



**AUTO ALLIANCE**  
DRIVING INNOVATION®

October 22, 2013

Clerk of the Board  
Air Resources Board  
1001 I Street  
Sacramento, California 95814

**Subject: ZEV Regulations**

Air Resources Board Members:

I am writing on behalf of the Alliance of Automobile Manufacturers (Alliance), a trade association of 12 car and light-truck manufacturers representing over 75 percent of the new vehicle market. We are writing to support the proposed amendments to the optional Section 177 state compliance path and to ask the Air Resources Board to consider a formal review of the Zero Emissions Vehicle (ZEV) regulations, specifically focusing on ZEV sales and use both in California and in the states that have adopted the ZEV regulations.

First, we support the proposed amendments to the optional Section 177 state compliance path. The changes reflect the agreement reached between the large volume manufacturers and the Section 177 states prior to the January 2012 Board hearing. The optional Section 177 state compliance path was developed to account for *minor* market variations in the Section 177 states. However, as explained below, we are concerned that it may not address the *major* market differences between California and all of the Northeast states that we currently see.

Automakers are committed to ZEV technology. Since 2011, automakers have introduced nine battery electric vehicles (BEVs), and six plug-in hybrid electric vehicles (PHEVs). By 2014, a total of 26 BEVs and PHEVs will be on the market, and three major automakers have announced plans to launch fuel cell vehicles (FCVs) commercially in 2015. These vehicles represent tens of billions of dollars in research, development, production and promotion. All of this will be for naught without a vibrant, robust commercially successful ZEV market. Automakers, perhaps more than any other group, need ZEVs to succeed in the market. We share the goal of a commercially successful ZEV market with ARB, environmentalists, utilities, and automobile dealers.

No state has shown its commitment to promoting ZEV technologies more than California, and the Alliance has worked closely with ARB, the Legislature, and the Brown Administration over the past year to secure critical funding for consumer incentives and infrastructure for both electric and hydrogen vehicles. California provides financial incentives for ZEV purchase and lease, important non-financial incentives such as free parking and single-passenger access to the high-occupancy vehicle (HOV) lanes, and the largest number of electric vehicle chargers in the country. Moreover, the climate and population distribution are ideally suited to ZEV technology.

---

**BMW Group • Chrysler Group LLC • Ford Motor Company • General Motors Company • Jaguar Land Rover  
Mazda • Mercedes-Benz USA • Mitsubishi Motors • Porsche • Toyota • Volkswagen • Volvo**

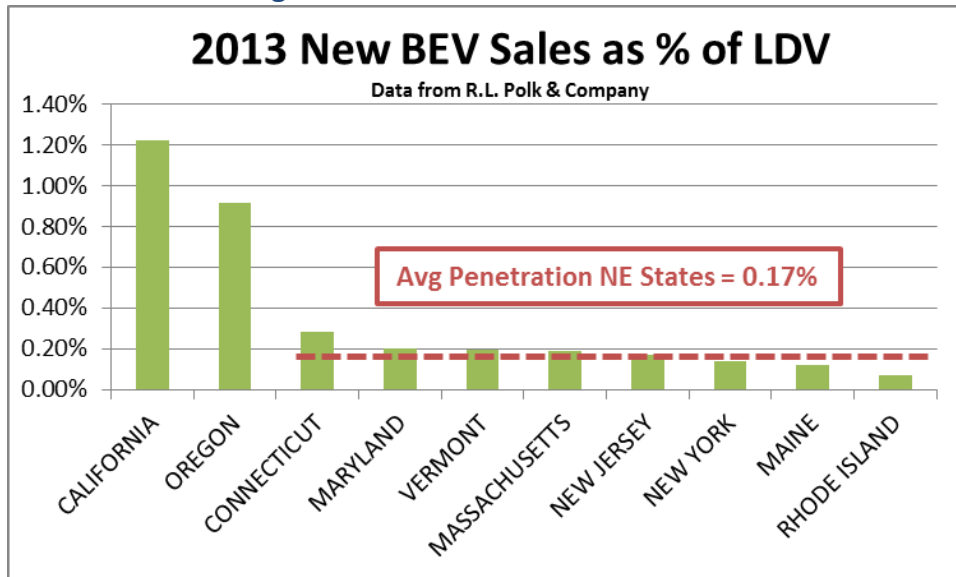
---

For their part, automakers offer a compelling mix of well-reviewed products, extensive, focused marketing and media coverage, and very competitive pricing. At this moment, for example, monthly leases for BEVs and PHEVs range from \$139 to \$299, with zero or near-zero down when the Clean Vehicle Rebate Program (CVRP) is considered. This compares very favorably with similar conventional vehicles. Finally, automakers are working harder than ever to educate consumers, dealers, emergency responders, and other stakeholders about the portfolio of available technologies and the advantages of each.

With all of this, we are off to a strong start in California. BEV sales tripled between 2012 and 2013, as additional models were introduced, and PHEV sales showed an increase (albeit slight) in the same period as well. Nonetheless, the ZEV market is still in its infancy. BEV sales in California represent slightly more than one percent of the market in California and far less in most other states. PHEV sales have yet to break the one percent mark even in California.

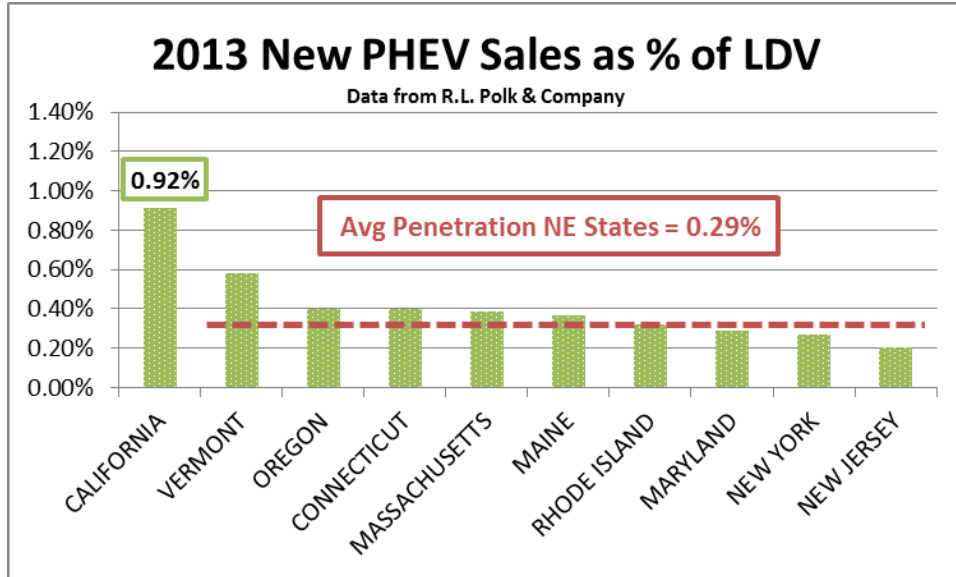
Moving forward from this strong start, to a larger, broader market will take more work. In particular, we are finding that the demand for these vehicles in Section 177 states is much different from California. As shown in Figure 1, BEV sales rate (as a percent of total light-duty vehicle (LDV) sales) in the Northeast represents only about a seventh of the sales in California. This was also true in 2012, the first year where sufficient vehicles were sold to show a trend.

Figure 1: BEV Sales CA vs Northeast



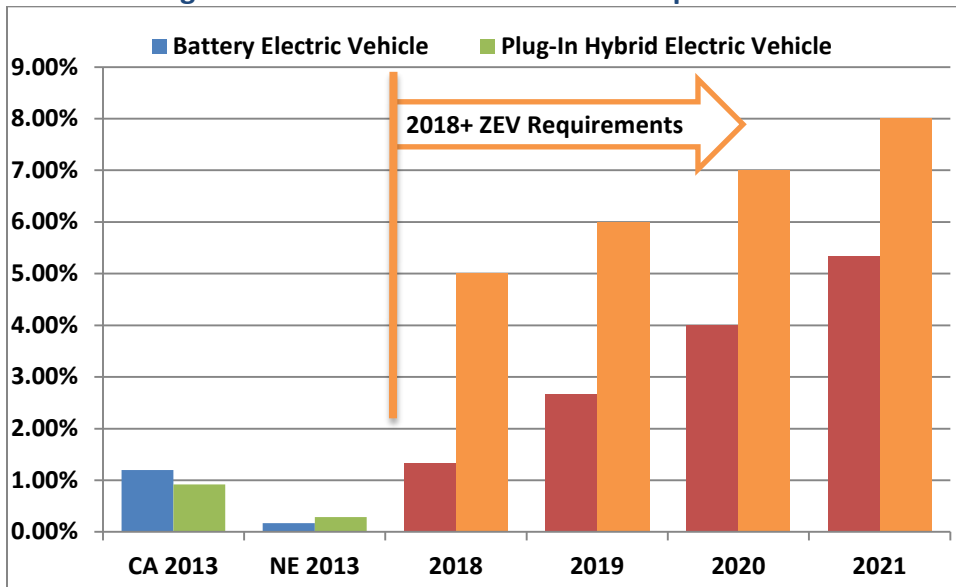
A similar story is true for PHEVs (see Figure 2), where sales of PHEVs in the Northeast states are less than a third of those in California. Again, this is consistent across the years for which we have data.

Figure 2: PHEV Sales CA vs. Northeast



Comparing the sales rates of BEVs and PHEVs to the required volumes in 2018-2021 shows how much progress is needed (Figure 3). It's also worthwhile to note that automakers are currently in the 2014 model year and the 2018 model year starts in 2017 calendar year.

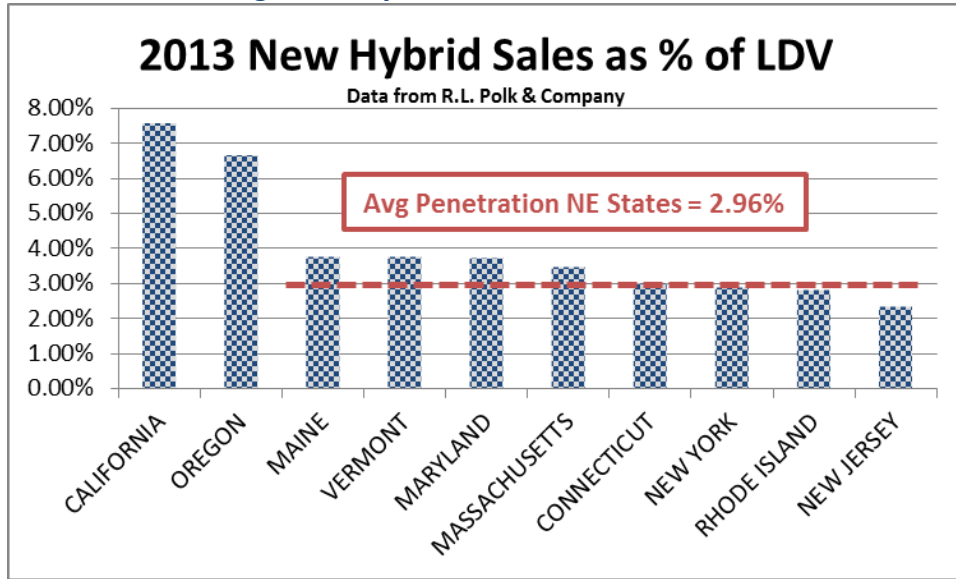
Figure 3: 2013 Sales vs. Future ZEV Requirements



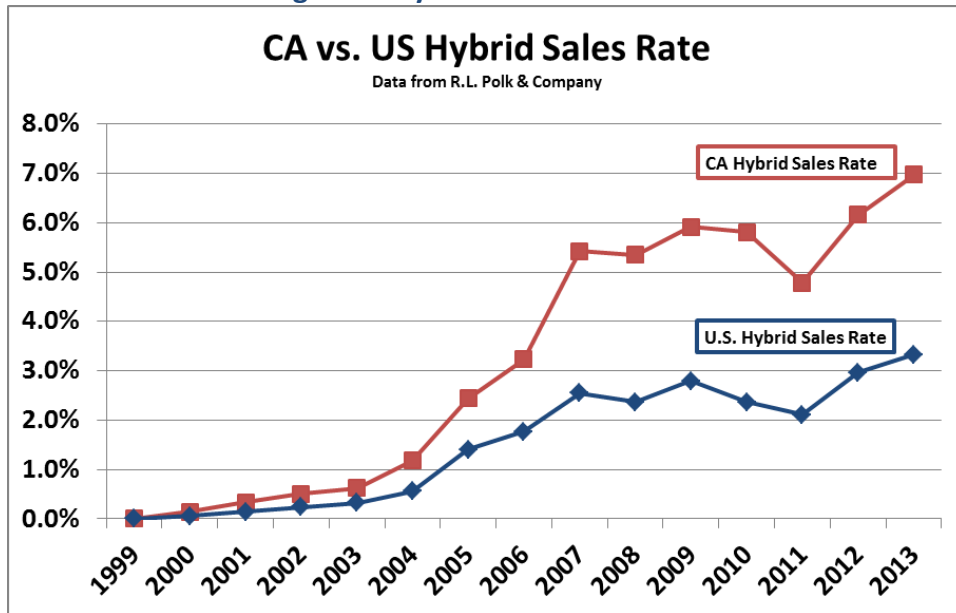
Matching the California incentives and infrastructure in the Northeast states will help. However, even in the case of hybrid vehicles, with no infrastructure requirements nor incentives in any

state, are selling at a rate in the Northeast that simply does not match that in California. As shown in Figure 4 below, after 14 years on the market, hybrids sell at less than half the rate in the Northeast when compared to California. As shown in Figure 5 below, U.S. sales of hybrids have trailed those in California for the past 14 years.

**Figure 4: Hybrid Sales CA vs Northeast**



**Figure 5: Hybrid Sales CA vs. U.S.**



Automakers continue to make strides on the technology front – improving performance and reducing costs. In addition to the market being in its infancy, the technology itself is quickly evolving and changing, particularly as it relates to performance improvements and cost reductions. A key question, however, continues to be the point at which these vehicles become economically

sustainable for automakers. Sales have clearly been buoyed by a significant package of federal, state, local, and manufacturer incentives. As both a public policy and sustainable business matter, however, it is unclear how long these incentives can and should last.

The last ZEV review was conducted in 2011 prior to significant ZEV introductions and sales. Since then, over 10 additional ZEV models have been introduced and a wealth of data is available on both ZEV sales and ZEV use. Historically, the ZEV program has been evaluated on a 2-3 year cycle.

For these reasons, the Alliance and its members request that the board consider the following proposed action. We believe it is appropriate to begin a formal assessment of the ZEV program, including the technology and market of ZEV and near ZEV technologies. If the ARB staff reviews the program in 2014, they could bring their findings and recommendations to the board in early 2015.

As part of this review, we believe a focus should be that despite identical requirements, the sales rate in the Section 177 states is not equal to the rate in California, and the Board and ARB Staff should assess this potential issue and determine whether adjustments might be appropriate in the future. While we support and will assist in staff's efforts to work with these states on incentives and infrastructure, we believe we must also work together to ensure that regulatory requirements in those states are consistent with consumer demand.

We appreciate your consideration and look forward to working with you and the ARB staff to implement these ambitious regulations.

Sincerely,



Steven Douglas  
Senior Director, Environmental Affairs

Copy: Richard Corey  
Alberto Ayala