

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

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