

## ARB's AB 32 Scoping Plan

The AB 32 Scoping Plan is a description of the specific measures ARB and others must take to meet the objective of AB 32: Reduce statewide greenhouse gas emissions to 1990 levels by 2020 ("2020 limit"). The reduction measures identified in the Scoping Plan must be proposed, reviewed, and adopted as individual regulations by January 1, 2011, to become operative by January 1, 2012.

A total reduction of 174 million metric tons (MMT), or 30% compared to business as usual, is necessary to achieve the 2020 limit. The major sources of greenhouse gas emissions that must be cut are the transportation and electricity sectors, as well as high global warming potential (GWP) products.

According to the Scoping Plan, reductions of approximately 140 MMT (~80%) will be achieved through identified "regulatory" measures. Of the regulatory measures, more than 54% of the tons come from four measures in the transportation and electricity sectors.

The additional 34.4 MMT (~20%) will be achieved through unspecified additional reductions resulting from a "cap-and-trade" market. These reductions are also expected to come primarily from the transportation and electricity sectors.

The top four regulatory measures in the Scoping Plan are:

1. Vehicle greenhouse gas standards = 31.7 MMT

These "Pavley" regulations, adopted by ARB pursuant to AB 1493 (2002), apply to light-duty vehicles sold in California beginning with the 2009 model year. Implementation of the regulations by California and at least 13 other states depends on a waiver from U.S. EPA which was denied in 2007, but is being revisited by the Obama Administration.

2. Increased energy efficiency = 26.3 MMT

California has long been a leader in energy efficiency. This measure expects much more. Most of the tons are expected to come from additional building and appliance efficiency, to reduce electricity demand and natural gas use. This will require further improvements in efficiency standards for both new and existing buildings, as well as appliances, plus additional spending for rebates and other incentives.

3. 33% by 2020 Renewables Portfolio Standard (RPS) = 21.3 MMT

A 20% RPS was enacted in 2002, although it is worth noting that the RPS has not increased significantly in the five-plus years since the RPS law was implemented. Renewable energy remains about 12% of California's total electricity sales, largely based on power plants built in the 1980's. ARB attributes approximately one MMT to each point increase in the RPS. Given the limited progress thus far, significant changes in policy and practice will be necessary to meet this goal.

#### 4. Low Carbon Fuel Standard (LCFS) = 15 MMT

The LCFS was adopted by ARB in 2007 as an early action measure, following an Executive Order, to achieve a 10% reduction in the "carbon intensity" of gasoline and diesel fuel. It is currently in implementation, with many remaining questions about how it will actually work as a regulation (*e.g.* how to measure the full life-cycle greenhouse gas emissions of a fuel).

Additional cap-and-trade:

ARB proposes to achieve the additional reductions (34.4 MMT) necessary to meet the 2020 limit through a cap-and-trade program that links with other states participating in the Western Climate Initiative to create a regional market. ARB's pledges to ensure California's program meets all applicable AB 32 requirements for market-based compliance mechanisms.<sup>1</sup>

<sup>1</sup> 38505. (k) "Market-based compliance mechanism" means either of the following:

(1) A system of market-based declining annual aggregate emissions limitations for sources or categories of sources that emit greenhouse gases.

(2) Greenhouse gas emissions exchanges, banking, credits, and other transactions, governed by rules and protocols established by the state board, that result in the same greenhouse gas emission reduction, over the same time period, as direct compliance with a greenhouse gas emission limit or emission reduction measure adopted by the state board pursuant to this division.

38570. (a) The state board may include in the regulations adopted pursuant to Section 38562 the use of market-based compliance mechanisms to comply with the regulations.

(b) Prior to the inclusion of any market-based compliance mechanism in the regulations, to the extent feasible and in furtherance of achieving the statewide greenhouse gas emissions limit, the state board shall do all of the following:

(1) Consider the potential for direct, indirect, and cumulative emission impacts from these mechanisms, including localized impacts in communities that are already adversely impacted by air pollution.

(2) Design any market-based compliance mechanism to prevent any increase in the emissions of toxic air contaminants or criteria air pollutants.

(3) Maximize additional environmental and economic benefits for California, as appropriate.

(c) The state board shall adopt regulations governing how market-based compliance mechanisms may be used by regulated entities subject to greenhouse gas emission limits and mandatory emission reporting requirements to achieve compliance with their greenhouse gas emissions limits.