



# 2017 Climate Change Scoping Plan Update

February 16, 2017



# Outline

- ▣ Background
- ▣ Progress Update
- ▣ OEHHA AB 32 Implementation Report
- ▣ Refinements to Scoping Plan
- ▣ Schedule

# Background: 2017 Scoping Plan Update

- Path to achieve 40% reduction in GHGs by 2030 compared to 1990 levels
- Builds on California's success reducing GHGs
- Continues California's leadership in implementing actions to achieve global climate goals
- Proposed Plan draws on the successes and the lessons learned from the previous plans
- Proposes continuing successful programs that have served as a model for other states and jurisdictions around the world
- Proposed Plan achieves 2030 GHG reduction target and continues to make our communities and economy more resilient and equitable at the same time

# Objectives for Scoping Plan

- ▣ Achieve 2030 target
- ▣ Provide direct GHG emissions reductions
- ▣ Provide air quality co-benefits
- ▣ Minimize emissions leakage
- ▣ Support climate investment in disadvantaged communities
- ▣ Protect public health
- ▣ Facilitate sub-national and national collaboration
- ▣ Support cost-effective and flexible compliance
- ▣ Support Clean Power Plan and other federal action

# Progress Update Since January Board Hearing

- February 2: OEHHA AB 32 Implementation Report
- February 9: Scoping Plan Workshop
- February 14-15: Environmental Justice Advisory Committee Meeting
- February 15: ARB Board & Environmental Justice Advisory Committee Joint Public Discussion

# Governor's Directive

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*"I am directing that the Office of Environmental Health Hazard Assessment (OEHHA) prepare by December 1, 2016, a report analyzing the benefits and impacts of the greenhouse gas emissions limits adopted by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code within disadvantaged communities described in Health and Safety Code Section 39711. The report shall be made available to the public and the Legislature. OEHHA shall update the report at least every three years.*

*The report, at a minimum, shall track and evaluate*

- (a) greenhouse gas emissions, criteria air pollutants, toxic air contaminants, short-lived climate pollutants, and other pollutant emission levels in disadvantaged communities; and*
- (b) public health and other environmental health exposure indicators related to air pollutants in disadvantaged communities."*

# Initial Report

- Focuses on Cap-and-Trade Program's large GHG emitters
- Uses available data on emissions from covered facilities
  - California Air Resources Board
  - US EPA
- Characterizes relationships between greenhouse gas emissions and toxic and criteria air pollutants by facility
- Case studies: examines trends in some emissions within two industrial sectors
- Future reports will also analyze the benefits and impacts of other AB 32 programs

Tracking and Evaluation of Benefits and Impacts of  
Greenhouse Gas Limits in Disadvantaged Communities:  
Initial Report

*Office of Environmental Health Hazard Assessment  
California Environmental Protection Agency*

February 2017



# Conclusions

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- A large fraction of the Cap-and-Trade Program's GHG-emitting facilities are located in or near SB 535 disadvantaged communities.
- There are moderate correlations between GHG emissions and emissions of criteria air pollutants, especially PM2.5, and other air toxics.
  - Some sectors showed stronger correlations (for example, refineries).
- Case studies of cement plants and refineries illustrate some of the complexities in the relationships between GHG and co-pollutant emissions
- Overall reductions in GHGs are likely to result in lower emissions of pollutants, but the impact at individual facilities can vary based on many factors.
- Co-reporting of high quality data on criteria, air toxic and greenhouse gas emissions for facilities subject to the Cap-and-Trade Program would substantially aid the investigation of emissions impacts.

# Next Steps

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- Expand investigation of year-over-year data across larger set of facilities.
  - Pre-2014 emissions
- Investigate changes occurring at facilities and how they related to emissions of GHGs and other pollutants.
- Analyze benefits and impacts of AB 32 programs
  - Cap-and-Trade Program
  - Other AB 32 programs

# Refinements to the Scoping Plan

- ▣ Economic refinements outlined in the January Draft
- ▣ Supplemental health analysis in response to January Board member comments
- ▣ Presentation of additional scenario detail in response to January Board and stakeholder comments

# Refinements: More Detail on Cap & Tax Alternative

- The Cap-and-Trade Program would be replaced by a Cap & Tax Regulation post-2020
- Emissions from all sectors would decline 4.5% each year
  - Industry, transportation, energy, agriculture, recycling and waste, high GWP gasses, residential and commercial
- Each metric ton of GHG emissions would be subject to a tax at the social cost of carbon
- No trading and no use of offset credits
- Emissions above the annual cap would be subject to penalties

# Cap & Tax: Additional Details

- As with carbon tax alternative, tax set at social cost of carbon
- Cap decline, not tax, would be main driver of emissions reductions
- Additional work would be needed to address new industry moving to the State
- Would need regulation to set individual caps for all entities, including establishing a base year
- Staff does not believe each sector can reduce at this level year over year
- Expected to have higher cost than proposed plan and may result in loss of industry, jobs, and GDP

# Ongoing Refinements to the Economic Analysis

- ▣ Refinements outlined in the January Draft
- ▣ Supplemental analysis and presentation of additional detail in response to Board and stakeholder
- ▣ For Proposed Plan and Alternatives
  - ▣ Estimate the regional impacts, including in disadvantaged communities
  - ▣ Sensitivity analysis
  - ▣ Macroeconomic analysis
  - ▣ Quantify and monetize the estimated avoided health impacts resulting from implementation

# Estimating Health Impacts from Scoping Plan

- Some actions that reduce GHG emissions can lead to reductions in ozone and PM<sub>2.5</sub> precursors, and TACs
  - Reduced adverse health impacts
  - Reduced cancer risk
- Actions that result in GHG reductions in the transportation sector can lead to significant health benefits from improved air quality
  - Active transportation



# Schedule

- ▣ CEQA comment period: January 20 – March 6
- ▣ March Workshop
- ▣ EJAC and Community Meetings
- ▣ April 2017: Release Final Proposed Scoping Plan
- ▣ April 2017: Final Board consideration