

JOINT LEGISLATIVE COMMITTEE ON CLIMATE CHANGE POLICIES

ASSEMBLYMEMBER EDUARDO GARCIA, CHAIR

SENATOR BEN HUESO, VICE CHAIR

INFORMATIONAL HEARING:

2030 TARGET SCOPING PLAN

JUNE 14, 2017

3:00PM

STATE CAPITOL ROOM 127

2030 TARGET SCOPING PLAN OVERVIEW

The Global Warming Solutions Act of 2006 (Chapter 488 [AB 32, Núñez/Pavley]) requires the State Air Resources Board (ARB) to prepare and approve a Scoping Plan at least once every five years. The first Scoping Plan was approved by the ARB in 2008, with an update approved by the ARB in 2014. The ARB began development of the 2030 Target Scoping Plan in October 2015 in response to EO B-30-15 and SB 32, which codified California's greenhouse gas reduction target of 40 percent below 1990 levels by 2030.

The Scoping Plan is to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas (GHG) emissions from sources of or categories of sources of GHG emissions towards achieving the State's climate goals. The Plan shall identify and make recommendations on direct emissions reduction measures, alternative compliance mechanisms, market-based compliance mechanisms, and potential monetary and nonmonetary incentives for sources and categories of sources that are necessary or desirable to meet the State's climate goals.

The ARB shall evaluate all relevant information as well as the potential costs and potential economic and noneconomic benefits of the Plan to California's economy, environment, and public health using the best available economic models, emission estimation techniques, and other scientific methods. The Plan shall take into account the relative contribution of each source or category to statewide GHG emissions. The ARB shall also identify opportunities for emissions reductions measures from all verifiable and enforceable voluntary actions.

The ARB is required to hold a series of public workshops, a portion of which in regions of the state that have the most significant exposure to air pollutants. The ARB is required to convene an Environmental Justice Advisory Committee to advise it in developing the Plan and any other pertinent matters in implementing AB 32 and SB 32.

The Proposed 2017 Scoping Plan Update addresses reductions across major sectors of the State's economy. ARB has conducted 5 public Board hearings and 15 workshops on the Plan. Key strategies within ARB's preferred scenario:

- a) Implementation of SB 350:
 - a. Achieving 50 percent Renewables Portfolio Standard (RPS) with doubling of doubling of energy efficiency savings
- b) Increasing the stringency of the Low Carbon Fuel Standard (LCFS) to 18 percent
- c) Implementation of the Mobile Sources Strategy:
 - a. Maintaining existing GHG standards for light- and heavy-duty vehicles
 - b. Putting 4.2 million zero-emission vehicles (ZEVs) on the road
 - c. Increase ZEV buses, delivery and other trucks
- d) Implementation of the Sustainable Freight Strategy:
 - a. Improve freight system efficiency
- e) Implementation of the Short-Lived Climate Pollutant (SLCP) Reduction Strategy:
 - a. Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels
 - b. Reduce emissions of black carbon 50 percent below 2013 levels
- f) Increased stringency of SB 375 Sustainable Communities Strategies 2035 Targets
- g) Implementation of a Post-2020 Cap-and-Trade Program:
 - a. Declining caps
 - b. Continued linkage with Québec, and linkage to Ontario, Canada
 - c. Continue to explore options on how to support greater reductions
- h) Reducing GHG emissions from the refinery sector by 20 percent
- i) By 2018, develop the Integrated Natural and Working Lands Action Plan

Potential questions for the panel:

- a) How has the ARB evaluated the original 2008 Scoping Plan? What programs have been more or less cost effective?
- b) How were the proposed scenarios evaluated to inform the selection of the preferred scenario?
- c) Will there be excess allowances from the pre-2020 program?
- d) Should ARB continue to allow the use of offsets to meet compliance obligations?
- e) Explain the projected impacts of the new refinery reduction rule in the Scoping Plan – has the Board considered applying a similar rule to other entities, like power plants?
- f) What policy recommendations were made that did not make it into the plan? Why?
- g) What metrics should we use to ensure California stays on track to meet our climate goals as the Plan is implemented?

ECONOMIC MODELING

The ARB uses two models to examine how proposed actions to reduce GHG emissions may affect the California economy: the California PATHWAYS Model and the Regional Economic Models, Inc. (REMI). PATHWAYS can model the buildings and equipment throughout the economy and estimates the supply and use of all forms of energy. The model can input policy changes to estimate how the use of energy, GHG emissions, and costs will be affected. The REMI model takes the costs estimates from PATHWAYS to examine how changes in expenditures and prices can affect economic growth, employment, and income. A significant strength of the PATHWAYS model is its ability to quantify interactions between sectors (more electric vehicles will increase electricity demand).

Potential questions for the panel:

- a) What factors influence the level of uncertainty in ARB's models?
- b) What are the relative costs of direct regulations as compared to Cap and Trade as a mechanism to reduce emissions?
- c) What are the merits to adding a hard price ceiling to the current cost containment measures in the Cap and Trade Program?
- d) Why does the Plan projection to the 2030 targets show a constant rate of change?
- e) What other modeling has been done outside of PATHWAYS and REMI? In what way do those modeling results differ from the results in the current draft of the Plan?
- f) What is the spectrum of job opportunities and impacts we can expect as these policies are implemented?

AB 197 COMPLIANCE

AB 197 (E. Garcia) created the Joint Legislative Committee on Climate Change Policies (Committee) to ascertain facts and make recommendations to the Legislature concerning the state's programs, policies, and investments related to climate change.

Specifically, the chair of the ARB shall appear at least annually before the Committee to present on emissions of GHGs, criteria pollutants, and toxic air contaminants from all sectors covered by the Scoping Plan. The report shall evaluate emission trends and include a discussion of the regulatory requirements, initiatives, and other programs that may influence those trends. The report also may include recommendations from the state board for legislative action and consideration.

When adopting rules and regulations, the ARB shall consider the social costs of the emissions of GHGs. The ARB must prioritize both direct emissions reductions at large stationary sources of greenhouse gas emissions sources and direct emission reductions from mobile sources, as well as direct emissions reductions from other sources.

When updating the Scoping Plan, the ARB shall identify for each emissions reduction measure, including each alternative compliance mechanism, market-based compliance mechanism, and potential monetary and nonmonetary incentive the following information:

- a) The range of projected GHG emissions reductions that result from the measure.
- b) The range of projected air pollution reductions that result from the measure.
- c) The cost-effectiveness, including avoided social costs, of the measure.

Potential questions for the panel:

- a) How did the ARB analyze the policies within the Plan for direct emissions reductions in GHGs, criteria air pollutants, and toxic air contaminants?
- b) How will ARB analyze the social cost of carbon for strategies in the Plan?
- c) What strategies could ARB use to reduce co-pollutants at stationary sources?