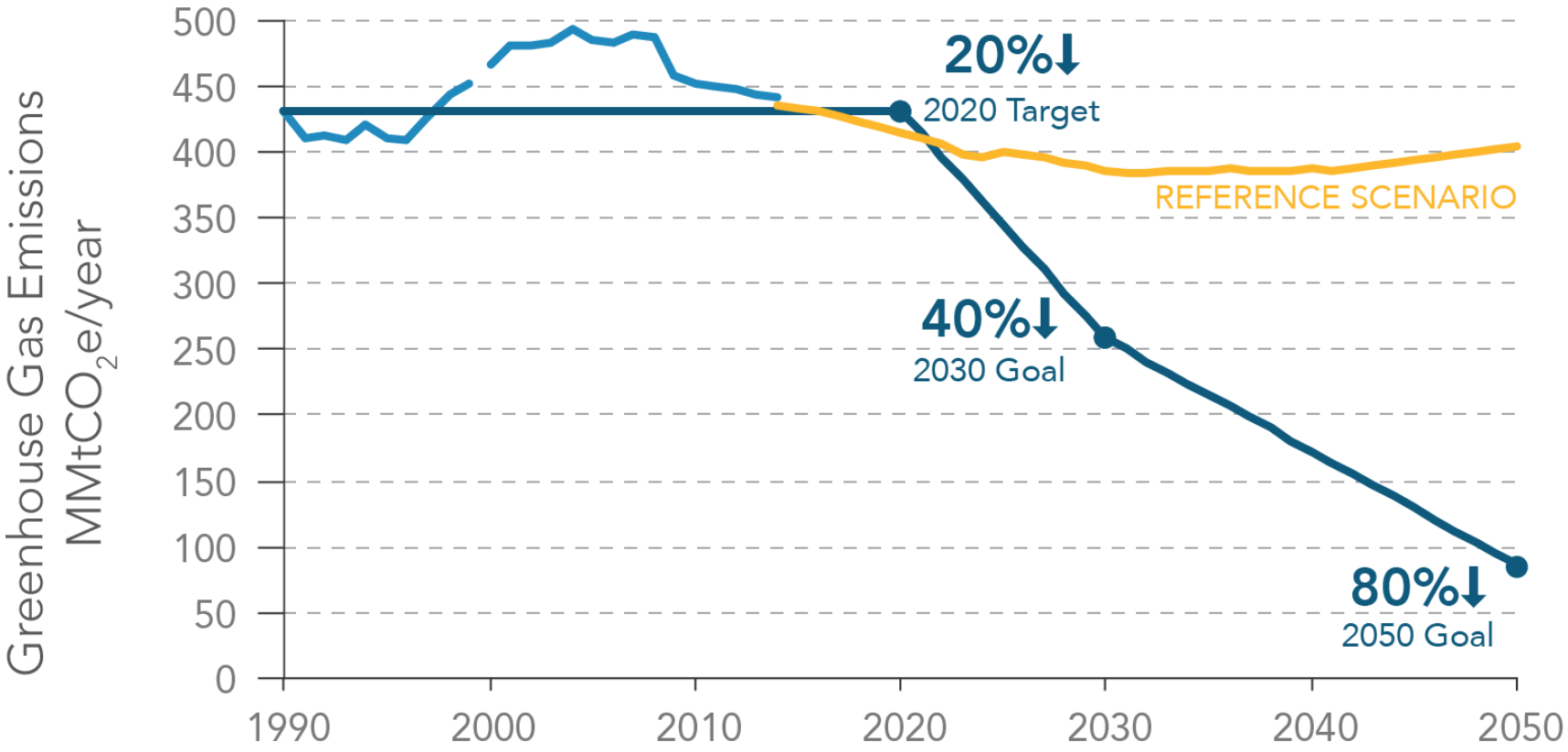
VALUE OF AVOIDED DAMAGES USING SOCIAL COST OF CARBON



$1.9-11.2 billion

California's Climate Strategy

Vision for 2030



REDUCING GREENHOUSE GAS EMISSIONS TO

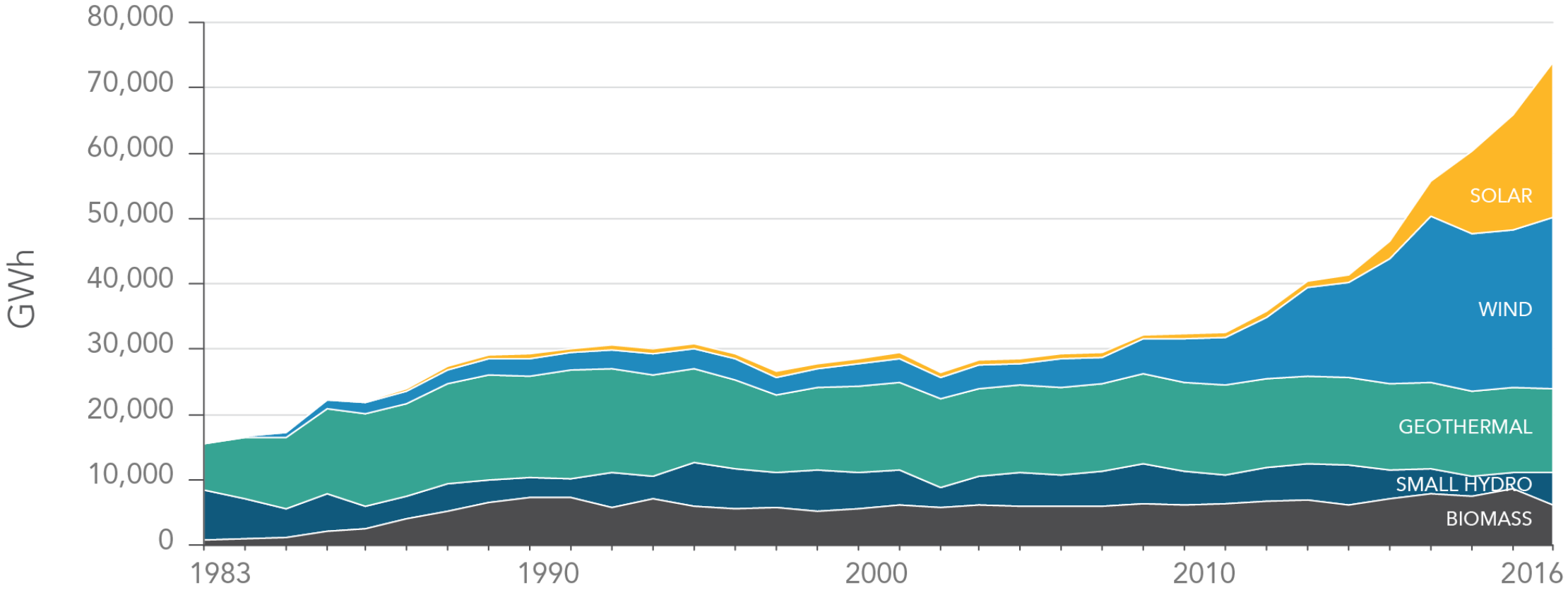
40%↓

1990 LEVELS

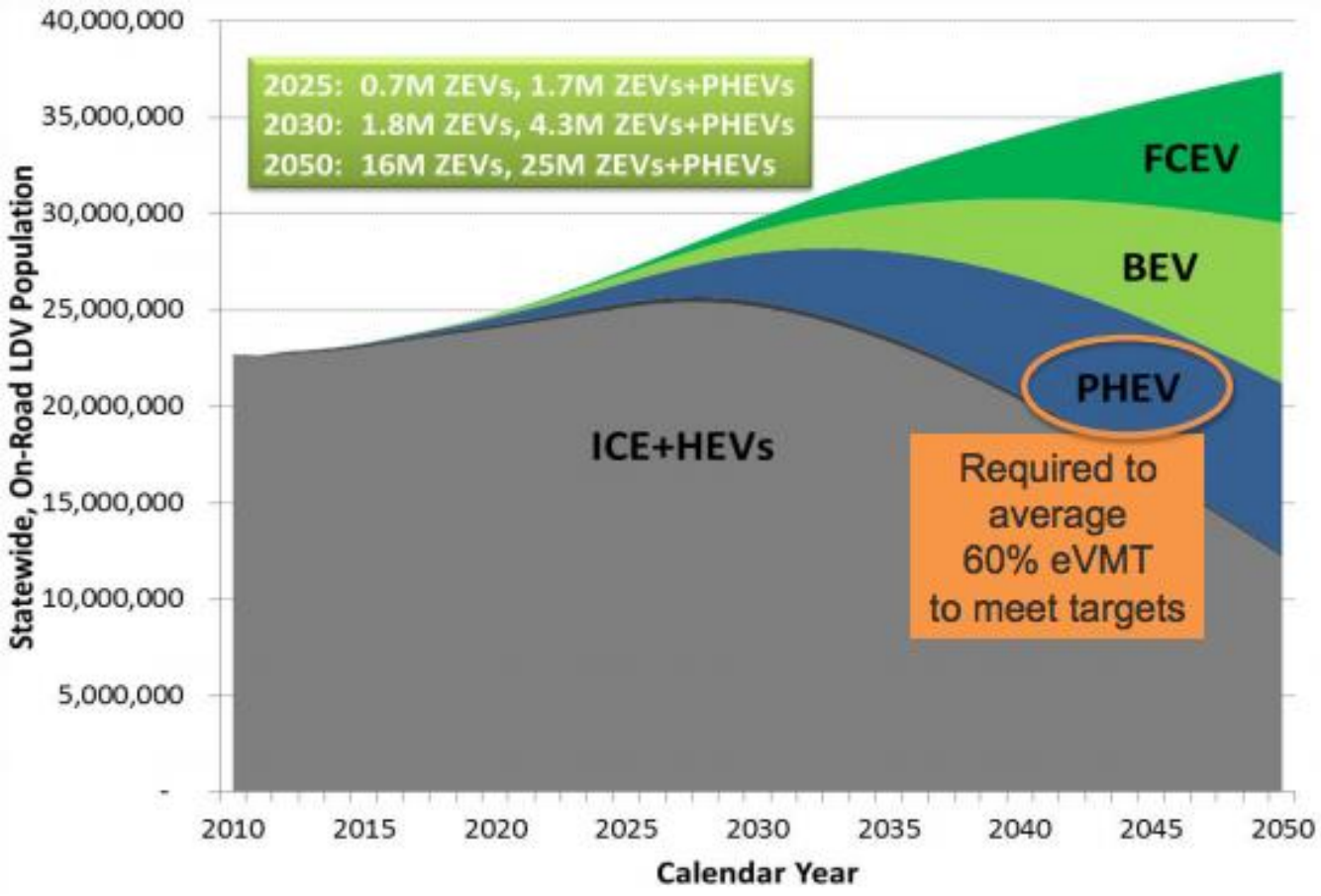
Growing Energy Innovation

Increasing Renewable Electricity Generation

(In-State and Out-of State)



California's Clean Car Future



Key Points Summary

- This plan provides an achievable path for reaching the State's 2030 GHG target
- 2030 target is a milestone on the way to achieve greater reductions needed to stave off the catastrophic impacts of climate change
- We need to continue to evaluate and incorporate additional opportunities to reduce GHGs, criteria, and air toxics emissions as they become cost-effective and technologically feasible
- Implementation of the SP measures must not disproportionately impact low-income communities
- Continue to monitor, adjust, and enforce existing air quality programs, in addition to implementing AB 617

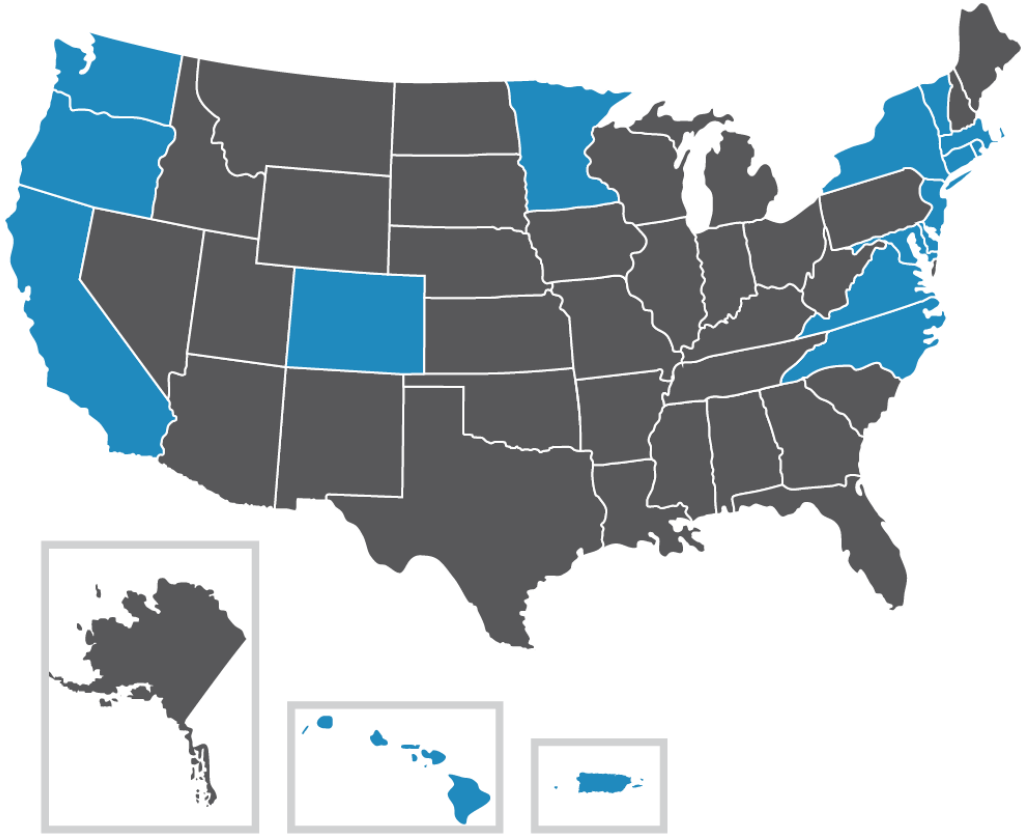
California's Subnational Climate Leadership

- AB 32 already having national and international impact
- Lessons learned
  - Co-benefits
  - Public participation and transparency

California's Subnational Climate Leadership

UNDER2 MOU

U.S. CLIMATE ALLIANCE



California Agreements with States and Regions throughout the World

North America

United States
U.S. Climate Alliance

Pacific Coast Collaborative
British Columbia
Oregon
Washington

Quebec and California Cap-and-Trade Linkage
Quebec

Canada
Various Ministries/entities at the federal and Provincial level

Mexico
Various Ministries/entities at the federal, State and local level

South America

Brazil
State of Acre

Chile

Peru

United Kingdom

England
Wales
Scotland

Europe

France
Germany
Netherlands
Norway
Spain
Catalonia
Sweden

Middle East

Israel

Asia

China
Various Ministries/entities at the federal, Provincial and local level

India
Forum of Regulators

Japan
Osaka

Malaysia
South Korea

As of January 2019

Information

CARB Website: https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm

California's 2017 Climate Change Scoping Plan:
https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

Contact Person: Rajinder Sahota, (916) 323-8503, Rajinder.Sahota@arb.ca.gov

Cap-and-Trade Program

Program Overview and Tribal Engagement

Cap-and-Trade: Program Goals

- Ensure AB 32 and SB 32 GHG goals are realized through a strict limit
- Provide compliance flexibility to achieve cost-effective reductions
- Allow price signal to motivate long-term investment in cleaner fuels and energy efficiency
- Complement existing programs to reduce smog and air toxics
- Facilitate integration of regional, national, and international GHG reduction programs
- First adopted in 2012, with compliance obligations starting in 2013

Cap-and-Trade: Overview

- Program Coverage (~80% of statewide emissions)
  - Stationary sources with emissions ≥ 25,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year
  - Generators and importers of electricity
  - Emissions from the combustion of supplied fuels and natural gas
- Allowance Budget (Cap)
  - 358.3 $MMTCO_2e$ (2018); 334.2 $MMTCO_2e$ (2020); 200.5 $MMTCO_2e$ (2030)
- Compliance Obligation
  - Calculated annually based on actual reported and verified emissions
  - Covered entities must acquire and surrender compliance instruments that match emissions at the end of multiyear compliance periods

Cap-and-Trade: Allowances

- Allowance: A limited tradable authorization to emit up to one $MTCO_2e$
- Distribution of State-owned allowances
  - Direct allocation (free allowances)
    - Industrial producers: Transition assistance/Leakage prevention
    - Electric utilities and natural gas suppliers: Ratepayer benefits
  - Allowance Price Containment Reserve
  - State-held quarterly auctions
    - 2019 Reserve (floor) price: $15.62
    - 25 auctions to date (17 were joint auctions)
    - $9.47 billion placed in Greenhouse Gas Reduction Fund

Cap-and-Trade: Offset Credits

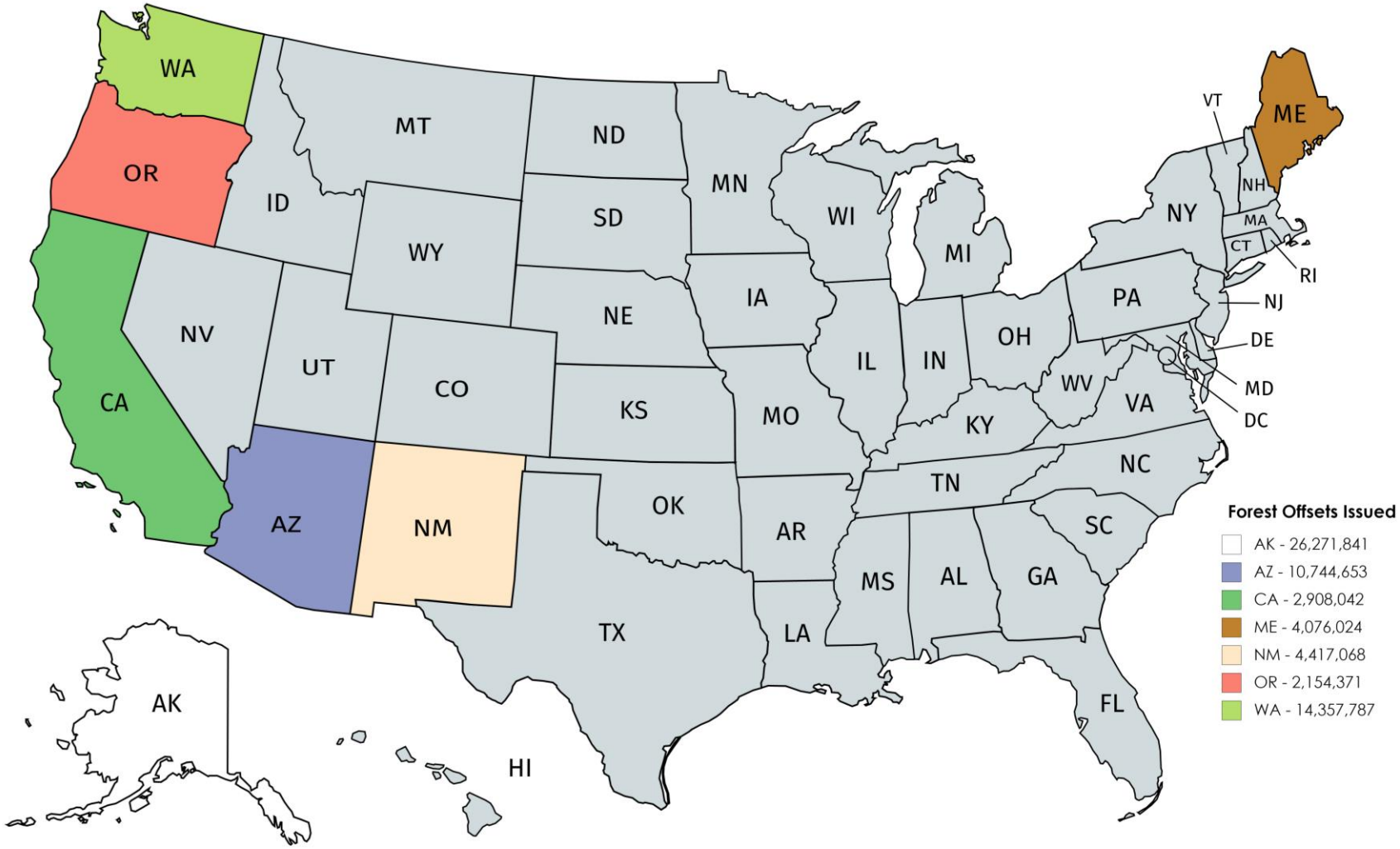
- Offset credits: A tradable compliance instruments that represent verified GHG emission reductions or removal enhancements made in sources outside of the Program
- Usage limits
  - Up to 8% of entity's compliance obligation 2013-2020
- AB 32 criteria: Real, permanent, quantifiable, verifiable, enforceable, and additional
  - 6 adopted protocols (U.S. Forests, Urban Forests, Dairy Digesters, Ozone Depleting Substances, Mine Methane Capture, Rice Cultivation)
- Offset credit issuance
  - Issued directly by CARB or a linked jurisdiction
  - ~141 million issued to date (>112 million for forest projects)

CARB-Tribal Engagement

- Cap-and-Trade Program and Forest Offsets
  - 2009-2010 – Regulatory Design Phase
  - 2010 – CalEPA Tribal Advisory Committee; Yurok Tribe Advocacy and Consultation; participation in public workshops and Board hearings
  - 2011 – Developed regulatory language that ensures tribal projects are eligible, recognizing unique sovereign nature and needs of CARB implementation of the offsets program
  - 2014 – Yurok project is first to receive forest offset credits under the Program
    - 7 tribes and 2 Alaska Native Corporations have projects to date
    - ~58% of forest offset credits have gone to these projects
  - Building on government-to-government relationship with tribes interested in participating in Program

Tribal and Alaska Native Projects by State

- 11 Tribal Lands/AK Native Corp. projects
- 3 in California
- 9 projects > 1 million credits each
- 3 largest projects (per credits issued)



Created with mapchart.net ©

Cap-and-Trade: Recent updates

- In 2017, Legislature passed AB 398 and AB 617
  - AB 398 provides direction on a post-2020 Cap-and-Trade Program
  - AB 617 focuses on reducing exposure to criteria and toxic pollutants in California's disadvantaged communities
- Last week, our Board adopted amendments to the Cap-and-Trade Program pursuant to AB 398, including:
  - Instituting a price ceiling and restructured strategic reserve to commence in 2021
  - Reducing the offset credit usage limit
  - Requiring that no more than ½ of offsets limit comes from projects that do not provide direct environmental benefits in the State

Next Steps

- New amendments set to take effect April 1, 2019
- Commence public process to update existing Compliance Offset Protocols
- Annual progress reports to Board on Program implementation
- Continuing collaboration with tribes through the Cap-and-Trade Compliance Offset Program
- Expand engagement to opportunities in other CARB programs

Information

CARB Website: https://www.arb.ca.gov/cc/capandtrade/capandtrade.htm

Offset Listing Requirements for Tribes:
https://www.arb.ca.gov/cc/capandtrade/offsets/offset-tribes.htm

Contact Person: Jason Gray, (916) 324-3507, Jason.Gray@arb.ca.gov

California Climate Investments

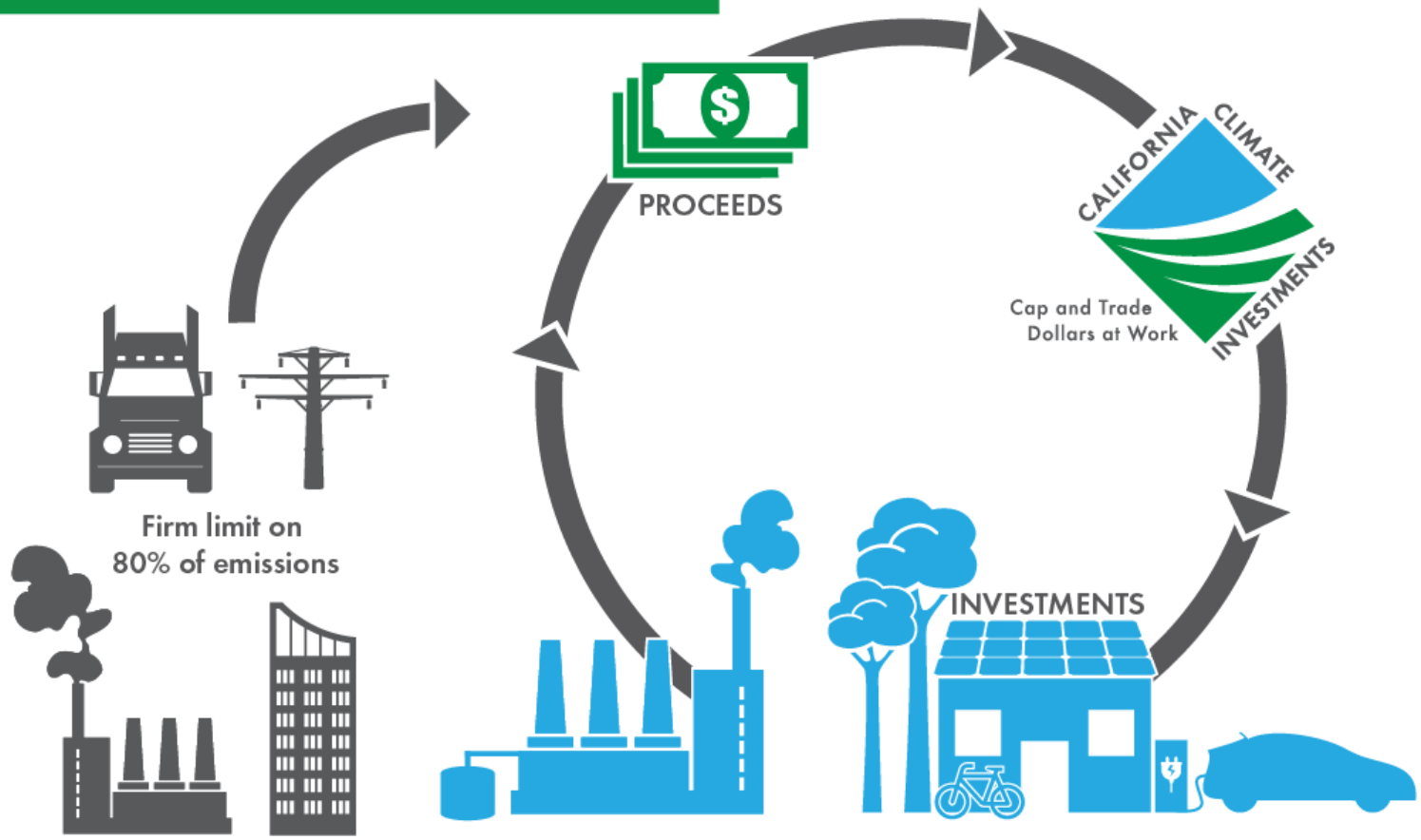
OVERVIEW AND FUNDING OPPORTUNITIES FOR TRIBES

CALIFORNIA
AIR RESOURCES BOARD

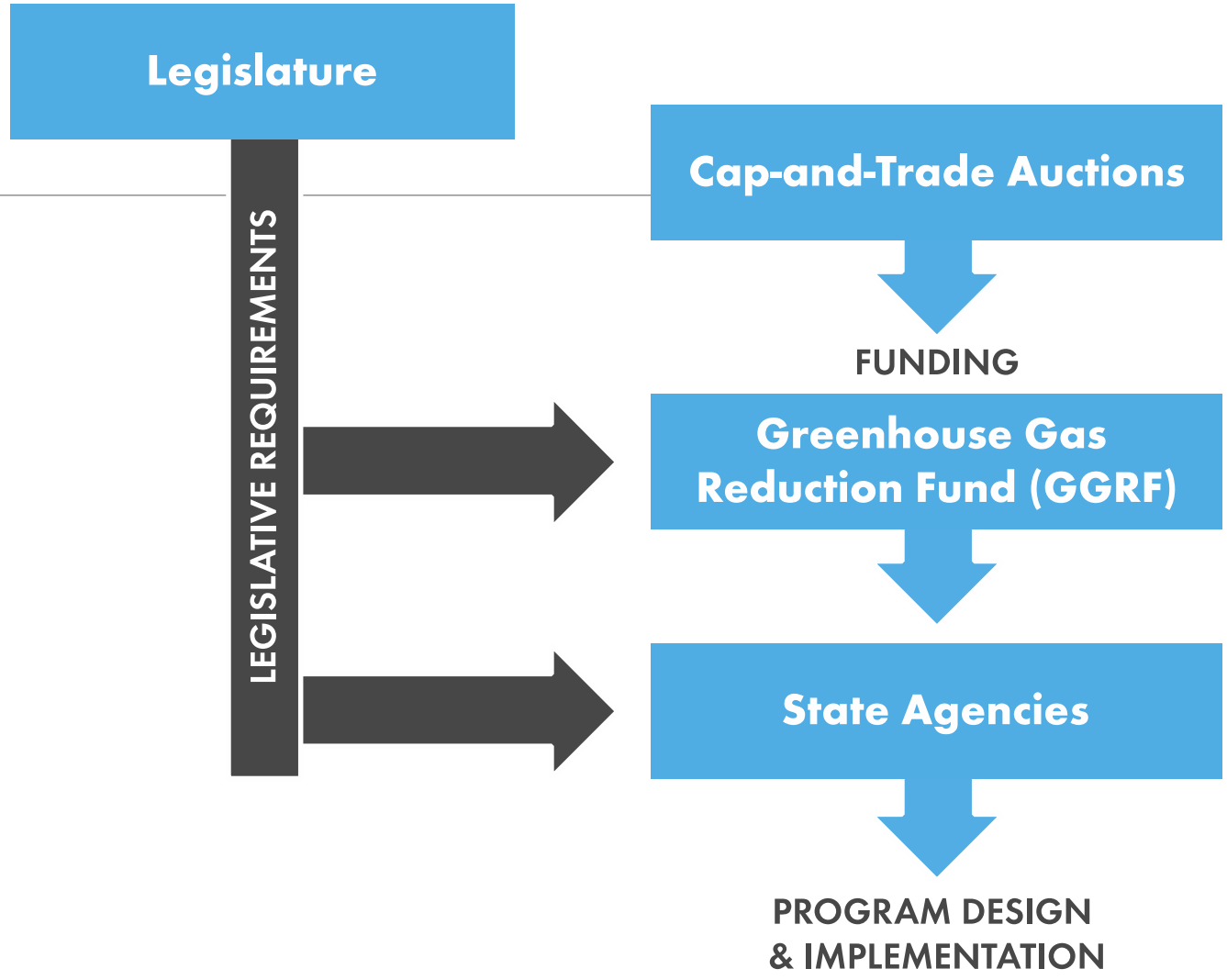
What is California Climate Investments?

A statewide initiative that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy and improving public health and the environment — particularly in disadvantaged communities

Overview of California Climate Investments using Cap-and-Trade Auction Proceeds



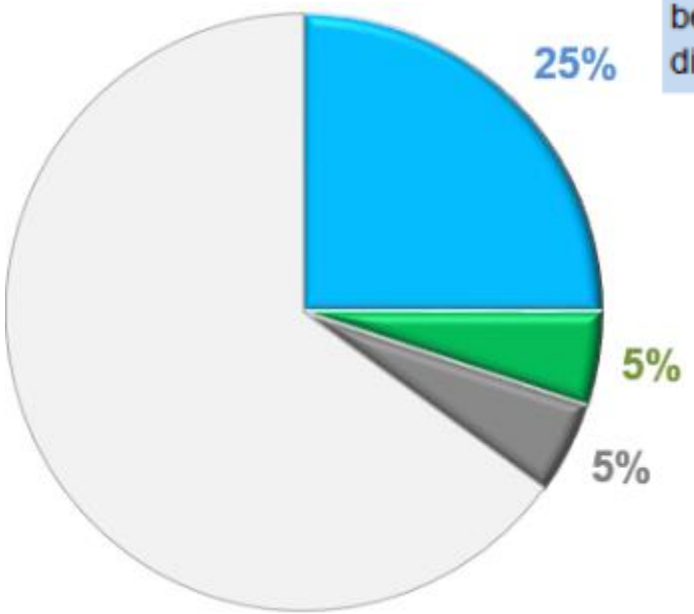
Funding Flow



Funding Priorities

$8.4B appropriated to date to:

- Facilitate greenhouse gas emission reductions
- Invest in disadvantaged and low-income communities
- Provide other community benefits

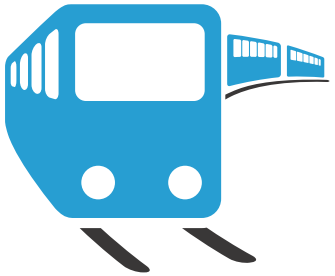


At least 25% of funds are for projects located in and benefiting people living in disadvantaged communities.

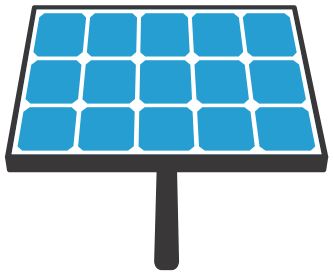
At least 5% of funds are for projects located in and benefiting low-income households or low-income communities anywhere in the State.

At least 5% of funds are for projects located in and benefiting low-income households or low-income communities that are within ½ mile of a disadvantaged community.

Program Types



Sustainable Communities & Clean Transportation



Energy Efficiency & Clean Energy

Natural Resources & Waste Diversion

Administering Agencies

CARB Dual Role

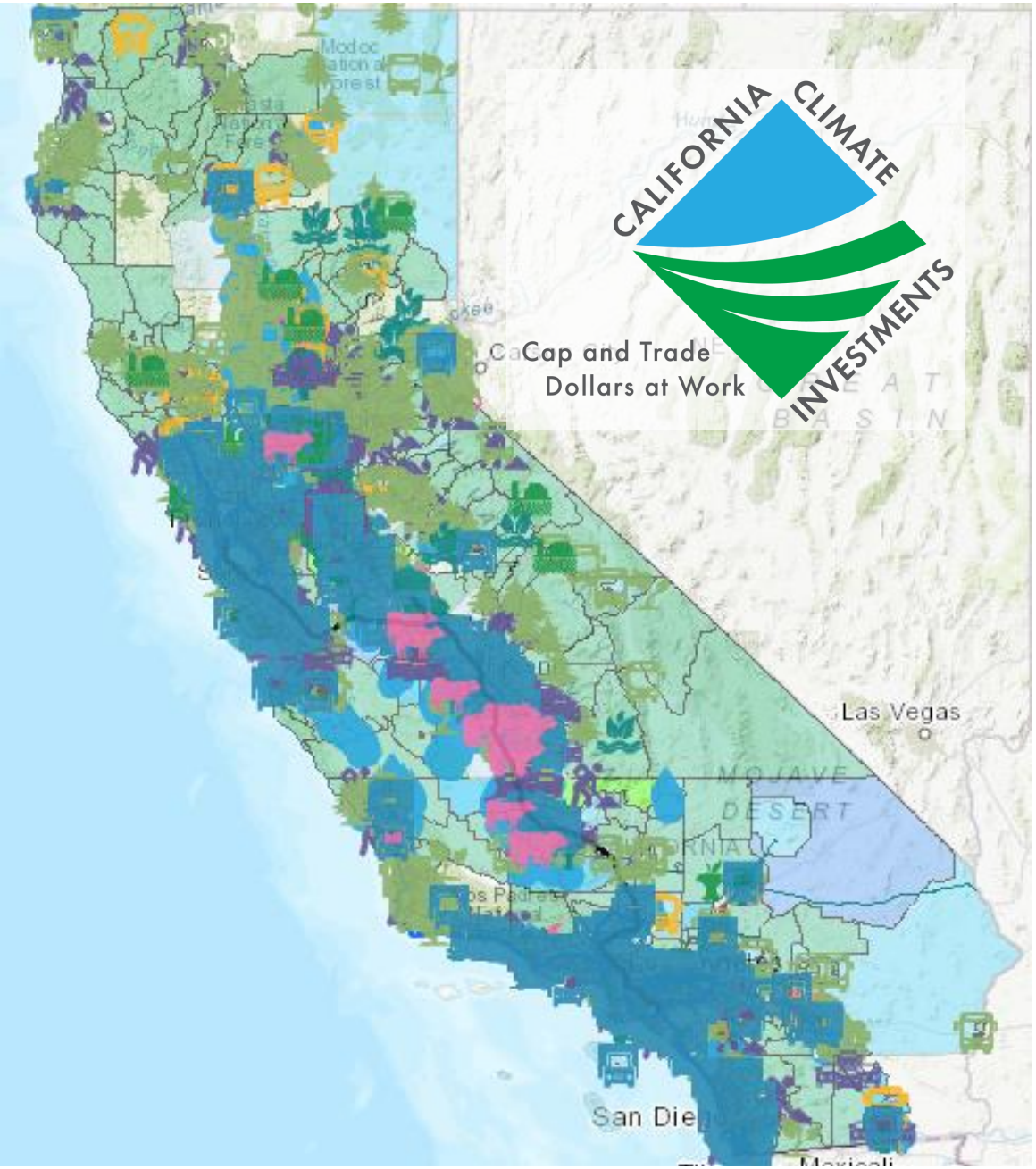
- Assistance on overall administration
  - Guidance for 19+ agencies, across 35+ programs
  - Transparency and accountability
  - Program development & quantification
- Administer Funding Programs
  - e.g. Low Carbon Transportation

CARB Climate Investment Programs

- Community Air Protection Funds
- Community Air Grants
- Low Carbon Transportation Program
- Woodsmoke Reduction Program
- Agricultural Replacement Measures for Emission Reductions (FARMER)

Outcomes

- Climate Investments Website: www.caclimateinvestments.ca.gov
- Annual Report
  - Summary of programmatic investments and cumulative data
- Project Map
  - Project-level information



Cumulative Project Outcomes

68,000 projects installing efficiency measures in homes

180,000+ rebates issued for zero-emission and plug-in hybrid vehicles

258,000+ acres of land preserved or restored

20,000+ trees planted in urban areas

1.5 million trees planted to restore forests damaged by wildfire

330+ transit agency projects funded, adding or expanding transit options

2,600+ affordable housing units under contract

215,000+ individual projects implemented

As of May 2018

CCI Resources

www.caclimateinvestments.ca.gov

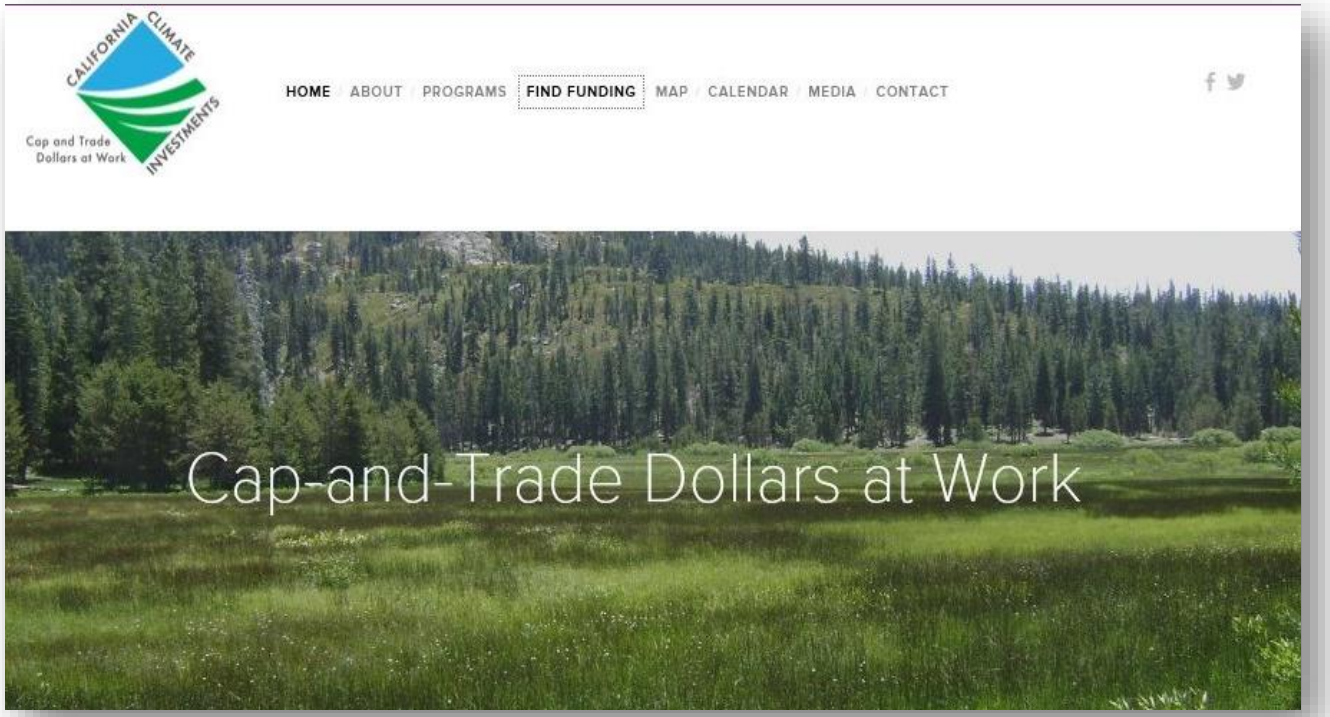
@CAClimateInvest

info@caclimateinvestments.ca.gov

1-800-757-2907 • Hablamos Español

Website Includes:

- Funding Wizard
- Calendar of Events
- Social Media
- Contacts
- Program Links
- Map of Projects



Information

CARB Website: https://ww2.arb.ca.gov/our-work/programs/california-climate-investments

2018 Annual Report: http://www.caclimateinvestments.ca.gov/annual-report/

Contact Person: Matthew Botill, (916) 445-0266, ggrfprogram@arb.ca.gov

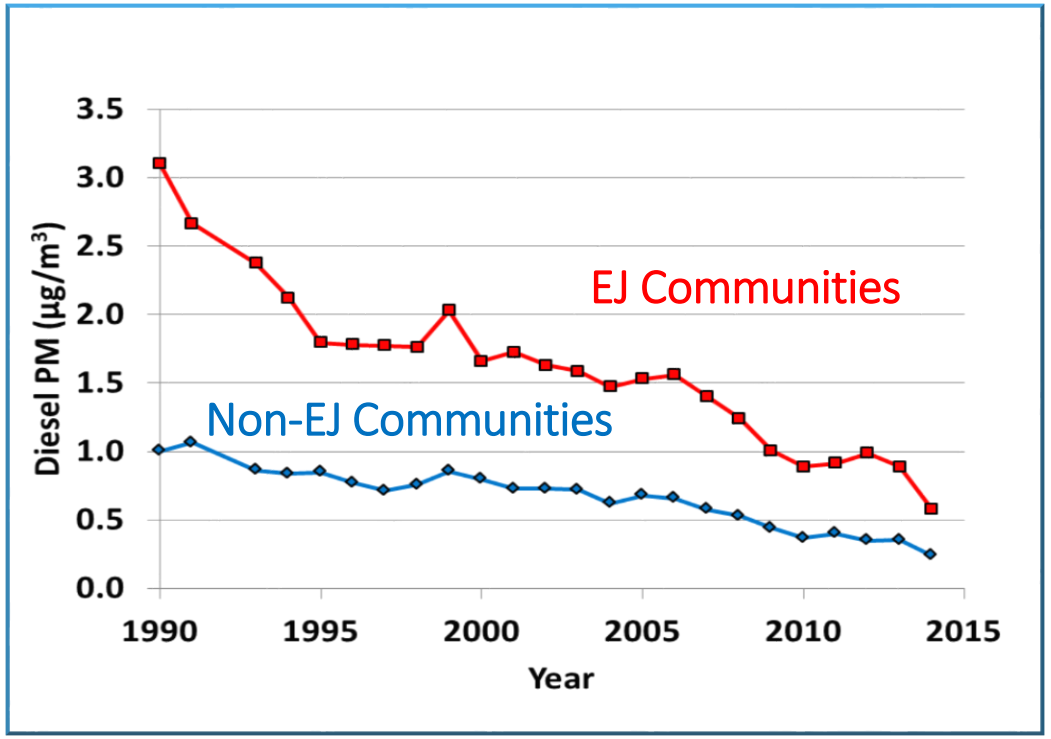
4. AB 617

UPDATE ON COMMUNITY AIR PROTECTION PROGRAM

CALIFORNIA
AIR RESOURCES BOARD

Motivation for AB 617

- Historical focus on regional air quality
- Significant improvement, but disproportionate burdens remain
- Need for community-level focus
- Address cumulative exposure
- Take advantage of advances in monitoring technologies



Building a Community-Focused Framework

PARTNERSHIPS
WITH COMMUNITIES

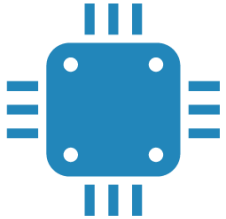
NEW STATEWIDE
STRATEGIES TO
REDUCE EMISSIONS

TARGETED
COMMUNITY
CLEAN AIR PLANS

METRICS
TO TRACK &
REPORT PROGRESS

COLLABORATIONS
WITH LAND USE
& TRANSPORTATION
AGENCIES

CLEAN TECHNOLOGY
INCENTIVE INVESTMENTS



EXPANDED
AIR MONITORING

IMPROVED
DATA
ACCESSIBILITY

AB 617 Community Air Grant Recipients

Rose Foundation for Communities & the Environment
Greenaction for Health & Environmental Justice
West Oakland Environmental Indicators Project
Central California Asthma Collaborative
El Pueblo Para el Aire y Agua Limpia
Citizens for Responsible Oil & Gas
Californians for Pesticide Reform
Environmental Health Coalition
Fresno Metropolitan Ministry
Comite Civico Del Valle, Inc.
Groundwork Richmond
Clean Water Fund
Comite Pro Uno
Casa Familiar

Valley LEAP
Community Focus
Pala Band of Mission Indians
Special Service for Groups, Inc.
Physicians for Social Responsibility
Charitable Ventures of Orange County
Communities for a Better Environment
Madera Coalition for Community Justice
Big Pine Paiute Tribe of the Owens Valley
The Regents of the University of California
Twenty-Nine Palms Band of Mission Indians
Legacy LA Youth Development Corporation
Leadership Counsel for Justice and Accountability
Physicians, Scientists & Engineers for Healthy Energy

CALIFORNIA CLIMATE INVESTMENTS
Cap and Trade Dollars at Work

Initial $10 million supports:

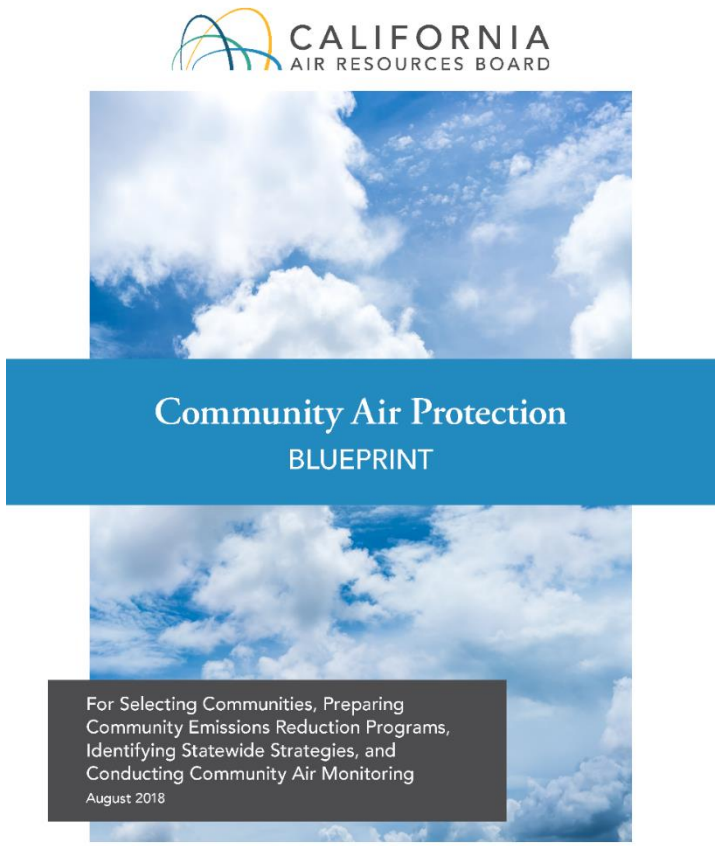
- Community-operated air monitoring
- Technical training and education
- Action plans to reduce local toxic air pollution
- Increasing residents' engagement

Additional $5 million for second round of grants in 2019

Blueprint for Program Implementation

Defines statewide strategies
and sets requirements for:

- Public engagement and community partnerships
- Selecting communities
- Conducting community air monitoring
- Developing community emissions reduction programs

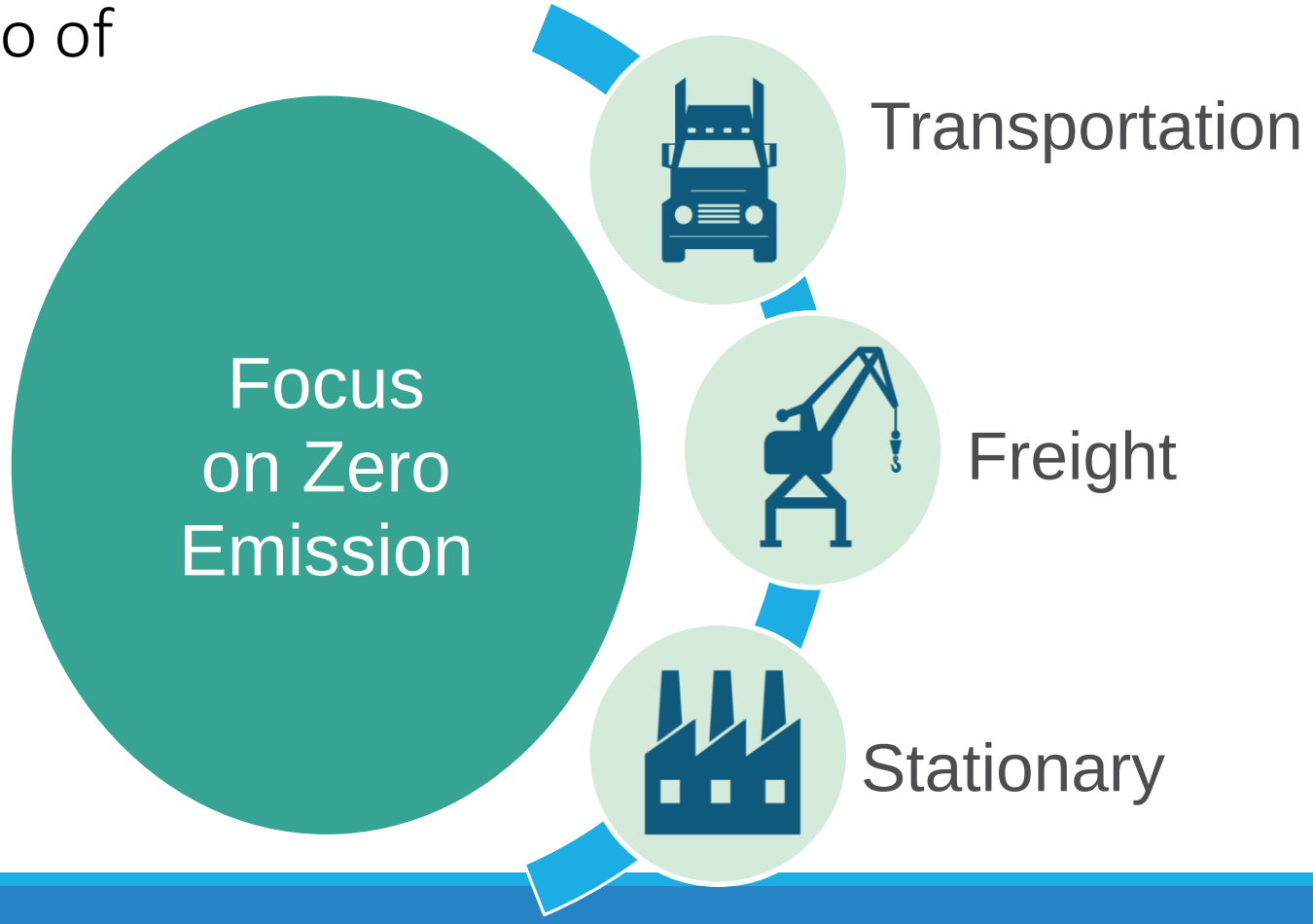


Community Air Grants Program Consultation Group

- Provides opportunity for discussion about the program
- Complements other outreach and consultation efforts, including public workshops, community meetings, CalEPA TAC meetings, and discussions with individual organizations, stakeholders, and tribes
- Includes the following representation:
  - Tribal member – Jana Ganion, Blue Lake Rancheria Tribe
  - Environmental justice
  - Air districts
  - Industry
  - Academia
  - Public health
  - Local government

New Regulations for Key Sources Impacting Communities

- Comprehensive portfolio of statewide actions
- Many coming to the Board in next few years
- BARCT – cleaner control technologies



Investing in Clean Technologies in Burdened Communities

2017-2018 State Budget

- $250 million in funding for early reductions from mobile sources

2018-2019 State Budget

- Additional $245 million in funding for both mobile and stationary sources
- Focus on zero emission technologies
- Projects must reflect community priorities

The set of 10 initial communities serve as statewide models

Additional Action in Initial Set of Communities

Air districts will work with communities to implement:

- Community emissions reduction programs
- Community air monitoring

Additional Implementation Elements

TECHNOLOGY CLEARINGHOUSE

- Best available control technologies
- Stationary, area-wide, and mobile sources

EMISSIONS REPORTING

- Annual reporting for specified facilities
- Development of uniform methodologies

RESOURCE CENTER

- Land use and transportation strategies
- Community air monitoring resources
- Health, education, and outreach

Information

CARB Website: https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program

Community Air Program Protection Blueprint: https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program/community-air-protection-blueprint

Contact Person: Trish Johnson, (916) 445-3365, trish.johnson@arb.ca.gov

5. SB 350 Barrier Study & Education and Outreach Strategic Roadmap

EQUITABLE ACCESS TO CLEAN TRANSPORTATION AND MOBILITY OPTIONS

CALIFORNIA AIR RESOURCES BOARD

SB 350 Background

- Clean Energy and Pollution Reduction Act of 2015
- Prioritizes reducing GHGs through various clean energy and clean air policies, including:
  - Widespread transportation electrification
  - Procuring energy from renewable sources
  - Energy efficiency and conservation
- Requires CEC and CARB to identify barriers to clean energy and transportation access for low-income residents

SB 350 Goals – Equity Focus

Expand access to clean transportation and energy efficiency

Increase **awareness** and understanding of key challenges to increasing access programs/investments

Reduce petroleum use to meet air quality and climate goals

Maximize benefits - environmental, economic, and social equity

Developing the SB 350 Guidance Document

- Engaged Low-Income Residents and Disadvantaged Communities
  - Public Roundtables
  - Community-based Events
  - Environmental Justice Meetings
  - One-on-One Interactions
  - State and Local Agency Coordination
- Analyzed various barriers to accessing clean transportation
  - Case study and literature communities reviewed in depth to understand barriers

Case Study Communities

- Selected four communities based on stakeholder input and represent different geographic regions, demographic characteristics and community types
  - Huntington Park
  - Huron
  - North Richmond
  - Redwood Valley
- Community recommendations for tribal lands in Redwood Valley
  - Address safety to improve active transportation and follow-through with proposed bike and trail projects
  - Subsidized vanpooling or shared car services
  - Transportation planners seek more input from tribal groups on needs and barriers
  - Increased outreach and education to better inform of available programs/services

Guidance Document Highlights: Barriers and Opportunities

- 5 main barrier categories identified for analysis
- Characteristics identified to inform potential opportunities to increase access
- Importance of understanding community needs and increasing education and awareness

CARB Priority Recommendations and Key Actions

1. Expand Community Needs Assessments
2* Develop an Outreach Plan Roadmap
3. Develop Regional One-Stop-Shops
4. Develop Grant/Solicitation Guiding Principles
5. Maximize Economic Opportunities and Benefits
6. Expand Funding and Financing Opportunities

Outreach Plan Roadmap – Key Elements

AUDIENCE	• Statewide outreach partners
PURPOSE	• Better understand outreach resource needs • Increase participation in clean transportation programs
GOALS	• Improve **coordination**, content development, tailoring and delivery of information • Increase **awareness** of clean transportation and mobility options • Allow for **flexibility** to adapt statewide strategies to meet community needs

Strategy 1: Build Understanding of the Current State of Outreach Efforts and Gaps

- Improve awareness of existing programs
- Identify how outreach differs for target audience
- Assess outreach gaps
- Develop strategies to align/coordinate outreach

- Matrix of Existing Marketing Education and Outreach Activities
- Matrix of Transportation Programs
- Outreach Coverage Map
- Coordination, Alignment and Outreach Best Practices

Strategy 2: Build and Maintain Partnerships

- Develop partnership networks to facilitate collaboration/coordination
- Maximize outreach effectiveness
- Streamline outreach and expand the reach of program awareness and participation

- Coalition of State and Local Level Outreach Providers
- Regional Networks and Support System
- Stakeholder and Community Organization Directory
- Sharing Platform

Strategy 3: Engage Community and Identify Outreach Needs

- Leverage existing transportation needs assessments
- How best to engage low-income communities
- Identify priority areas for targeted outreach
- Criteria for identifying community outreach needs

- Identify and Evaluate Existing Assessments
- Identify Target Regions
- Framework for Community Engagement
- Community Outreach Needs Assessment Checklist

Strategy 4: Dynamically Develop Targeted Outreach

- Develop statewide and regional/community specific strategies and outreach materials

- Statewide Outreach Material Development
- Outreach Campaign Toolkit
- Regional Training Support
- Regional Outreach Pilot Projects
- Expand Education Opportunities

Strategy 5: Measure Outreach and Education Efficacy

- Develop qualitative and quantitative outreach metrics to set reasonable goals and track progress toward these goals
- Support flexibility in altering efforts based on lessons

- Community Engagement Evaluation
- Marketing Education and Outreach Metrics
- Outreach Outcomes Mapping Tool

Next Steps

- Release Public Draft of Outreach Roadmap in early 2019 for review and comment
- Conduct Ongoing stakeholder and community engagement
- Finalize Roadmap and begin implementation

Information

CARB Website https://ww2.arb.ca.gov/our-work/programs/accessible-clean-transportation-options-sb-350

Final Guidance Document https://ww2.arb.ca.gov/resources/documents/carb-barriers-report-final-guidance-document

Contact Person: Violet Martin, (916) 322-6366, violet.martin@arb.ca.gov

6. Woodsmoke Reduction Program

PROGRAM OVERVIEW AND FRAMEWORK, LEGISLATION, KEY COMPONENTS, AND ELIGIBILITY CRITERIA

CALIFORNIA AIR RESOURCES BOARD

Program Overview

- The Woodsmoke Reduction Program offers financial incentives for homeowners to replace old, inefficient, and highly polluting wood stoves, wood inserts, or fireplaces with cleaner burning and more efficient home heating devices.
- California residents (including tribal residents) using uncertified wood stoves/inserts or fireplaces as their primary heat source may be eligible for incentives towards the purchase and installation of qualifying devices.
- The incentive amounts vary depending on the location of the residence and the household income, with some households qualifying for the full replacement cost.
- CARB administers the program to promote the voluntary replacement of old wood-burning stoves with cleaner and more efficient alternatives.
- The Program is implemented by the California Air Pollution Control Officers Association (CAPCOA) in coordination with local air pollution control districts or air quality management districts (Districts). CAPCOA will determine how much funding will be available to each District participating in the Program.

Program Structure

CARB

- Administer Program
- Develop statewide Program guidelines

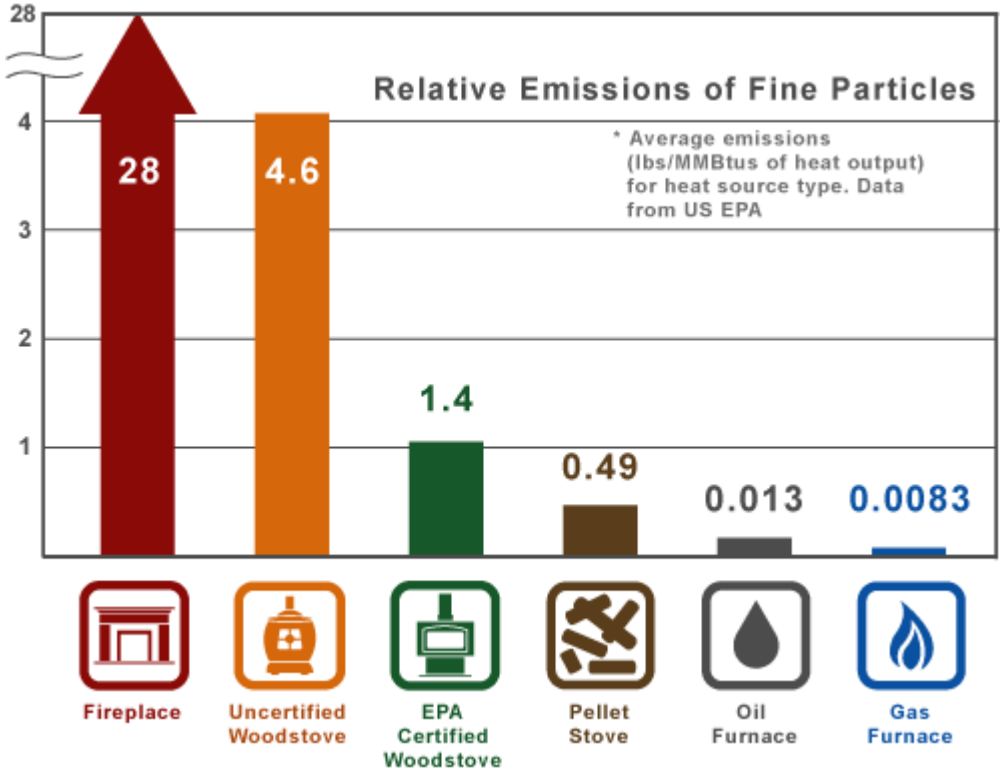
CAPCOA

- Distribute funds to districts
- Oversee Program implementation

District

- Develop district specific guidelines
- Implement program in their district

Why Retire Uncertified Wood Stoves?



Source: "Consumers: Energy Efficiency and Wood-Burning Stoves and Fireplaces "http://epa.gov/burnwise/energyefficiency.html

- Residential wood stoves produces GHGs, fine particulate matter, black carbon, carbon monoxide, volatile organic compounds, and hazardous air pollutants
- Residential wood stoves are forecasted to be the largest individual source of anthropogenic black carbon in 2030 absent implementation programs
- These emissions have serious health and climate impacts
- Reduction in black carbon is necessary to meet California's climate and goals and ambient air quality standards for fine particulate matter

Legislative Framework

Senate Bill 563

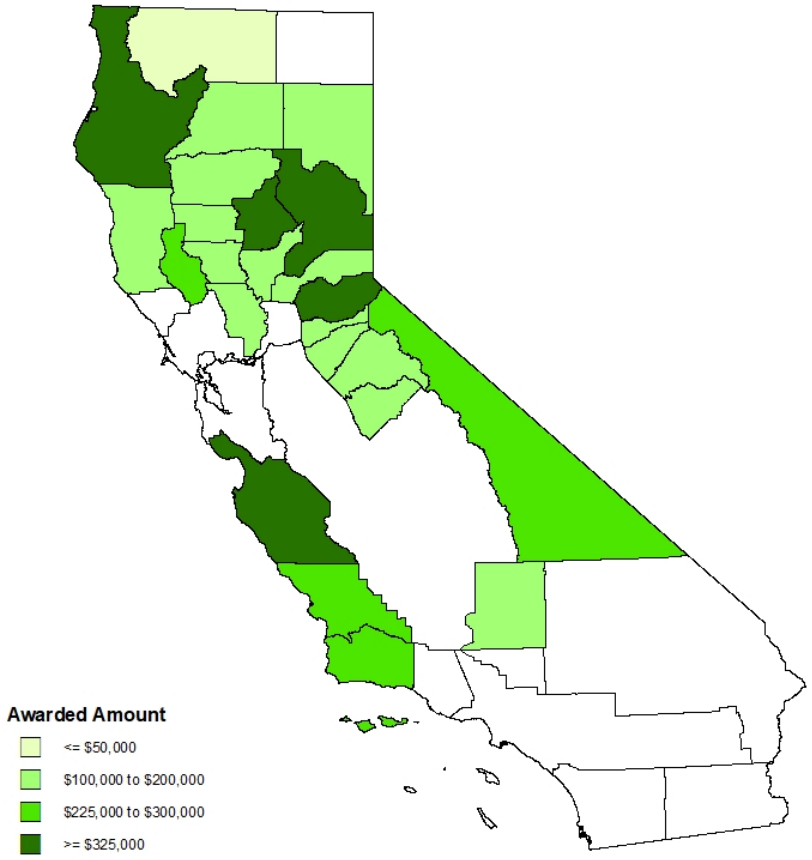
- Established the Woodsmoke Reduction Program
- Authorized monies from the Greenhouse Gas Reduction Fund to be allocated for incentives

$5 million in 2016-2017 budget

$3 million in 2018-2019 budget

Districts Participating in the Program

- 24 districts participate in the program
- Allocations range from $50 K to $425K between 2016-2017



Key Elements

- Provide incentives for a voluntary replacement of uncertified wood burning devices used as a primary source of heat
  - Enhanced vs. standard incentives
  - Vouchers vs. rebates
- Maximize benefits to priority populations
- Achieve greenhouse gas emission reduction as well as important co-benefits

Households considered 'Priority Population' may be able to replace their old device at no cost.

Co-Benefits

- Improve indoor and outdoor air quality
- Improve visibility
- Reduce heating cost
- Increase safety
- Improve comfort

How to Qualify for the Program?

Contact your local air district

- Check if the district participates in the program
- Obtain an application from the air district

Check if your existing home heating device qualifies for the program

- Is your primary source of heat an uncertified wood stove/insert or a fireplace?

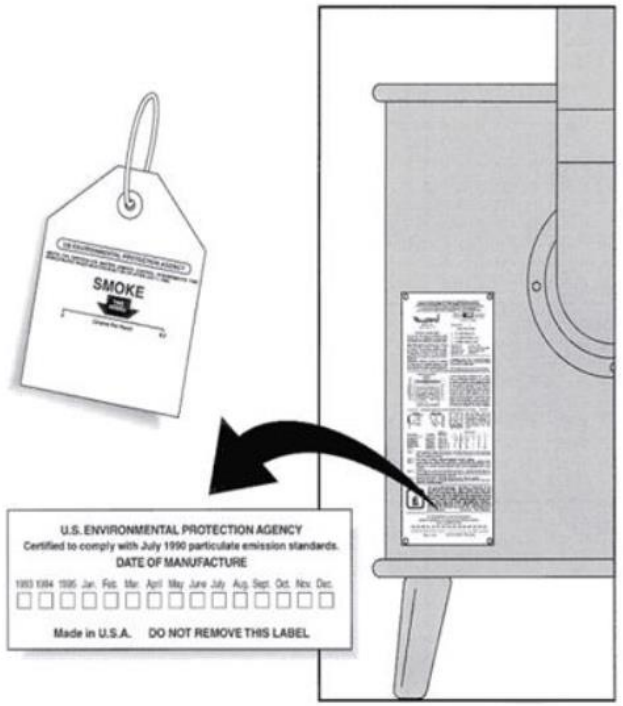
Submit an application to your local air district

- Applicant must agree to:
  - Select an eligible replacement device
  - Have it professionally installed
  - Surrender the old wood stove or insert for recycling
  - Get trained on proper device operation and maintenance

Identifying Uncertified Stoves

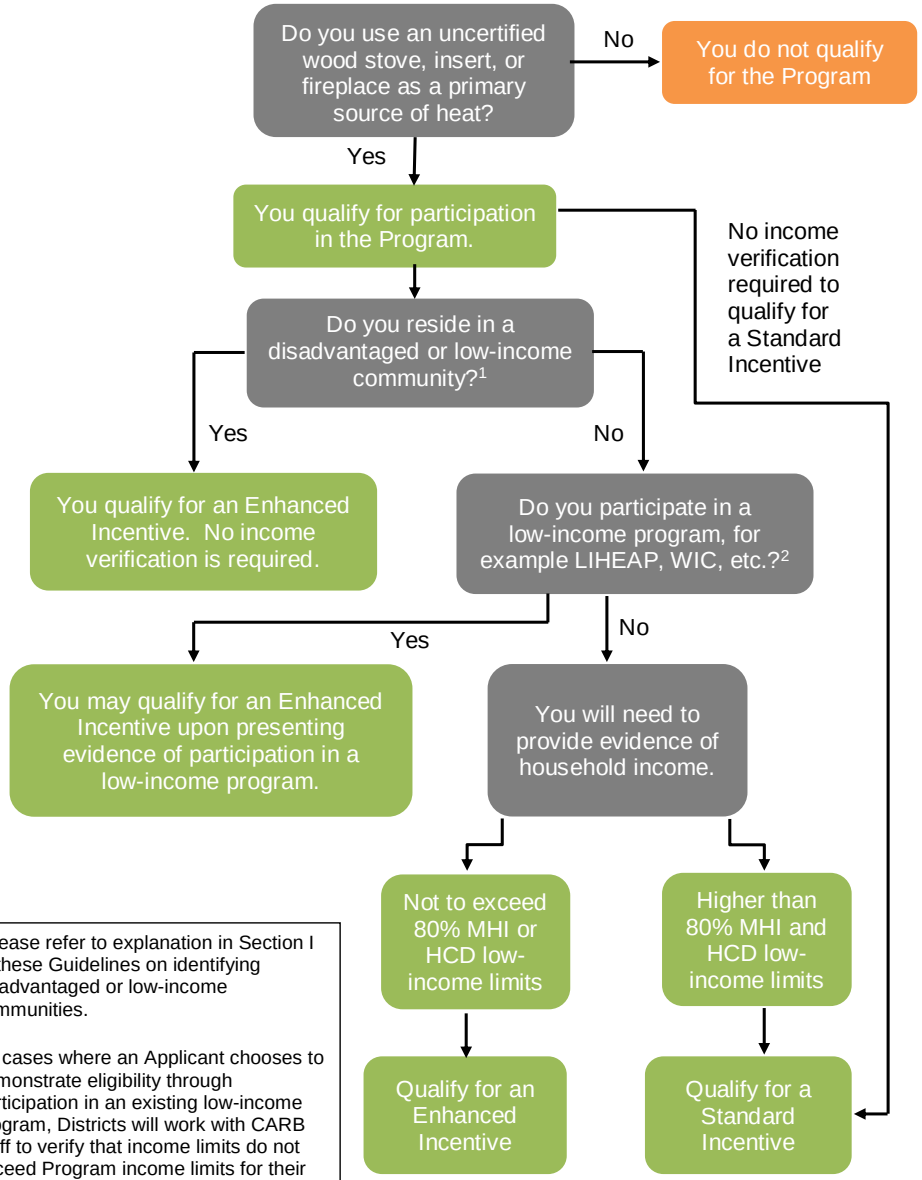
- Installation date (all stoves installed prior to July 1, 1988 are uncertified)
- Check the stove model against the lists of U.S. EPA certified stoves
  - Current list: https://www.epa.gov/compliance/list-epa-certified-wood-stoves
  - Historical list: https://www.epa.gov/compliance/historical-list-epa-certified-wood-heaters
- Check the back of the stove for a certification label

EPA certification label circa 1988 to present



Eligibility Criteria

Figure 2. Approval Process



[1]Please refer to explanation in Section I of these Guidelines on identifying disadvantaged or low-income communities.

[2]In cases where an Applicant chooses to demonstrate eligibility through participation in an existing low-income program, Districts will work with CARB staff to verify that income limits do not exceed Program income limits for their area.

Eligible Replacement Devices

2016 - 2017	2018 - 2019
Wood stoves or inserts with emission rates not to exceed 4.5 grams/hour	Wood stoves or inserts with emission rates not to exceed 2 grams/hour
Electric, natural gas, or propane heating devices	Electric, natural gas, or propane heating devices
	Pellet stoves or inserts with emission limits not to exceed 2 grams/hour
	Ductless mini-split heat pump

Information

CARB Website: https://www.arb.ca.gov/planning/sip/woodsmoke/reduction_program.htm

CAPCOA Website: http://www.capcoa.org/woodsmoke-reduction-program/

Draft Woodstove Reduction Program Guidelines:
https://www.arb.ca.gov/planning/sip/woodsmoke/2018_2019_wrp_guidelines.pdf

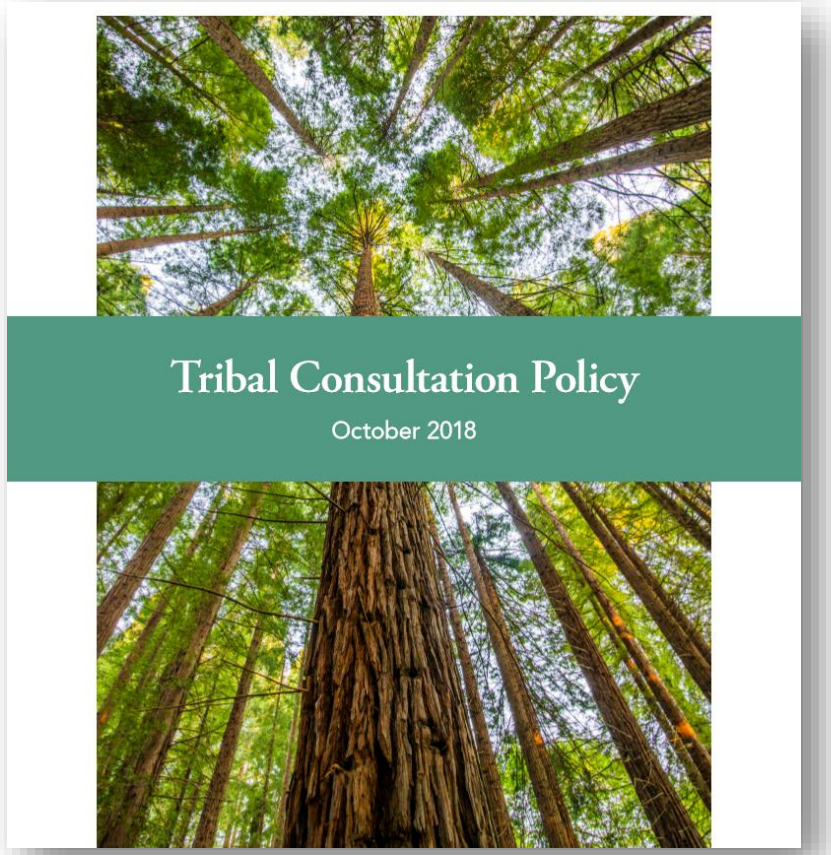
Contact Person: Kasia Turkiewicz, (916) 445-6497, kasia.turkiewicz@arb.ca.gov

7. Tribal Consultation Policy

GOVERNMENT-TO-GOVERNMENT RELATIONS

Purpose

- Basic policy framework committing CARB to engage in government-to-government consultations
- Educates CARB staff on basic tribal concepts
- Directs CARB staff on what to do if staff receives a tribal consultation request
- Fulfill intent of Executive Order B-10-11 and Assembly Bill 52
- Identifies guiding principles
- Provides a list of action items



History

- Governor Brown signed Executive Order B-10-11 in 2011
  - Directed all state agencies to consult with California Native American Tribes
- Legislature signed Assembly Bill 52 in 2014
  - Amended CEQA to include consultation requirements
  - Added cultural resources to the list of potential significant effect on the environment
  - Created statutory requirements for notifying and consulting with tribes when a lead agency is engaging in an environmental analysis
- CalEPA adopted a Tribal Consultation Policy in 2009 committing to consultation with California Native American Tribes
  - Updated it in 2015
  - Instructed each BDO to implement a Tribal Consultation Policy unique to the work of that agency

2018 Activities

- The Board heard the Tribal Consultation Policy in October 2018 and the Executive Officer signed it in November 2018
- CARB created a both a tribal relations website and a tribal listserv so tribes could receive pertinent information related to air pollution and climate change

Information

CARB Website: https://ww2.arb.ca.gov/tribal-relations

Tribal Consultation Policy:
https://www.arb.ca.gov/regact/nonreg/2018/california_air_resources_board_tribal_consultation_policy.pdf?_ga=2.267260110.1752094432.1545093509-903971413.1542328807

Contact Person: Shannon Dilley, (916) 322-3940, shannon.dilley@arb.ca.gov

8. Reference Materials

ACRONYMS AND LEGAL REFERENCES

Acronyms

- CARB: California Air Resources Board
- CalEPA: California Environmental Protection Agency
- CCI: California Climate Investments
- CDFA: California Department of Food and Agriculture
- CEC: California Energy Commission
- CO2: Carbon dioxide
- CNRA: California Natural Resources Agency
- BDO: Boards, Departments, Offices
- BEV: Battery electric vehicle
- FCEV: Fuel cell electric vehicle
- GDP: Gross domestic product
- GHG: Greenhouse gas
- GWh: Gigawatt hour
- GWP: Global warming potential
- HEV: Hybrid electric vehicle
- LCFS: Low carbon fuel standard
- MTCO2e: Metric ton of carbon dioxide equivalent
- MMTCO2e: Million metric tons of carbon dioxide equivalent
- PHEV: Plug-in hybrid electric vehicle
- SLCP: Short lived climate pollutant
- SGC: Strategic Growth Council
- TAC: Tribal Advisory Committee
- VMT: Vehicle miles travelled
- ZEV: Zero emission vehicle

Legal References

- **Assembly Bill 32 (AB 32):** California Global Warming Solutions Act of 2006 (Nunez, Stat. 2006, Ch. 488)
- **Assembly Bill 52 (AB 52):** Native Americans: California Environmental Quality Act (Gatto, Stat. 2014, Ch. 532)
- **Senate Bill 350 (SB 350):** Clean Energy and Pollution Reduction Act of 2015 (De Leon, Stat. 2015, Ch. 547)
- **Senate Bill 32 (SB 32):** California Global Warming Solutions Act of 2006: emissions limit (Pavely, Stat. 2016, Ch. 249)
- **Assembly Bill 398 (AB 398):** California Global Warming Solutions Act of 2006: market based compliance mechanisms: fire prevention, fees: sales and use tax manufacturing exemption (Garcia, Stat. 2017, Ch. 135)
- **Assembly Bill 617 (AB 617):** Nonvehicular Air Pollution: criteria air pollutants and toxic air contaminants (Garcia, Stat. 2017, Ch. 136)
- **Senate Bill 563 (SB 563):** Residential Wood Smoke (Lara, Stat. 2017, Ch. 671)

The End