

Executive Order B-16-12 Zero-Emission Vehicle Report for Zero-Emission Vehicles Approved in Fiscal Year 2014-15

Compliance Summary

The chart below reflects the summary of zero-emission vehicle (ZEV) compliance for fiscal year 2014-15 based on approved ZEV purchase requests and their corresponding ZEV credits.

FY 2014-15 ZEV Progress Chart						
A	B	C = (A-B)	D = (C/10)	E = (D/2)		
Total LD vehicle approved ⁱ acquisitions	Dept. designated special performance vehicle exemptions	LD vehicle approved acquisitions less special performance	ZEV purchase credits needed to meet 10% ZEV mandate	BEV acquisitions needed to meet 50% BEV mandate	Approved BEV acquisitions	Approved PHEV acquisitions
2,504	1,552	952	95.2	47.6	66	87
Total ZEVs approved		153	Total ZEV credits earned		101.40	
			Pre- FY 2014-15 ZEV credits used to meet 10% compliance		10.40	
			Total earned and used credits in FY 2014-15		111.8	
FY 2014-15 earned credits ZEV compliance %					10.65%	
FY 2014-15 earned and used credits ZEV compliance %					11.74%	

According to the chart above, the state exceeded both the 10 percent ZEV mandate and the 50 percent battery electric vehicle (BEV) mandate. BEV credits accounted for 69.32 percent of all ZEV credits earned, far exceeding the 50 percent requirement. The 101.4 total ZEV credits earned in 2014-15 equate to 10.65 percent of approved light-duty (LD) vehicle acquisitions (less special performance) while the sum of 2014-15 earned credits and pre-2014-15 credits used to meet the 10 percent requirement calculate to a total compliance percentage of 11.74.

At this time, 137 of the 153 approved 2014-15 ZEVs have been delivered or have had purchase orders executed and are pending delivery. From the process date of the purchase order, dealers have 150 days to deliver the purchased vehicle(s). For the remainder of the approved ZEV purchases that have yet to be purchased, DGS will

continue to closely monitor the progress of those purchase orders and will ensure all approved ZEV purchases are made.

With the 153 approved ZEV purchases and the voluntary 157 ZEV purchases made prior to 2014-15, the state is projected to have 310 ZEVs in its fleet. In the February 2015 ZEV progress report submitted to the governor's office, DGS reported 155 ZEVs had been voluntarily purchased prior to 2014-15. However, the California Lottery recently reported the purchase of two additional BEVs that were not reflected on the ZEV progress report. The total of 157 voluntarily purchased ZEVs identified in this report reflects this updated information.

Background

Executive Order (EO) B-16-12 mandated that 10 percent of all LD fleet acquisitions be ZEVs by 2015 and that the percentage should increase to 25 percent by 2020. Since vehicle acquisitions are submitted by fiscal year, the 10 percent mandate became effective for LD annual purchases beginning 2014-15. Per EO B-16-12, vehicles having special performance requirements necessary for the protection of public safety and welfare are exempt from the mandate. Management Memo (MM) 13-04 allowed for plug-in hybrid electric vehicles (PHEVs) to be considered a transitional ZEV based on ratios established by the California Air Resources Boardⁱⁱ. MM 13-04 also required that 50 percent of the 10 percent mandate be pure ZEVs (BEVs and fuel cell electric vehicles [FCVs]). Due to the allowance of PHEVs to meet ZEV compliance, a credit system was developed to track the actual amount of credits the purchase of a PHEV would earn based on its corresponding ratio determined by its battery range. ZEV credit calculations used in the summary totals above are based on these established ratios.

Compliance Challenges

Some of the biggest challenges departments experience in meeting compliance with this policy are limited electric charging infrastructure and limited variety of electric vehicles on the market. To assist with these challenges, DGS' Procurement Division (PD) recently solicited and awarded contracts for solar electric charging stations and medium- and heavy-duty PHEVs. These recent contract awards further expand electric charging infrastructure options and the electric vehicle classes needed to help departments meet the ZEV mandates. The DGS Office of Fleet and Asset Management (OFAM) will continue to collaborate with PD to help expand ZEV options on contracts.

In 2014-15, departments invoked EO B-16-12's public safety vehicle exemption for 1,552 vehicles; this accounted for approximately 62 percent of all approved light-duty vehicle purchases for 2014-15. In an effort to further ensure that this exemption is being appropriately applied, OFAM will be working with department fleet managers in the Statewide Equipment Council to identify criteria that will better define the public safety vehicle exemption.

Current Initiatives

DGS is currently working with the California Air Resources Board (ARB) to establish ratios for electric motorcycles. If implemented, departments will receive ZEV credits for

purchasing highway rated electric motorcycles in lieu of petroleum based highway rated motorcycles. Under EO B-16-12, light duty passenger vehicles, trucks, vans and SUVs are subject to the mandate. Pursuant to the Federal Department of Energy, motorcycles are considered equipment and, therefore, are not subject to the EO B-16 12 ZEV mandate. Consequently, any electric motorcycle purchases will be considered bonus credits that can be used towards a department's overall 10 percent mandate.

Additionally, DGS worked with ARB to establish credit ratios for medium- and heavy-duty PHEVs, similar to those established for the light-duty vehicles. On February 9, 2016 these ratios were adopted and included in the State Administrative Manual Section 4121 through the issuance of MM 16-02, State Fleet Acquisition Plan.

Attached is a summary of the ZEV purchases made prior to 2014-15, a summary of ZEV vehicles approved for purchase, and the overall 2014-15 compliance.

ⁱ "Approved" reflects vehicles that have been approved but may not have been purchased.

ⁱⁱ PHEV credits are determined by ratios noted below which are set by the California Air Resources Board; see table below.

PHEV to ZEV Ratio Table

Vehicle Type	Minimum Range	Maximum Range	Ratio
BEV			1:1
Low Range PHEV	10	19	5:1
Mid Range PHEV	20	34	3:1
Long Range PHEV	35	49	2:1
Extra long range PHEV	50	n/a	1:1