

Massachusetts Low Emission Vehicle Program

2009 Zero Emission Vehicle Credits

Manufacturer Volume Status

The Zero Emission Vehicle (ZEV) Regulation requires large and intermediate volume vehicle manufacturers to deliver and place in service within Massachusetts (MA) a certain percent of ZEVs (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 the 2009 vehicle manufacturers subject to the ZEV requirements.

| 2009 Manufacturer Volume Status | |
|---------------------------------|---------------|
| Large | Intermediate |
| Chrysler Group | BMW |
| Ford | Hyundai |
| GM | Kia |
| Honda | Land Rover |
| Nissan | Mazda |
| Toyota | Mercedes Benz |
| | Mitsubishi |
| | Subaru |
| | Volkswagen |
| | Volvo |

Manufacturer Sales in Massachusetts

A vehicle manufacturer's 2009 ZEV requirement is based on a percentage of all passenger cars and light-duty trucks (LDTs) from 0 to 8,500 pounds, delivered for sale in MA. The table below is the 2009 MA vehicle production of large volume and intermediate volume manufacturers.

| Large and Intermediate Volume Manufacturer 2009 Vehicle Production Delivered for Sale in MA | | |
|---|-----------------------|-------|
| Manufacturer | Passenger and LDT1 | LDT2 |
| BMW | 4,998 | 543 |
| Chrysler Group | 5,331 | 3,977 |
| Ford | 12,371 | 2,821 |
| GM | 18,219 | 6,221 |
| Honda | 33,218 | 3,940 |
| Hyundai | 8,986 | 1,118 |
| Jaguar Land Rover | 619 | 0 |
| Kia | 3,686 | 917 |

| | | |
|--------------------|----------------|---------------|
| Mazda | 2,764 | 419 |
| Mercedes | 2,675 | 503 |
| Mitshubishi | 1,672 | 41 |
| Nissan | 14,370 | 2,947 |
| Subaru Corporation | 7,876 | 1,077 |
| Toyota | 38,949 | 10,346 |
| Volkswagen | 8,733 | 280 |
| Volvo | 1,278 | 456 |
| TOTAL | 165,745 | 35,608 |

Manufacturer Credit Balances

In complying with the ZEV Regulation, manufacturers delivering and placing vehicles in MA 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, 2010 generated since the start of MA ZEV Program. The credits are in units of grams per mile non-methane organic gas (g/mi NMOG).

| Manufacturer | ZEV | NEV+ | AT PZEV | PZEV |
|----------------------|--------|---------|---------|--------|
| Azure Dynamics, Inc. | 0.00 | 0.00 | 0.00 | 0.00 |
| BMW | 0.00 | 0.00 | 0.00 | 6.49 |
| Chrysler Group | 50.73 | 1103.04 | 2.34 | 0.00 |
| Ford | 142.11 | 231.33 | 85 | 436.49 |
| GM | 355.32 | 801.39 | 5.8 | 17.98 |
| Honda | 205.64 | 0 | 140.71 | 178.29 |
| Hyundai | 25.76 | 0.00 | 0.00 | 129 |
| Jaguar Land Rover | 0.00 | 0.00 | 0.00 | 26.26 |
| Kia | 23.32 | 0.00 | 0.00 | 7.54 |
| Mazda | 0.00 | 0.00 | 0.00 | 93.59 |
| Mercedes | 67.4 | 40.1 | 0.00 | 0.00 |
| MILES | 0.00 | 0.00 | 0.00 | 0.00 |
| Mitsubishi | 0.00 | 0.00 | 0.00 | 35.86 |
| Nissan | 31.12 | 0.00 | 23.66 | 337.3 |
| Polaris | 0.00 | 0.00 | 0.00 | 0.00 |
| Subaru Corporation | 0.00 | 0.00 | 0.00 | 219.26 |
| Tesla | 0.00 | 0.00 | 0.00 | 0.00 |
| THINK North America | 0.00 | 0.00 | 0.00 | 0.00 |
| Toyota | 65.39 | 0.00 | 657.05 | 133.89 |
| VANTAGE | 0.00 | 0.00 | 0.00 | 0.00 |
| Volkswagen | 0.00 | 0.00 | 0.00 | 92.33 |
| Volvo | 0.00 | 0.00 | 0.00 | 0.00 |
| ZENITH | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | |
|--------------|---------------|----------------|------------|----------------|
| Zipcar | 0.00 | 0.00 | 39.44 | 33.05 |
| Total | 966.79 | 2175.86 | 954 | 1747.33 |

Description of Credit Balances:

ZEV = Zero emission vehicle

NEV = Neighborhood Electric Vehicle

AT PZEV = Advanced Technology Partial Zero Emission Vehicle

PZEV = Partial Zero Emission Vehicle

More Information

- Current California ZEV Regulation <https://ww2.arb.ca.gov/our-work/programs/zero-emission-vehicle-program/current-zero-emission-vehicle-regulation>
- Current Massachusetts LEV Regulation <https://www.mass.gov/regulations/310-CMR-700-air-pollution-control> (see 7.40 Low Emission Vehicles)
- 2009+ ZEV Credit Archive <https://www.mass.gov/info-details/massachusetts-zero-emission-vehicle-zev-credits> (see Historical Information)

Contact Us

For more information please contact the Low Emission Vehicle Program at 617-292-5762.