



2014 Zero Emissions Vehicle Credits

Oregon implements California's rules for Zero Emission Vehicles as allowed under section 177 of the federal Clean Air Act. Oregon Administrative Rules chapter 340, division 257 includes provisions for the public disclosure of manufacturers' ZEV credits in the following manner.

Manufacturer Volume Status

The Zero Emission Vehicle Regulation requires large-volume and intermediate-volume vehicle manufacturers to bring to and operate in Oregon a certain percent of zero emission vehicles (such as battery electric and fuel cell vehicles), clean plug-in hybrids, clean hybrids and clean gasoline vehicles with near-zero tail pipe emissions. The table below lists 2014 vehicle manufacturers subject to the ZEV requirements.

2014 Manufacturer Volume Status	
Large Volume	Intermediate Volume
Fiat Chrysler	BMW
Ford	Hyundai
GM	Kia
Honda	Jaguar Land Rover
Nissan	Mazda
Toyota	Mercedes Benz
	Subaru
	Volkswagen

Manufacturer Requirement

A vehicle manufacturer's ZEV requirement is based on a percentage of all passenger cars and light-duty trucks from 0 to 8,500 pounds, delivered for sale in Oregon. The table below is the 2014 Oregon vehicle production of large-volume and intermediate-volume manufacturers.

Large- and Intermediate-Volume Manufacturer 2014 Vehicle Production Delivered for Sale in OR	
Manufacturer	Passenger and LDT
BMW	4,307
FCA	17,268
Ford	20,626
FUJI Heavy Industries/Subaru	11,960
General Motors	16,233
Honda	12,632
Hyundai	4,840
Jaguar Land Rover	370
KIA	5,994
Mazda	4,489
Mercedes Benz	4,064
Nissan	6,234
Toyota	26,070
Volkswagen	6,130
TOTAL	141,217

LDT = light duty truck 0-8500 lbs

Manufacturer Credit Balances

In complying with the ZEV Regulation, manufacturers operate vehicles in Oregon 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 credit balances as of Sept. 30, 2015 generated since the start of Oregon's ZEV program in 2009. The credits are in units of grams per mile Non-Methane Organic Gases (g/mi NMOG).

ZEV = Zero Emission Vehicle

NEV = Neighborhood Electric Vehicle

NMOG = Non-Methane Organic Gases

TZEV = Transitional Zero Emission Vehicle

AT PZEV = Advanced Technology Partial Zero Emission Vehicle

PZEV = Partial Zero Emission Vehicle

Oregon Zero Emission Vehicle Credit Balances

Manufacturer	Units	ZEVs (excluding NEVs)	1.5x/ltx	NEV+	TZEV	AT PZEV	PZEV
BMW	g/mi NMOG credits	73.623	20.852	0.000	0.000	0.000	0.000
	ZEV credits	2,103.514	595.771	0.000	0.000	0.000	0.000
Fiat Chrysler	g/mi NMOG credits	4.306	0.000	0.000	0.000	0.000	0.000
	ZEV credits	123.029	0.000	0.000	0.000	0.000	0.000
Ford	g/mi NMOG credits	53.920	0.000	75.381	50.226	32.223	72.571
	ZEV credits	1,540.571	0.000	2,153.743	1,435.029	920.657	2,073.457
Fuji Heavy Industries/Subaru	g/mi NMOG credits	0.000	0.000	0.000	0.000	5.987	115.426
	ZEV credits	0.000	0.000	0.000	0.000	171.057	3,297.886
GM	g/mi NMOG credits	69.296	0.000	29.610	163.054	23.013	0.000
	ZEV credits	1,979.886	0.000	846.000	4,658.686	657.514	0.000
Honda	g/mi NMOG credits	143.695	0.000	16.948	164.276	29.652	18.364
	ZEV credits	4,105.571	0.000	484.229	4,693.600	847.200	524.686
Hyundai	g/mi NMOG credits	31.360	0.000	0.000	0.000	7.508	14.301
	ZEV credits	896.000	0.000	0.000	0.000	214.514	408.600
Jaguar Land Rover	g/mi NMOG credits	16.135	0.000	0.000	0.000	0.000	0.000
	ZEV credits	461.000	0.000	0.000	0.000	0.000	0.000
KIA	g/mi NMOG credits	27.500	0.000	0.000	0.000	8.701	0.476
	ZEV credits	785.714	0.000	0.000	0.000	248.600	13.600
Mazda	g/mi NMOG credits	0.000	0.000	0.000	0.000	0.000	3.477
	ZEV credits	0.000	0.000	0.000	0.000	0.000	99.343
Mercedes	g/mi NMOG credits	80.732	0.000	3.767	0.000	0.038	3.970
	ZEV credits	2,306.629	0.000	107.629	0.000	1.086	113.429
Mitsubishi	g/mi NMOG credits	0.477	0.000	0.000	0.000	0.000	3.858
	ZEV credits	13.629	0.000	0.000	0.000	0.000	110.229
Nissan	g/mi NMOG credits	101.914	0.000	0.000	15.551	0.000	13.906
	ZEV credits	2,911.829	0.000	0.000	444.314	0.000	397.314
Polaris	g/mi NMOG credits	0.000	0.000	0.000	0.000	0.000	0.000
	ZEV credits	0.000	0.000	0.000	0.000	0.000	0.000
Tesla	g/mi NMOG credits	22.365	0.000	0.000	0.000	0.000	0.000
	ZEV credits	639.000	0.000	0.000	0.000	0.000	0.000
Toyota	g/mi NMOG credits	91.314	0.000	0.000	47.919	184.173	0.000
	ZEV credits	2,608.971	0.000	0.000	1,369.114	5,262.086	0.000
Volkswagen	g/mi NMOG credits	30.954	0.000	0.000	0.000	2.002	0.000
	ZEV credits	884.400	0.000	0.000	0.000	57.200	0.000
Volvo	g/mi NMOG credits	0.000	0.000	0.000	0.000	0.000	27.961
	ZEV credits	0.000	0.000	0.000	0.000	0.000	798.886
TOTALS	g/mi NMOG credits	747.591	20.852	125.706	441.026	293.297	274.31
	ZEV credits	21,359.743	595.771	3,591.601	12,600.743	8,379.914	7,837.43

Manufacturer Transfers

Manufacturers may transfer credits between manufacturers and third parties. Below are ZEV credits transferred between Oct. 1, 2014 and Sept. 30, 2015.

Oregon ZEV Credit Transfers Between Oct. 1, 2014 and Sept. 30, 2015 (g/mi NMOG)		
Transferor	Type of Vehicle	Number of Credits
FCA	ZEV	35.000
Mitsubishi	ZEV	0.158
Tesla	ZEV	8.925
TOTAL		44.083

Transferee	Type of Vehicle	Number of Credits
FCA	ZEV	8.925
GM	ZEV	0.158
Toyota	ZEV	35.000
TOTAL		44.083

Frequently Asked Questions

What do these credit balances mean?

All vehicle manufacturers subject to the ZEV Regulation are in compliance through model year 2014. 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?

Each manufacturer is unique in its strategy of compliance with the ZEV Regulation. It’s not possible to predict how and when these credit balances will be spent over the coming years due to the regulation’s complexity and flexibility. 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 credit balances displayed in both units of grams/mile Non-Methane Organic Gases (g/mile NMOG) and ZEV credits?

For reporting year 2014 only, the balances are displayed in both units of grams/mile Non-Methane Organic Gases (g/mile NMOG) and ZEV credits to provide a transition to units of ZEV credits. Through reporting year 2014 credits earned have been multiplied by the g/mile NMOG fleet average requirement for the appropriate model year. The g/mi NMOG is used only as index (which decreased over time)—it is the “currency” that credits are stored in and does not represent actual values of g/mi NMOG. The intent of this multiplier was to reward early production of vehicles. For reporting year 2015 onward credits will be expressed in ZEV credits. The purpose of this change is to simplify credit calculations. Current balances are divided by .035 to convert g/mile NMOG credits to ZEV credits.

How many vehicles have been brought to and operated in Oregon as a result of the ZEV Regulation?

As of June 30, 2015 more than 7,500 ZEVs and plug-in hybrids are on Oregon roads.

More Information

- [ZEV Regulation](#)

NMOG table from California Code of Regulations, Title 13, Section 1961(b)(1)(A)
Fleet Average Non-Methane Organic Gas Exhaust Mass Emission
Requirements for Light-duty Vehicle Weight Classes
(50,000 Mile Durability Vehicle Basis)

Model Year	Fleet Average NMOG (grams per mile)	
	All PCs; LDTs 0-3750 lbs LVW	LDTs 3751 lbs. LVW - 8500 lbs. GVW
2001	0.070	0.098
2002	0.068	0.095
2003	0.062	0.093
2004	0.053	0.085
2005	0.049	0.076
2006	0.046	0.062
2007	0.043	0.055
2008	0.040	0.050
2009	0.038	0.047
2010+	0.035	0.043