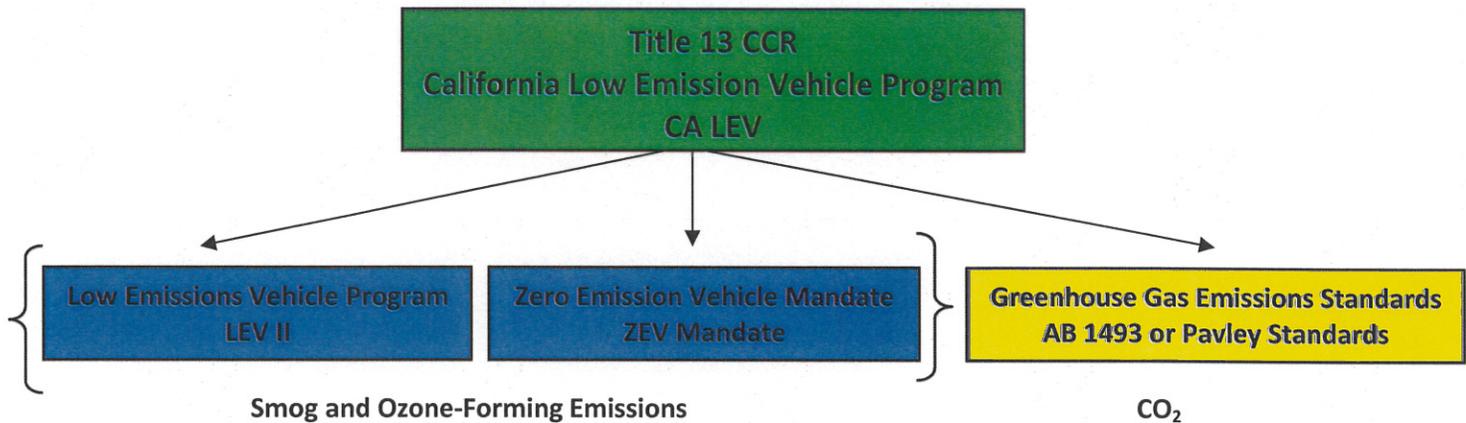


## California's Low Emission Vehicle Program in New Hampshire

The Alliance of Automobile Manufacturers – a trade association of twelve car and light truck manufacturers including BMW Group, Chrysler LLC, Ford Motor Company, General Motors, Jaguar Land Rover, Mazda, Mercedes-Benz, Mitsubishi Motors, Porsche, Toyota, Volkswagen, and Volvo – strongly opposes the adoption of the California's Low Emission Vehicle (CA LEV) Program in New Hampshire.

### Understanding CA LEV and the ZEV Mandate

CA LEV is a series of standards which regulate tailpipe emissions, fuel efficiency, and the type of motor vehicles sold in participating states. Specifically, CA LEV is comprised of three sections – LEV III, the ZEV Mandate, and greenhouse gas emissions standards (commonly referred to as AB 1493 or the Pavley standards).



- **Greenhouse Gas Emissions Standards (AB 1493 or Pavley Standards)** – AB 1493 regulates carbon dioxide and other greenhouse gas emissions.
- **Low Emission Vehicle Standard (LEV III)** – LEV III regulates smog and ozone-forming emissions such as exhaust PM<sub>2.5</sub>, NO<sub>x</sub>, volatile organic compounds, carbon monoxide, and air toxics.
- **The Zero Emission Vehicle Mandate (ZEV Mandate)** - The ZEV Mandate is a battery-electric (BEV), plug-in hybrid electric (PHEV), and hydrogen fuel cell (FCV) vehicle mandate intended to force the commercialization of these technologies and to reduce smog and ozone-forming, as well as greenhouse gas emissions.

CA LEV is a California program designed by California legislators and regulators. States electing to participate in CA LEV do so at deference to the California Air Resources Board (CARB). By adopting CA LEV, states' effectively cede authority to California and tie themselves to all future changes California makes to these programs.

Section 177 of the Federal Clean Air Act allows states to follow either the federal or the California program regulating motor vehicle emissions. Furthermore, in choosing CA LEV, states must maintain identical standards to California, within the sections adopted.

The U.S. EPA has deemed the ZEV Mandate severable from the other two provisions of CA LEV. The decision to adopt CA LEV without the ZEV Mandate has precedence. Delaware, Washington, and Pennsylvania have all done so.

Significant changes to both CA LEV and its corresponding federal programs have occurred over the last several years and are outlined below. The Alliance believes that these developments further support the Alliance's position on that the adoption of CA LEV by states is duplicative and unnecessary.

### **Harmonization of California and Federal Emissions Standards**

On May 19, 2009 President Obama announced a National Program on greenhouse gas emissions and fuel economy that bridged the California and federal requirements, beginning in model year 2012 (January 2, 2011). This aggressive, nationwide program calls for a 54.5 mile per gallon fleet average by 2025.

The creation of the National Program was the first major development in the harmonization of the California and federal standards. California amended its AB 1493 regulations to specify that manufacturers that comply with the National Program are compliant with California's greenhouse gas emissions standards for model years 2012 – 2025. Harmonization of these formerly competing standards makes a state's participation in CA LEV's greenhouse gas provisions duplicative and unnecessary.

Smog and ozone-forming emissions from new vehicles have dropped by about 99% since these emissions were first regulated. In 2012, CARB adopted updated "LEV III" Low Emission Vehicle Standards requiring that the various pollutants which contribute to smog, be reduced by another 70% or more. This year U.S. EPA adopted the Tier 3 Rule, which starts in 2017, to match the emission standards required under LEV III. EPA noted that Tier 3 rules are intended "to harmonize with California's Low Emission Vehicle program, thus creating a federal vehicle emissions program that would allow automakers to sell the same vehicles in all 50 states." Thus, the criteria pollutant program and the greenhouse gas program are now, for all practical purposes, a single national program.

The adoption of CA LEV is often painted as an effort to "clean the air;" however that misrepresents the benefits CA LEV provides. The difference in air quality benefits under the Tier 2 and LEV II programs were already nearly identical; there was no measureable environmental benefit attributable to LEV II over Tier 2. The harmonization of Tier 3 and LEV III will ensure the benefits associated with these programs are identical.

### **ZEV Mandate – All Cost, No Benefit**

With the National Program in place and the near-term harmonization of LEV III and Tier 3, the ZEV Mandate remains the outstanding provision of CA LEV. The program mandates that specific percentages of a state's new vehicle market consist of BEV, FCV, and PHEVs. It calls for approximately three percent of each participating state's new vehicle sales be BEV, FCV, or PHEVs in 2018. By 2025, the mandate is approximately 15%, of which approximately five percent can be PHEVs and the remaining 10% must be BEVs or FCVs.

In comparison, New Hampshire's 2013 sales data shows that the new vehicle market consisted of approximately 0.12% BEVs and 0.23% PHEVs. In order to meet the percentages dictated by the ZEV Mandate, New Hampshire consumers would need to embrace and purchase of BEVs, FCVs, and PHEVs at a rate that is more than 10 times faster than the public embraced and purchased hybrid vehicles – a technology, that unlike ZEV technologies, requires absolutely no change in consumer behavior.

While there is no measureable environmental benefit associated with the ZEV Mandate, it remains the most expensive regulation in the history of CARB. The latest CARB figures estimate that this regulation may cost over \$14 billion in incremental costs alone. As a point of comparison for what New Hampshire's costs may be, California suggests the incremental costs in Maine will reach approximately \$93 million annually by 2025.

California estimates that in 2016, a BEV75 (battery electric vehicle with a 75 mile range) will cost \$17,562 more than a comparable gasoline vehicle. This cost will ultimately be shared by manufacturers, dealers, consumers, and the state. California currently offers consumers significant financial incentives, parking incentives, free electricity, free home chargers and installation, and HOV lane access to make purchasing a BEV more attractive. Currently, to the best of the Alliance's knowledge, New Hampshire offers no incentives for ZEVs.

Not only are the market quotas established by the ZEV Mandate unreasonable, but the infrastructure necessary to support three to 15% of the new vehicle fleet as ZEVs is not in place in New Hampshire, or arguably any other state. California has invested more than \$120 million in electric charging stations alone. With respect to hydrogen infrastructure, California has already invested nearly \$40 million, with an additional \$100 million already appropriated. However, even with these significant investments by California, the feasibility of the ZEV Mandate is still in question.

## **Conclusions**

The Alliance and its member companies strongly support the development, production, and sale of zero emission vehicles and are eager to work with New Hampshire on building consumer acceptance of these advanced technologies outside of a technology mandate. The industry believes the path to consumer acceptance is not mandating sales, but creating appropriate market signals to customers that include incentivizing technology and building a supporting infrastructure.