

FACTS ABOUT

The Zero Emission Vehicle Program - 2008 and 2009 Regulatory Changes

Advancing vehicle technology and improving air quality

The Zero Emission Vehicle (ZEV) regulation was first adopted in 1990 as part of the Low Emission Vehicle Program. Although it has been modified several times over the years, it still remains an important program for California's air quality and has spurred many new technologies that are being driven on California's roads.

2008 Regulatory Changes

The Board approved modifications to the ZEV Program in a public hearing on March 27, 2008. These changes became effective in early 2009 and include:

Two new ZEV categories - Type IV ZEV (a ZEV with a 200 mile or more range plus fast refueling) earning 5 credits and Type V ZEV (a ZEV with a 300 mile or more range plus fast refueling) earning 7 credits.

- A new category called Enhanced Advanced Technology Partial Zero Emission Vehicle (AT PZEV). An Enhanced AT PZEV is a vehicle using a fuel that would be used in a ZEV such as hydrogen or electricity. Examples for this category are hydrogen internal combustion engine vehicles and plug-in hybrid electric vehicles.
- Combining the Base Path and Alternative Path into the New Path (2012 and onward) for regulatory compliance.
- A lower number of gold vehicles for 2012-2014 required.
- Allowing Enhanced AT PZEVs to meet a portion of the gold requirement. Enhanced AT PZEVs may be used to meet up to 70% of the requirement during Phase III (2012 - 2014) and up to 50% during Phase IV (2015 – 2017).
- More equal treatment of battery electric vehicles by allowing them to meet the full gold requirement.
- The release of manufacturer production data for model year (MY) 2009 and beyond, and ZEV bank credits as well as the release of trades beginning in MY 2010.
- A redesign of the ZEV Program to affect the 2015+ model years. The redesign will place the bronze vehicles into Air Resources Board's (ARB) Low Emission Vehicle Program and silver vehicles into ARB's climate change program for motor vehicles. The new program will greatly strengthen the gold requirement to meet the need of moving advanced technologies from the laboratory and demonstration phase to commercialization.

The different types of ZEV included in the Regulation include:

ZEV	Definition	Example
TYPE I	Electric Vehicle with 50-75 mile range	Limited Range Battery EV
TYPE I.5	Electric Vehicle with 75-100 mile range	City Electric Vehicle
TYPE II	Electric with 100-200 mile range	Full function Battery EV
TYPE III	100+ mile electric vehicle with fast refueling or 200 mile battery EV	Fuel Cell or Battery EV
TYPE IV	200+ mile electric vehicle with fast refueling	Fuel Cell
TYPE V	300+ mile electric vehicle with fast refueling	Fuel Cell

Impacts of 2008/2009 Regulatory Changes

Due to the introductions of Enhanced AT PZEVs, more clean vehicles will be introduced to California which means more clean air and greenhouse gas emission reduction benefits. Also, these changes provide manufacturers with more compliance options. They can comply with the full requirement of 25,000 ZEVs or choose to make a fewer number of pure ZEVs and backfill with a large number of Enhanced AT PZEVs. The table below shows how many vehicles could be placed to meet the Gold requirement during the 2012 to 2014 timeframe.

The numbers in the table below assume that an auto manufacturer will use Type IV ZEVs to meet the ZEV requirements. However, a manufacturer is able to comply using a variety of different types of ZEVs. For example, if a manufacturer uses Type II ZEVs, more vehicles would be placed since they earn less credit than a Type IV vehicle.

Phase III: 2012 - 2014 Timeframe

Gold Requirement Options		
Option	Vehicle Type	Number of Vehicles
1	Type IV ZEV	25,000*
2	Type IV ZEV	7,500*
	Enhanced AT PZEVs	58,333*

*Numbers based on estimated annual sales of 1.4 million passenger cars.
Actual number of ZEVs may vary with actual annual sales

For More Information

For questions regarding the ZEV Regulation, please contact:
Elise Keddie, ARB's ZEV Implementation Section Manager at: ekeddie@arb.ca.gov,
or visit the ZEV Program website: www.arb.ca.gov/zev.

If you'd like to do your part and find out what clean cars are available today, go to:
www.DriveClean.ca.gov.

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