

# **First Update to Climate Change Scoping Plan**

**Public Workshop  
October 15, 2013**

# *Process for Draft Update*

- AB 32 mandates scoping plan updated every five years
- Discussion Draft released October 1, 2013
- Seeking public input on Draft:
  - October 15, 2013 workshop in Sacramento
  - October 24, 2013 Board meeting
  - Written comments due November 1, 2013
- Proposed Update and Environmental Assessment:
  - Released November 2013
  - Presented to Board in December 2013

## ***Development of Draft Update***

- Four public workshops in Summer 2013 (Northern, Central, and Southern California)
- Environmental Justice Advisory Committee
- Economic Advisors
- Interagency focus area workgroups
- Individual meetings with stakeholders (e.g., tribes, industry associations, environmental groups)

# *Overview of Draft Update*

- Latest Climate Science/ Short Lived Climate Pollutants
- Progress of Scoping Plan measures
- Impacts of AB 32
- Regional and local initiatives
- Continuing progress beyond 2020
- Recommendations to transition beyond 2020 in six key focus areas
- Future funding opportunities

# ***Latest Understanding of Climate Science***

- September 2013 IPCC Fifth Assessment Report
- California particularly vulnerable
  - Extreme heat
  - Wildfires
  - Drought
  - Extreme storms
  - Coastal flooding and erosion
- Underscores need to accelerate GHG emission reductions

# ***Short Lived Climate Pollutants (SLCP)***

- Atmospheric lifetime of a few days to a few decades
- High global warming potential
- Include black carbon, methane, and HFCs
- SLCP already regulated by ARB
- Further control strategies are being evaluated
- ARB committed to develop SLCP strategy by 2016

# ***Progress of Scoping Plan Measures***

## ***Key Achievements***

- Cap-and-Trade program
- Low Carbon Fuel Standard
- 33 Percent Renewable Portfolio Standard
- Advanced Clean Cars
- Regional Transportation-Related Greenhouse Gas Targets (SB 375)
- Building and Appliance Energy Efficiency Standards
- California Solar Initiative (i.e., Solar Hot Water Heaters and Million Solar Roofs)
- Water Efficiency
- Mandatory Commercial Recycling
- High-Speed Rail

# ***Progress of Scoping Plan Measures Meeting the 2020 GHG Emissions Target***

<b>Category</b>	<b>2020 (MMT)</b>
<b>AB32 Baseline 2020 Forecast Emissions</b>	509
<b>Expected Reductions from Sector-Based Measures</b>	
<b>Energy</b>	25
<b>Transportation</b>	23
<b>High GWP</b>	5
<b>Waste</b>	2
<b>Cap-and-Trade Reductions</b>	23*
<b>2020 Target</b>	431

**\*Cap-and-Trade emission reductions depend on the emission forecast.**



# *Analyzing Public Health Impacts of AB 32*

- Many Scoping Plan measures have public health co-benefits
  - Improved air quality
  - Active transportation/physical activity
  - Greener buildings
- Efforts are underway to address unintended negative health impacts
- New tools/data to help quantify impacts and monitor and track progress

# *Analyzing Economic Impacts of AB 32*

- ARB engaged Economic Advisors to identify metrics and methodologies for future analyses
- Measures underway but still in early stages
- Net impact of AB 32 small in relation to the \$2 trillion California economy
- Data collection in preliminary stages
  - Assessment of direct and indirect regulatory cost to be conducted in coming years
- Continue to engage external economic experts, researchers, and stakeholders

# ***Environmental Justice***

- Environmental Justice Advisory Committee (EJAC)
- EJAC initial recommendations considered during development of Update
- Future EJAC meetings will be held before final proposed Update completed

# *Environmental Assessment (EA) of Scoping Plan Update*

- EA will be prepared according to requirements of ARB's certified program under CEQA
- The EA covers:
  - Foreseeable methods of compliance
  - Potential for adverse impacts
  - Feasible mitigation measures
- The EA will be released for a 45-day comment period with the Proposed Scoping Plan later in November
- Input on the appropriate scope and content of the EA is welcomed as it is being developed

# *Regional and Local Initiatives*

- Locally-driven efforts critical to success of AB32
- Efforts are reducing emissions across sectors
  - Improved municipal operations
  - Codes, standards, and general plan improvements
  - SB 375 regional planning
- Roughly 70 percent of California jurisdictions have either completed policies or programs to reduce GHG emissions or are in the process of adopting them.

# *Continuing Progress Beyond 2020*

## *Need for Midterm Target*

- Governor's 2050 goal
- Establishing a 2030 target would:
  - Frame the next suite of emission reduction measures
  - Ensure continued progress toward scientifically-based targets
  - Provide greater levels of market certainty in the near term
- Midterm target should align with targets under consideration elsewhere in the developed world

# *Overarching Needs for Post 2020 Transition*

- Coordinated approach to reducing GHG emissions across all economic sectors
- Changes to technology
- Changes to transportation, land use and housing development
- Supporting sustainable choices
- Coordinated infrastructure planning and development

# ***Recommendations to Transition Beyond 2020***

- Six key focus areas:
  - Energy
  - Transportation, land use, fuels, housing planning and development, and infrastructure
  - Agriculture
  - Water
  - Waste Management
  - Natural and working lands



# ***Recommendations to Transition Beyond 2020 Energy***

- Develop an overarching statewide energy plan
- Decarbonize natural gas generation
- Define procurement strategies for CHP
- Evaluate expansion of the Renewable Portfolio Standard
- Develop efficiency standards for buildings and appliances
- Develop educational programs on energy efficiency and demand-response
- Upgrade transmission and distribution system
- Promote R&D of renewable technologies

# ***Recommendations to Transition Beyond 2020 Transportation, Land Use, Fuels, Housing Planning and Development, and Infrastructure***

- Coordinate development of the State's transportation plans and regional planning efforts
- Support regional planning, local leadership, and implementation of sustainable community strategies
- Grow markets for clean passenger transportation, advanced technology trucks and equipment, and low carbon transportation fuels
- Support investment in vehicle miles traveled reduction strategies
- Promulgate regulations that support markets for low carbon transportation fuels
- Support development of renewable and low carbon fuel production facilities

# ***Recommendations to Transition Beyond 2020 Agriculture***

- Promote precision irrigation, water pump efficiency, and installation of electric pumps
- Support adding digester biogas to natural gas pipelines and bioenergy to electric grid
- Research reduction of methane emissions from livestock manure and digestive processes
- Develop outreach program for farmers and ranchers on GHG emission reduction practices
- Align farmland preservation with local and regional land use planning
- Evaluate State agency efforts on reporting synthetic fertilizer usage

# ***Recommendations to Transition Beyond 2020***

## ***Water***

- Assess decoupled water rates and develop rate and revenue structures to decouple municipal utility programs
- Develop policies with local partners that reflect the economic, social, and environmental value of water in California
- Develop pricing and rate structure policies that promote efficiency, while ensuring that low-income households are able to purchase necessary water supplies
- Increase non-traditional water supplies and make water and wastewater systems more energy efficient
- Increase water conservation and energy efficiency
- Promote water-energy conservation outreach and education

# ***Recommendations to Transition Beyond 2020 Waste Management***

- Pursue waste management alternatives
- Consider regulatory actions to reduce GHG emissions and remove organic wastes from landfills
- Streamline permitting and resolve conflicting requirements
- Initiate education campaign to promote the GHG benefits of waste diversion and recycling
- Develop standardized product quality requirements for composting and anaerobic digestion processes
- Improve State procurement of recycled-content materials

# ***Recommendations to Transition Beyond 2020***

## ***Natural and Working Lands***

- Ensure that the State's forests operate as a net carbon sink and establish carbon sequestration goals for California forests
- Fill data gaps in California's inventory and refine forest inventory data
- Ensure policies by land use agencies emphasize conservation of natural and working lands and promote urban forestry and green infrastructure
- Expand urban forestry and green infrastructure programs and investments, particularly in California's EJ communities
- Investigate funding opportunities to protect forests, urban forests, rangelands and wetlands, and to enable restoration and improved management practices

# ***Future Funding Opportunities***

- Funding critical to both near and long-term GHG emission reduction goals
- Greenhouse Gas Reduction Fund (Cap-and-Trade auction proceeds)
- Other funding programs include:
  - Alternative and Renewable Fuel and Vehicle Technology Program (AB 118)
  - Energy efficiency projects for schools (Proposition 39)
  - Electric Program Investment Charge Program (EPIC)
- Recommendations for funding in specific areas to support GHG emission reduction goals

# *Next Steps*

- Accept comments on Discussion Draft by November 1, 2013
- Release Proposed Update and EA in November 2013 for public comment
- Board consideration of Proposed Update and EA in December 2013
- Final Proposed Update and written responses to EA comments to Board for approval in Spring 2014



# *Contact Information*

- Submit written comments by November 1, 2013 to:  
<http://www.arb.ca.gov/cc/scopingplan/2013comments.htm>
- Direct other inquiries to:  
Mike Tollstrup  
Chief, Project Assessment Branch  
Stationary Source Division  
Air Resources Board  
[mtollstr@arb.ca.gov](mailto:mtollstr@arb.ca.gov)  
(916) 323-8473