

Clean Vehicle Rebate Project (CVRP) Long-Term Planning

December 8, 2015 Workshop

California's Zero-Emission Vehicle (ZEV) Deployment Goals: CVRP is a critical component in meeting the goals for ZEV deployment:

- CVRP supports the Governor's goal of increasing the number of ZEVs on California's roadways to 1.5 million ZEVs by 2025 as directed in Executive Order B-16-2012
- Senate Bill 1275 (De León, Chapter 530, Statutes of 2014) establishes the following goals:
 - Place one million zero-emission and near-zero emission vehicles in California by the beginning of 2023
 - Increase access to ZEVs for lower-income consumers and consumers in disadvantaged communities

SB 1275 Requirements for Long-Term Plan: The 2016-17 Funding Plan for Low Carbon Transportation & Air Quality Improvement Program (AQIP) must:

- Forecast the estimated funding needs for AQIP (including CVRP) for the next three funding cycles to be compatible with ZEV deployment goals
 - Update funding need estimates at least every three years
- Include an assessment of when a self-sustaining market is expected

ZEV Market & CVRP Demand: CVRP has provided rebates for more than 125,000 vehicles since the program's inception, however the light-duty (LD) ZEV market is still in its infancy and these vehicles currently make up a very small percentage of the overall new LD vehicle market. There are numerous factors affecting the uptake of ZEVs into California's LD vehicle market including:

- Upfront cost of ZEVs relative to conventional equivalents
- Product diversity and new ZEV model introductions
- Other incentives such as federal incentives, high occupancy vehicle (HOV) lane access, subsidized electricity, free parking, etc.
- ZEV awareness increased through education & outreach
- Fuel costs

The CVRP program changes mentioned above, along with additional factors may have an impact on the future growth of the ZEV market and consequently, CVRP rebate demand and funding needs. Due to the infancy of this dynamic market, long-term forecasts are likely to be highly speculative.

Potential Approaches for Initial 3-Year Funding Estimates:

ARB is requesting stakeholder input on potential methods and assumptions to be used in projecting CVRP funding needs for the next three funding cycles.

ZEV Deployment Goals

- Base our funding estimates on a steady growth rate that will meet deployment goals. Assumptions may include:
 - Setting proportions of vehicle types (BEV,PHEV,FCEV) to be constant or variable
 - Unvarying growth rate over time

Historical CVRP Trends

- Utilize growth trends of CVRP's historical data to forecast future demand. Assumptions may include:
 - Adjusting for seasonal/monthly variation
 - Viewing trends from the program's inception or from the first fiscal year CVRP saw consistent demand growth (FY 2012-13)
 - Holding current trends constant, such as growth of each technology category, or incorporating estimated variation

Percent of ZEV's in new LD vehicle market

- Examine growth of the percentage of ZEVs within the total new LD vehicle market. Assumptions may include:
 - Only examining comparable LD passenger vehicles and excluding LD trucks and/or LD SUVs
 - Rebates reflect only 75 percent of the ZEV market (approximate overall CVRP participation rate)

Other assumptions for various methods may include:

- Excluding low-volume categories (such as fuel cell vehicles) until volumes reach a point of significant impact on funding needs
- Consider effect of income cap and increased rebates for lower income consumers
- Excluding qualitative factors, such as new vehicle models and PEV awareness, from the assessment
- Assuming other incentives continue to be available, such as HOV lane access and federal ZEV incentive
- Implementation costs make up 5 percent of total rebate funding