

# **ARB Policies and Actions for Environmental Justice**

## **A Ten Year Retrospective**

**Board Presentation  
November 17, 2011**

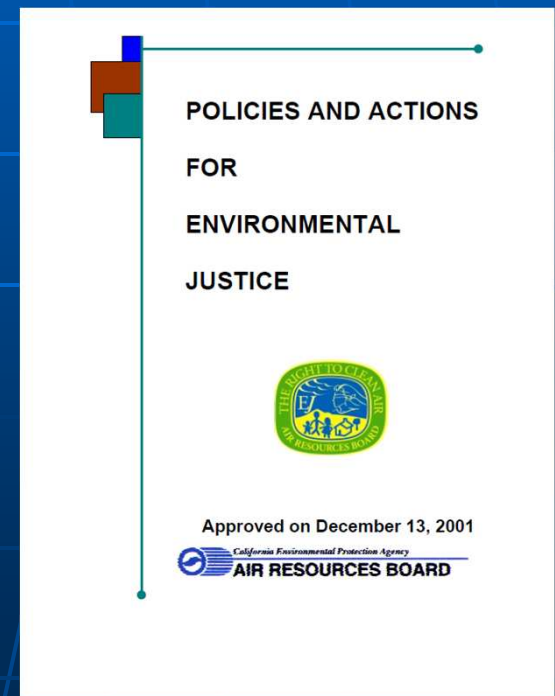
California Environmental Protection Agency



**Air Resources Board**

# Overview

- Board adopted Environmental Justice Policies and Actions in 2001
- Today's presentation highlights implementation



# ARB Environmental Justice Policies

- I. Incorporate environmental justice (EJ) into all ARB programs
- II. Strengthen community outreach
- III. Meet air quality standards and reduce toxic air pollutants
- IV. Strengthen enforcement in communities
- V. Assess and reduce cumulative emissions, exposure and risk
- VI. Engage local planning agencies
- VII. Conduct community research

# EJ Incorporated into All ARB Programs

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- Regulatory development
- Incentive programs and bond funding
- Enforcement
- Research

# Community Outreach Strengthened



- Community workshops
- Expanded access for non-English speakers
- ARB/CAPCOA complaint resolution protocol
- Low income assistance for Smog Check

# Public Participation Guide

- Provides information on how to be involved in decision-making
- Explains roles of state and local agencies
  - Regulations
  - Permitting
  - Enforcement
  - Resolving complaints

## Let's Clear the Air

*A Public Participation Guide to  
Air Quality Decision Making  
in California*



REPASO DE

## La etiqueta necesario ilustra el impacto ambiental de nuevos vehículos

Todos los nuevos vehículos deben de mostrarla que ilustra la puntuación de polución y efecto invernadero

Elegir un carro más respetuoso al medio ambiente acaba de hacerse más fácil. Una nueva regulación de California requiere que todos los nuevos vehículos exhibe una etiqueta que demuestre la potencial de smog y las emisiones de clima-cambiantes de los vehículos. La etiqueta clasificará las emisiones del vehículo contra los del resto de vehículos en el mismo año y modelo.

Cada etiqueta tendrá dos puntuaciones usando una clasificación de 1-10. Se ilustrará las emisiones clima-cambiantes del vehículo, la otra sus contribuciones de smog. Por comparando estos números, ahora los consumidores pueden seleccionar con confianza carros que cubren sus necesidades de transporte mientras reducir las emisiones dañosas.

Las puntuaciones de smog se basa en las emisiones normales, invernales y de consumo.

Aunque durante que eleg de comp variar dr SUVs, c

California reducir e

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### UP LINKS

- Reducing Air Pollution - ARB Programs
- Research Activities
- Health Effects of Air Pollution

### PROGRAM LINKS

- Ambient Air Quality Standards
- Air Toxics Program
- Asthma and Air Pollution
- Background
- Children's Health Research
- Community Health
- Environmental Justice
- Fact Sheets
- Health Outcome Data
- Health Updates
- Indoor Air Quality
- Library Catalog



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### UP LINKS

- Reducing Air Pollution Programs
- Research Activities
- Health Effects of Air Pollution

# Vamos Aclarando El Ambiente

*Un Manual de Participación Pública para Llevar a Cabo Decisiones sobre la Calidad del Aire Ambiental en California*

## Aire Limpio para las Comunidades de California

Noviembre 2000

fue llevado a cabo bajo la dirección de un equipo de científicos del Sur de California. Los científicos estudiaron a 5,500 niños en el Sur de California que viven en comunidades con distinta contaminación del aire. Los científicos siguieron a los niños comunidades y después compararon su salud respiratoria con de contaminación del aire en sus comunidades.



# EJ Policies in Action

- Diesel Program
- Neighborhood Air Toxics Reductions
- Climate Change Program





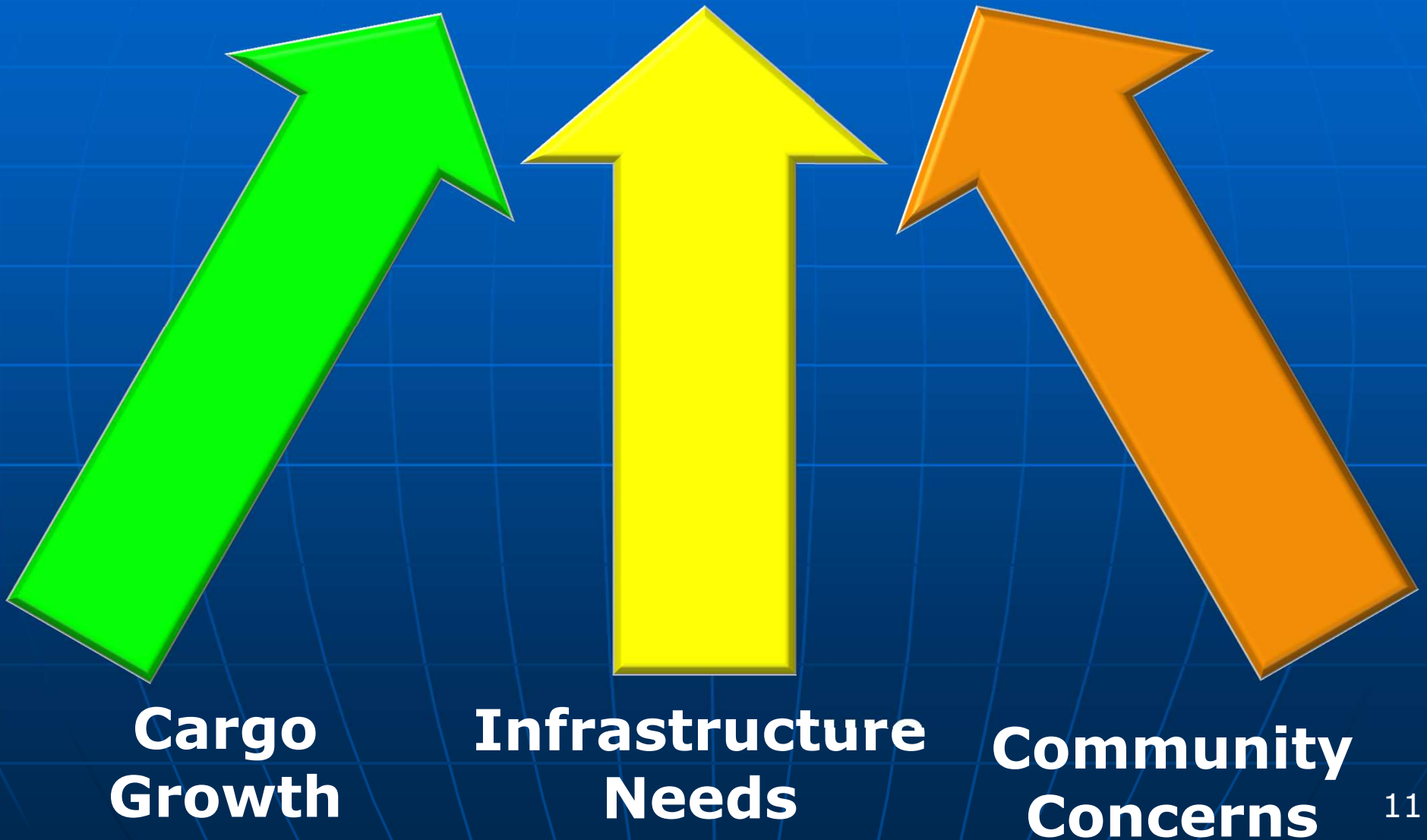


# Diesel Program

# Diesel Risk Reduction Plan

- Diesel Risk
  - One million diesel engines (typical day)
  - 70-80% of all air cancer risk
- Reduction Plan
  - Reduce diesel PM emissions, exposures and risk 85% by 2020
  - Reduce NO<sub>x</sub> to meet SIP targets
  - Almost every type of diesel engine subject to controls

# Emissions Reduction Plan for Ports and Goods Movement – 2005



# Tools to Reduce Diesel Impacts in EJ Communities

Community outreach

Assessments and research

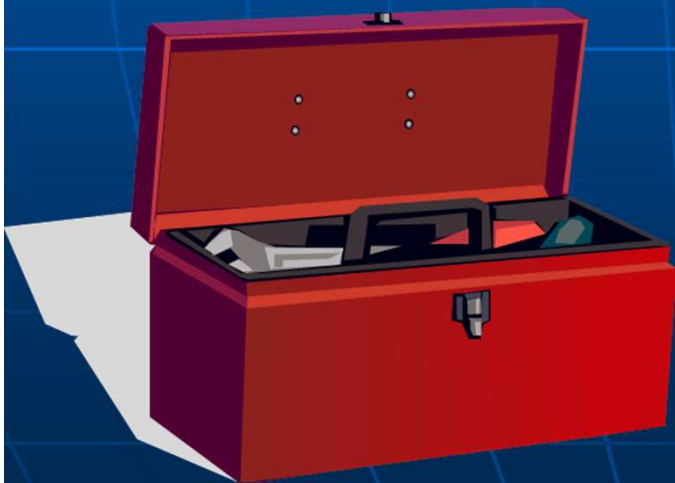
Regulations

Enforceable agreements

Port/industry initiatives

Targeted incentives

Enhanced enforcement



# Prioritize Diesel Rules to Get Fastest Reductions in EJ Communities

- Port and railyard assessments
- Design actions to reduce local risk



# Regulations and Agreements for Cleaner Freight Operations

- ✓ Port and railyard trucks
- ✓ Statewide trucks and buses
- ✓ Truck/trailer efficiency
- ✓ Truck idling and refrigeration units
- ✓ Harbor craft
- ✓ Cargo handling equipment
- ✓ Locomotive/railyard agreements
- ✓ Ship shore power
- ✓ Low sulfur diesel fuel



# Community Priority: Diesel Truck Emissions

- Truck traffic through neighborhood
- Idling at distribution centers, railyards and ports



# Community Enforcement: EJ Strike Force



**15,000 Trucks**



**2,700 Locomotives**



**300 Ships**

# Incentives Speed Progress

- Prop 1B – \$460,000,000 at ports, railyards, freeways, warehouses and border
- 50% of Carl Moyer funding dedicated to EJ communities



# Goods Movement – Today

Since 2005:

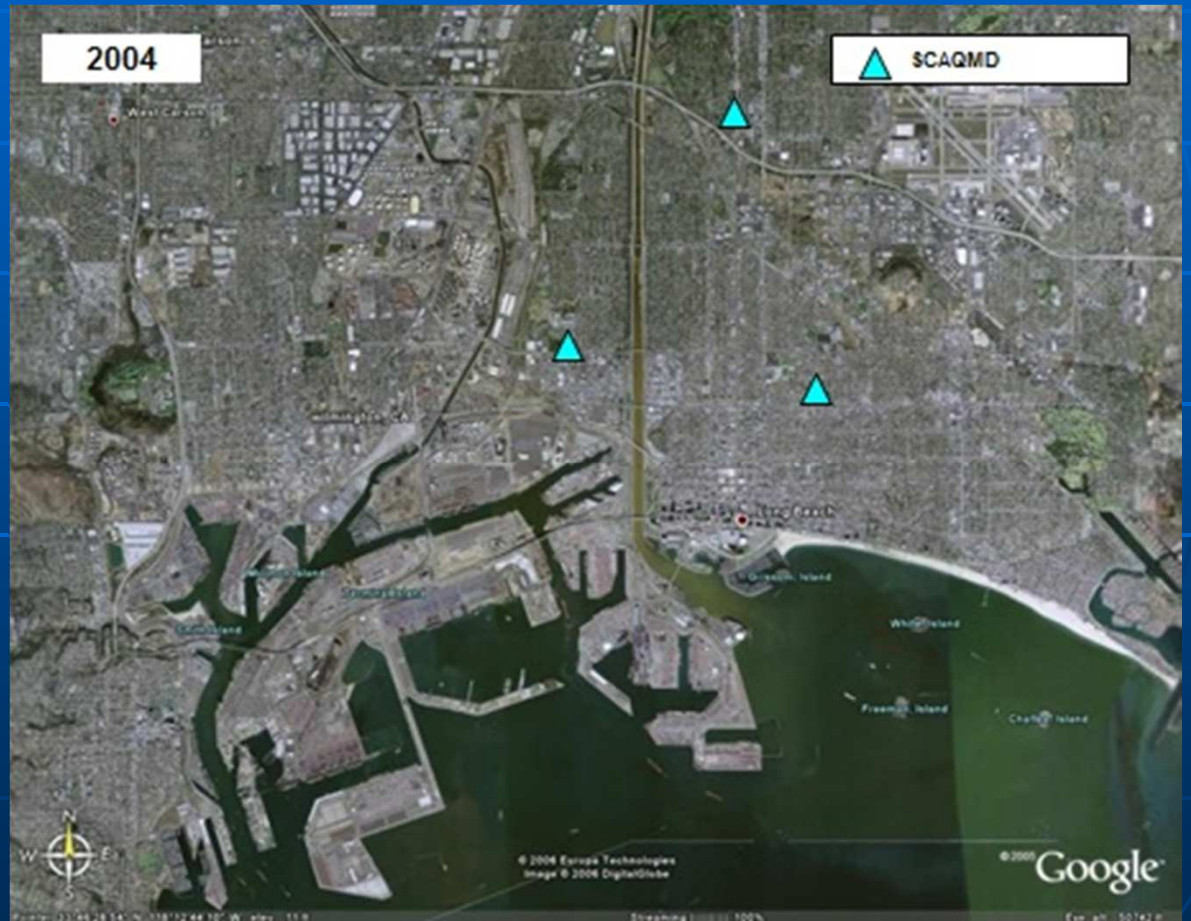
**50% reduction  
in diesel soot and health risk  
at the largest ports and railyards**





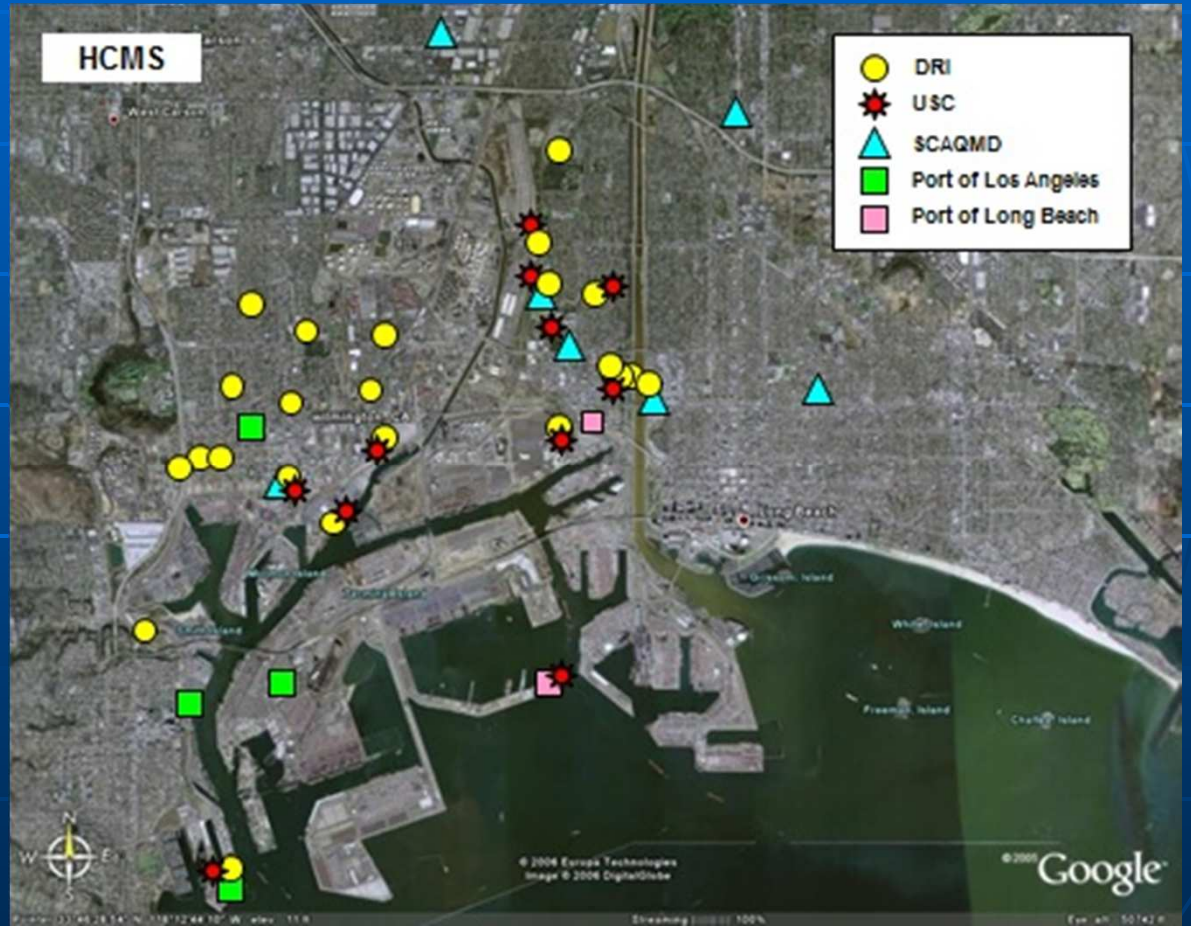
# Harbor Communities Monitoring Study

- Residents participated in study design
- Measured 50% improvement



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# Goods Movement – New Reductions

- No “drayoffs” at ports (late 2011)
- Transition of port/rail truck fleets (2013)
- PM filters for other trucks (2012+)
- Wider clean fuel zone for ships (2012)
- Ships plug into electric grid (2012+)
- More clean yard and regional locomotives (2012+)

# Reducing Diesel Pollution from Other Sources



- Cleaner School Buses
  - 8,473 buses retrofit
  - 955 buses replaced
  - Pre-1977 buses retired by Jan. 1, 2012



# Neighborhood Air Toxics Reductions

# Neighborhood Air Toxics

- Community Concerns
  - Cumulative impact of local pollution sources
  - Proximity to home and schools
- Risk Reduction
  - Community assessments
  - Enhanced regulations and enforcement
  - Land use guidance



# Barrio Logan Assessment

## Chrome Platers

- Residents concerned about multiple toxics
- Found high levels of chromium near source
  - At home next to facility, 200-fold higher
  - Across the street, up to 8-fold higher
- ARB strengthened chromium regulation
  - All communities benefit



# Enhanced Enforcement

- Enforcement is key for maintaining health benefits to communities
- Large-scale effort: thousands of small facilities across California
- Districts are mainstay of enforcement





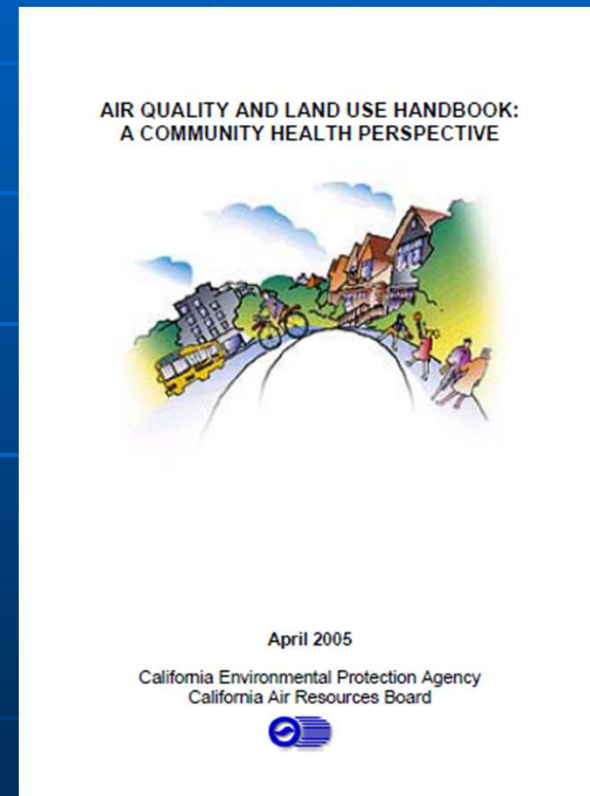
# Boyle Heights Assessment

## PM and Toxics near Roadways

- Community contains several busy freeways
- Found high levels of PM and toxics near roadways
  - UCLA/USC research project and others found similar results
  - Adverse health effects found near roadways
- Diesel regulations lowering near-source levels of toxics and PM<sub>2.5</sub>

# Land Use Guidance to Reduce Near-source Impacts

- Provides recommendations on appropriate distance from pollution sources
- One consideration along with housing and transportation needs





# Climate Change Program

# California Global Warming Solutions Act of 2006

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- AB 32 identified ARB as lead agency for climate change mitigation
  - Reduce California greenhouse gas emissions to 1990 levels by 2020
  - Established Environmental Justice Advisory Committee

# Climate Change Program

## Protecting Communities

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- Ensure progress on EJ while meeting climate change goals
- Concurrent reduction of criteria pollutants and air toxics
  - Biorefinery siting guidance
  - Adaptive management of cap-and-trade regulation
  - Criteria pollutant and air toxics reductions for the largest industrial sources

# Climate Change Program

## Future Activities

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- Seek opportunities to reduce greenhouse gas, criteria pollutant, and air toxic emissions
- Enforce regulations
- Monitor and address community impacts of cap-and-trade regulation
- Continue to seek public input on all aspects of climate change program





# Research

# EJ Tools under Development

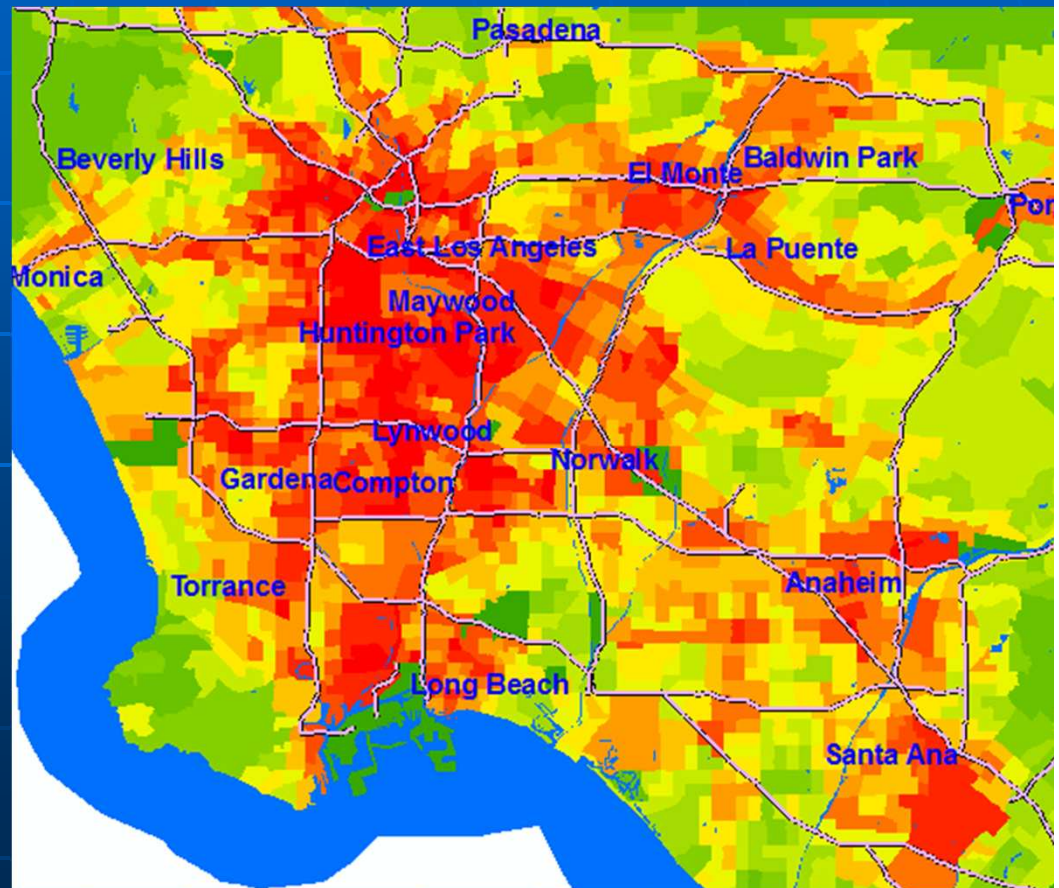
- EJ Screening Method

- SoCal and SF Bay Area complete
- SJV being added

- Cal/EPA

- OEHHA assessing cumulative multi-media impacts

- Community input



# Research to Inform EJ Actions

- Test new vehicle technologies and fuels
  - Verify toxics reductions
- Assess communities
  - EV-based pollution monitor
- Test high-efficiency filtration
  - Homes of asthmatic children
  - Schools and school buses



# Summary

- Environmental justice now an integral part of all ARB programs
- Goal is equal benefits for all

