

## California Air Resources Board

### 2019 Zero Emission Vehicle Credits

The data below provide greater transparency of compliance with the Zero Emission Vehicle (ZEV) Regulation per California Code of Regulations title 17 section 1962.2(l) Public Disclosure.

#### Manufacturer Volume Status

The ZEV Regulation requires large volume and intermediate volume vehicle manufacturers to bring to and operate in California a certain percent of ZEVs (such as battery electric and fuel cell electric vehicles), and clean plug-in hybrids. The tables below list the 2019 vehicle manufacturers subject to the ZEV requirements.

Large Volume Status		
BMW	Fiat Chrysler	Ford
GM	Honda	Hyundai
Kia	Mercedes Benz	Nissan
Toyota	Volkswagen	

Intermediate Volume Status
Jaguar Land Rover
Mazda
Subaru Corporation
Volvo

#### Manufacturer Sales in California

The table below displays the 2019 vehicle production for sale in California of large volume and intermediate volume manufacturers. A vehicle manufacturer's 2019 ZEV requirement is based on 7.0% of their total average production volume of all passenger cars and light-duty trucks (LDT) from 0 to 8,500 pounds (lbs.) delivered for sale in California for the 2015-2017 model years.

Manufacturer	Passenger Cars and LDT1
BMW	78,400
Fiat Chrysler	174,598
Ford	155,981
GM	190,424
Honda	277,030
Hyundai	66,125
Jaguar Land Rover	18,600
Kia	69,334
Mazda	41,043
Mercedes Benz	76,993

Nissan	116,636
Subaru Corporation	80,859
Toyota	359,696
Volkswagen	122,345
Volvo	13,327
<b>Total</b>	<b>1,841,391</b>

\*Sales figures in the table above includes ZEVs.

## **Manufacturer Credit Balances**

In complying with the ZEV Regulation, manufacturers sell vehicles in California which generate varying credits based on vehicle type. There are also other parties generating credits that do not have ZEV requirements. The table below lists the credit balances as of August 31, 2020 generated since the start of the ZEV Regulation in 1990. The numbers are in units of ZEV credits.

<b>Manufacturer</b>	<b>ZEV</b>	<b>BEVx</b>	<b>NEV+</b>	<b>TZEV</b>	<b>DISCOUNT AT PZEV and PZEV</b>
BMW	16,493.86	35,705.33	0.00	616.68	0.00
Fiat Chrysler	73,690.99	0.00	0.00	0.00	217.95
Ford	57,637.84	0.00	6,530.48	73,574.29	3,451.97
GM	153,485.24	0.00	3,608.30	129,326.70	0.00
Honda	50,810.87	0.00	8,274.35	14,345.83	3,669.38
Hyundai	7,480.87	0.00	0.00	2,856.95	2,237.46
Jaguar Land Rover	7,195.71	0.00	0.00	0.00	0.00
Kia	13,307.51	0.00	0.00	3,351.29	3,563.98
Mazda	6,117.84	0.00	0.00	0.00	0.00
Mercedes Benz	21,588.98	0.00	0.00	5,211.65	0.00
Miles	0.00	0.00	5.14	0.00	0.00
Mitsubishi	151.00	0.00	0.00	1,145.40	367.11
Nissan	67,793.74	0.00	0.00	0.00	0.00
Subaru Corporation	53,567.00	0.00	1,177.11	598.50	527.11
Tesla	448,913.46	0.00	0.00	0.00	0.00
Toyota	209,242.99	0.00	0.00	29,228.35	43,194.14
Volkswagen	52,492.41	0.00	0.00	4,664.44	0.00
Volvo	0.00	0.00	0.00	2,857.36	1,184.92
Zenith	62.50	0.00	0.00	0.00	0.00
Zipcar	0.00	0.00	0.00	0.00	275.15
<b>Total</b>	<b>1,240,032.81</b>	<b>35,705.33</b>	<b>19,595.38</b>	<b>267,777.44</b>	<b>58,689.17</b>

\*The manufacturer credit balances table excludes all inactive manufacturers with zero credit balances.

### Description of Credit Balances:

ZEV = Zero Emission Vehicle (fuel cell and battery electric)

NEV = Neighborhood Electric Vehicle

TZEV = Transitional Zero Emission Vehicle (plug-in hybrids)  
Discount AT PZEV and PZEV = Conversion of Advanced Technology Partial Zero Emission Vehicle (clean hybrids) and Partial Zero Emission Vehicle (clean gasoline) per 1962.1(g)(2)(f)

## Manufacturer Transfers

Manufacturers may transfer credits with other manufacturers. Below are the ZEV credit transfers recorded between September 1, 2019 and August 31, 2020.

Transferor	Vehicle Type	Total Credits
Tesla	BEV	6,000.00
	<b>Total</b>	<b>6,000.00</b>

Transferee	Vehicle Type	Total Credits
Mazda	BEV	6,000.00
	<b>Total</b>	<b>6,000.00</b>

## Frequently Asked Questions

**How many vehicles have been brought to and operated in California as a result of the ZEV Regulation?** These credit balances reflect ZEV regulation compliance through model year 2019, representing a cumulative sales total of 625,000 vehicles including 8,500 fuel cell electric vehicles, 371,200 battery electric vehicles and range extended vehicles, and over 245,000 clean plug-in hybrids. Non-regulatory ZEV sales estimates, based on vehicle registrations, are available at [www.veloz.org](http://www.veloz.org).

**Besides earning credits or transferring credits, what else can contribute to a manufacturers' credit balance?** In the ZEV regulation fuel cell electric vehicles and battery electric vehicles earned in one state are allowed to be counted as earned in all ZEV states, this is called the "travel" provision. When credits earned in the other ZEV states are traveled to California, they are traveled on a one to one basis. Travel of BEVs is no longer allowed after the close of the model year 2017 per the ZEV Regulation. The frequency of manufacturers completing travel has varied over the years with some manufacturers traveling BEV credits on an annual basis, and some manufacturers traveling BEV credits accumulated from several model years in a single compliance year.

**What do these credit balances mean?** All vehicle manufacturers subject to the ZEV Regulation are in compliance through model year 2019. Positive credit balances represent a successful over compliance with the ZEV Regulation. Manufacturers can use these balances to provide flexibility in the timing and production of bringing new clean cars to the market to meet the ZEV requirements in coming years.

**How far into the future do these credit balances cover the manufacturers' ZEV requirement?** Discount credits will expire after model year 2025 compliance. Each manufacturer is unique in its strategy of compliance with the ZEV Regulation. It is not possible to predict how and when these credit balances will be spent over the coming years due to the complexity and flexibility of the

regulation. There are also various mechanisms in the ZEV Regulation which limit how credits are spent. These balances will be taken into account in future amendments to the regulation.

**Why are the credit balances in ZEV credits instead of grams per mile Non-Methane Organic Gases (g/mi NMOG)?** For 2015 reporting year and onward credits are expressed in ZEV credits. The purpose of this change is to simplify credit calculations. 2014 balances were divided by 0.035 to convert g/mile NMOG credits to ZEV credits.

**How do you calculate a manufacturer's requirement?** For understanding the calculations involved in the ZEV Regulation, please see the ZEV Tutorial link below.

**More Information can be found through these links:**

- [ZEV Regulation](#)
- [ZEV Tutorial](#)
- [ZEV Credit Archive](#)

Contact Us

For more information please contact the [Advanced Clean Cars Branch](#) at (916) 322-1731.