

Advanced Clean Cars II: Zero-Emission Vehicle Regulation Frequently Asked Questions

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The Northeast States for Coordinated Air Use Management (NESCAUM) is the nonprofit association of state air quality agencies in the six New England states, New Jersey, and New York. NESCAUM serves as a technical and policy advisor to its members and works with broader groups of states to develop strategies to achieve air quality and climate goals. For more than three decades, NESCAUM has supported states in using their authority under Section 177 of the Clean Air Act to adopt California’s motor vehicle emission standards. Currently, NESCAUM hosts a workgroup for Section 177 states across the country to assist with and coordinate state adoption and implementation of California’s clean car and truck standards. While NESCAUM works with the Section 177 states and California to develop common approaches and interpretations of California’s clean car and truck standards, each state is ultimately responsible for interpreting and implementing its regulations. NESCAUM also facilitates the Multi-State ZEV Task Force, a unique forum for galvanizing state leadership on complementary policies and programs to accelerate transportation electrification through research and analysis, information sharing, collective strategizing, and coordinated action on shared priorities.

This resource is intended to address key questions related to adoption and implementation of California’s Advanced Clean Cars II (ACC II) Zero-Emission Vehicle (ZEV) regulation in [13 CCR §1962.4](#). Under the federal Clean Air Act (CAA), California is the only state permitted to establish emission standards for new motor vehicles. Other states, however, may adopt and enforce California’s standards, in lieu of federal standards. States that adopt California’s standards are referred to as “Section 177 states,” in reference to the CAA provision that grants this authority.

ACC II ZEV Requirements and Applicability

What is Advanced Clean Cars II (ACC II)?

ACC II is a set of regulations that the California Air Resources Board (CARB) recently adopted to reduce motor vehicle emissions of criteria pollutants and greenhouse gases. The Zero-Emission Vehicle (ZEV) regulation requires manufacturers of passenger cars and light-duty trucks to produce and deliver for sale an increasing percentage of ZEVs. The annual ZEV requirements are shown in the table below. The Low-Emission Vehicle (LEV) regulation establishes increasingly more stringent exhaust and evaporative emission standards for light- and medium-duty internal combustion engine (ICE) vehicles. This document focuses on the ACC II ZEV regulation.

Model Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
ZEV/PHEV Share of New LDV Sales	35%	43%	51%	59%	68%	76%	82%	88%	94%	100%

What type of technologies can be used to comply with the annual ZEV requirements under ACC II?

Manufacturers may use battery-electric vehicles (BEVs), fuel-cell electric vehicles (FCEVs), and plug-in hybrid electric vehicles (PHEVs) that emit zero tailpipe emissions while operating on battery power.

What vehicles are subject to the ACC II ZEV regulation?

Passenger cars (i.e., vehicles designed to transport 12 persons or less) and light-duty trucks with a gross vehicle weight rating less than 8,500 pounds (collectively referred to as light-duty vehicles or LDVs).

Are medium-duty (Class 2b and 3) vehicles subject to the ACC II ZEV regulation or the Advanced Clean Trucks regulation?

Class 2b and 3 vehicles are subject to the Advanced Clean Trucks (ACT) regulation. However, manufacturers may elect to certify these vehicles and earn vehicle values under the ACC II ZEV regulation; such vehicles would then be ineligible to earn credits under the ACT regulation.

Are emergency vehicles subject to the ACC II ZEV regulation?

While there is no mention of an emergency vehicle exemption in the ZEV regulation, a California law exempts emergency vehicles from regulations regarding “motor vehicle pollution control devices,” such as the ZEV regulation. See California Vehicle Code §27156.2. Generally speaking, Section 177 states also exempt emergency vehicles.

Does the ACC II ZEV regulation require consumers to purchase ZEVs or retire their ICE vehicles?

No. The ACC II ZEV regulation is a manufacturer sales requirement. It does not require anyone to purchase ZEVs or relinquish their currently owned ICE vehicles.

Can a new ICE vehicle from a non-Section 177 state be registered after 2035 in a Section 177 state where ACC II is being implemented?

Yes, under limited exceptions, such as when someone moves into the state or inherits a new vehicle from out of state.

ACC II ZEV Rule Mechanics

How do manufacturers meet the annual ZEV requirements?

Manufacturers must meet the annual ZEV requirements by producing and delivering for sale qualifying ZEVs and PHEVs and by utilizing a variety of flexibility provisions, which are covered in the next section. At the end of each model year, manufacturers must calculate their ZEV requirement performance to determine whether their performance is above the applicable annual ZEV requirement (i.e., a “surplus”) or below the applicable annual ZEV requirement (i.e., a “shortfall”).

How do manufacturers determine their ZEV requirement performance?

A manufacturer’s ZEV requirement performance for a model year is the sum of:

1. Vehicle values for ZEVs delivered for sale;
2. Vehicle values for PHEVs delivered for sale up to the PHEV allowance;

3. Through the 2031 model year only, EJ vehicle values earned up to the EJ allowance;
4. Only for the first three model years annual ZEV requirements are implemented in a state, early compliance vehicle values earned up to the early compliance vehicle value allowance.

Rules for earning and using ZEV, PHEV, EJ vehicle, and early compliance vehicle values are discussed below.

What happens if a manufacturer's performance is above the annual ZEV requirement?

Manufacturers with a surplus for a given model year may bank excess vehicle values for future use, use them to offset a deficit carried over from a previous year, or trade them to another manufacturer in accordance with the provisions in 13 CCR §1962.4(f)(3)(4).

What happens if a manufacturer's performance is below the annual ZEV requirement?

To fulfill a shortfall in a given model year, manufacturers may use a combination of excess ZEV, PHEV, EJ vehicle, and early compliance vehicle values and take advantage of other flexibility provisions such as converted ZEV and PHEV values, pooled ZEV and PHEV values, and proportional FCEV values. These flexibility provisions and their limitations on usage are discussed below.

What if a manufacturer is not able to fulfill a ZEV requirement shortfall in a given model year?

Manufacturers that do not possess sufficient vehicle values in a given model year will incur a ZEV deficit for that model year, which must be made up within three model years. For example, a manufacturer must resolve a 2027 model year deficit by the conclusion of the 2030 model year.

What happens if a manufacturer cannot make up a ZEV deficit within three model years?

Any manufacturer that fails to make up a ZEV deficit is subject to applicable civil penalties.

What are the technical requirements for ZEVs to earn vehicle values?

ZEVs must meet the following requirements to earn one vehicle value:

1. Minimum certification range \geq 200 miles;
2. ZEV durability requirements: maintain 70% vehicle certification range through the 2029 model year and 80% vehicle certification range for subsequent model years for useful life of 10 years, or 150,000 miles, whichever occurs first; and
3. Specified battery labeling, data standardization, service information, ZEV warranty, and charging requirements.

To what extent can manufacturers use PHEVs to meet the annual ZEV requirements?

Manufacturers may meet up to 20% of their annual ZEV requirement with qualifying PHEVs.

What are the technical requirements for PHEVs to earn vehicle values?

PHEVs must meet the following requirements to earn one value per vehicle:

1. Certified to full useful life SULEV30 or lower exhaust standards;
2. Emissions performance warranty of 15 years or 150,000 miles, whichever occurs first;

3. Specified battery labeling, data standardization, service information, battery warranty, and charging requirements;
4. Minimum certification range value of ≥ 70 miles; and
5. Minimum US06 all-electric range value ≥ 40 miles.

Additionally, through the 2028 model year, PHEVs that meet criteria 1 through 3 (except for charging requirements) listed above with a minimum certification range of < 70 miles and ≥ 43 miles may earn up to 0.85 vehicle values per vehicle.

ACC II ZEV Compliance Flexibility Provisions

Which compliance flexibilities can manufacturers utilize when calculating their ZEV requirement performance for a given model year and which flexibilities can they use to fulfill a shortfall?

In recognition of the differing needs of automakers and varying market conditions across California and the Section 177 states, the ACC II ZEV regulation includes a mix of compliance flexibilities. When determining their ZEV requirement performance, manufacturers may utilize the following flexibilities: PHEV values, EJ vehicle values, and early compliance vehicle values. When fulfilling a shortfall, in addition to using excess vehicle values that are banked or traded, manufacturers may also utilize the following flexibilities: converted ZEV and PHEV values, pooled ZEV and PHEV values, and proportional FCEV values. The unique terms and conditions for each compliance flexibility is discussed in more detail below.

How can manufacturers earn and spend early compliance vehicle values?

For two model years prior to a state's ACC II implementation date, a manufacturer may elect to earn early compliance vehicle values for qualifying ZEVs and PHEVs it produces and delivers for sale in a state in excess of 20% of its total LDV volume in that state in that model year. If the 2020 through 2022 model year combined market share (ZEVs and PHEVs) in a state is less than 7% per model year, a manufacturer may also earn early compliance vehicle values for qualifying ZEVs and PHEVs sold in excess of 7% and below 20% of its total LDVs produced and delivered for sale in a state. When a manufacturer elects to earn early compliance vehicle values for qualifying ZEVs and PHEVs, such vehicles may not earn ZEV/PHEV credits under ACC I.

Manufacturers may spend early compliance vehicle values during the first three model years the annual ZEV requirements are implemented in a state. For each ACC II ZEV state, the table below shows the market share threshold for earning early compliance vehicle values and the applicable model years for earning and spending early compliance vehicle values.

State	2020-2022 MY Avg. Market Share	Market Share Threshold for Earning	MYs for Earning Early Compliance Vehicle Values	MYs for Spending Early Compliance Vehicle Values
CA OR WA	>7%	>20%	2024-2025	2026-2028
MA NY VT	<7%	>7%		
DC	>7%	>20%	2025-2026	2027-2029
CO DE MD NJ NM RI	<7%	>7%		

How does the threshold for earning early compliance vehicle values apply to a manufacturer that only produces medium-duty ZEVs?

All of the medium-duty vehicles (MDVs), including medium-duty passenger vehicles, that a manufacturer elects to bring into the ACC II (or ACC I) ZEV program are effectively treated like additional (or in this case, all of the) light-duty vehicles in the manufacturer’s fleet. As a result, such MDVs are subject to the same threshold for earning early compliance vehicles as LDVs. Also, it is important to note that any MDVs that are reported for earning compliance credits under the Advanced Clean Trucks regulation cannot also earn ACC I ZEV credits or ACC II ZEV values.

EXAMPLE: In State A, ACC I ZEV is in effect, ACT implementation begins in the 2025 model year, and ACC II ZEV implementation begins in the 2026 model year. The manufacturer’s market share threshold for earning early compliance vehicle values in State A is >7%. In the 2025 model year, Manufacturer Z delivers 125 medium-duty ZEVs to State A and chooses to earn ACT credits for 25 vehicles. Manufacturer Z designates the remaining 100 vehicles as light-duty and wants to earn as many early compliance vehicles under ACC II as possible. Manufacturer Z may earn early compliance vehicle values under ACC II for the 93 vehicles above the 7% threshold and ACC I ZEV credits for the remaining 7 vehicles.

What are the technical requirements for ZEVs and PHEVs to earn early compliance vehicle values?

Only ZEVs with more than a 50-mile urban dynamometer drive schedule (UDDS) range are eligible to earn early compliance vehicle values. On the other hand, PHEVs must have more than a 10-mile UDDS range and meet the charging, exhaust and evaporative emission, and warranty requirements specified in 13 CCR §1962.4(e)(3)(A)4.b.

How are early compliance vehicle values calculated?

Qualifying ZEVs are counted at a vehicle value of one. Qualifying PHEVs earn partial vehicle values of up to 0.85 calculated in accordance with the equation in 13 CCR §1962.4(e)(1)(B)1.

Are there any limits on how manufacturers may use early compliance vehicle values?

For the first three model years the annual ZEV requirements are implemented in a state, manufacturers may fulfill up to 15% of their total annual ZEV requirement with early compliance vehicle values; no shortfall is required. Manufacturers may trade or sell early compliance vehicle values for use in the state where earned, but early compliance vehicle values may not be transferred (i.e., pooled) for use in another state.

How can manufacturers earn and use EJ vehicle values?

Manufacturers may earn EJ vehicle values by:

1. Providing new ZEVs and PHEVs discounted by at least 25% for use in community-based clean mobility programs in the 2024 through 2031 model years;
2. Selling off-lease (used) ZEVs and PHEVs with a MSRP < \$40,000 (when new and adjusted annually for inflation) to dealerships participating in a financial assistance program in the 2026 through 2031 model years; and
3. Delivering for sale new ZEVs and PHEVs below the established MSRP threshold (\leq \$20,275 for passenger cars and \leq \$26,670 for light-duty trucks, as adjusted annually for inflation).

Manufacturers may use EJ vehicle values only in the state where they are earned to meet up to 5% of their total annual ZEV requirement through the 2031 model year. For more information on applicable definitions, conditions for usage, and reporting requirements for EJ vehicle values, please see NESCAUM's [ACC II: Environmental Justice Vehicle Values FAQ](#).

What are converted ZEV and PEV values?

After the 2025 model year, manufacturers' ZEV *and* PHEV credit balances under the ACC I ZEV regulation will undergo a one-time conversion (i.e., be divided by 2.1) to become "converted ZEV and PHEV values" under the ACC II ZEV regulation. Through the 2030 model year, manufacturers with a shortfall may use converted ZEV and PHEV values to fulfill up to 15% of their annual ZEV requirement.

How does the cumulative allowance for converted ZEV and PHEV values work?

In lieu of the 15% annual allowance for converted ZEV and PHEV values, a manufacturer may use any amount of its eligible cumulative converted ZEV and PHEV values toward its annual ZEV requirement through the 2030 model year as long as the cumulative quantity is equal to or below the calculated cumulative allowance.

The quantity of eligible cumulative converted ZEV and PHEV values is dependent on how many times a manufacturer uses for compliance an amount of EJ vehicle values that is \geq 0.5% of its annual ZEV requirement with EJ vehicle values in the 2026 through 2028 model years:

- For zero model years, the manufacturer may use up to 10% of its cumulative converted ZEV and PHEV allowance for compliance through the 2030 model years. In doing so, a manufacturer forgoes the remaining 5% of this allowance.
- For one model year, the manufacturer may use up to 15% of its cumulative allowance for three years through the 2030 model year.
- For two model years, the manufacturer may use up to 15% of its cumulative allowance for four years through the 2030 model year.
- For all three model years, the manufacturer may use up to 15% of its cumulative allowance for all five years between the 2026 through 2030 model years (note that this would only apply in states where ACC II is implemented in the 2026 model year).

Does the converted ZEV and PHEV cumulative allowance increase the number of converted vehicle values used in the 2026 through 2030 model years?

No. The cumulative allowance does not increase the number of converted vehicle values a manufacturer may use for compliance in these years, but it does provide greater year-to-year flexibility for a manufacturer. The table below provides an example of how a manufacturer with 1,000 annual sales may meet up to 15% of its annual ZEV requirement using the annual versus cumulative allowance for converted ZEV and PHEV values. In both scenarios, the manufacturer would meet up to 15% of its total ZEV requirements in the 2026 through 2030 model years using converted ZEV and PHEV values.

Model Year	2026	2027	2028	2029	2030	2026-2030
Annual ZEV Requirement	35% 350 values	43% 430 values	51% 510 values	59% 590 values	65% 650 values	N/A 2,530 values
Annual Allowance	15% 52.5 values	15% 64.5 values	15% 76.5 values	15% 88.5 values	15% 97.5 values	TOTAL 379.5 values
Cumulative Allowance	50% 189.8 values	25% 94.9 values	20% 75.9 values	5% 18.9 values	0% 0 values	TOTAL 379.5 values

Can converted ZEV and PHEV values be pooled?

No, only new ZEV and PHEV values earned in the 2026 through 2030 model years may be pooled.

How does the pooled ZEV and PHEV values compliance mechanism work?

Through the 2030 model year, manufacturers may transfer excess ZEV and PHEV values earned in one state to satisfy shortfalls or deficits earned in another state up to the applicable pooled allowance shown in the table below. A manufacturer may not transfer more excess ZEV or PHEV values than necessary to fulfill a shortfall within a given year or a deficit carried forward from a previous model year.

Model Year	2026	2027	2028	2029	2030
Percentage Allowance	25%	20%	15%	10%	5%

How does the pooling provision under the ACC II ZEV regulation differ from the ACC I ZEV regulation?

Under the ACC I ZEV regulation, there are two regional pools made up of eastern Section 177 states and western Section 177 states, and there is a premium for transferring credits between pools. Whereas the ACC II ZEV regulation creates a single pool made up of California and the Section 177 states.

How does the proportional FCEV values flexibility provision work?

Through the 2030 model year, manufacturers facing a shortfall may use proportional FCEV values to meet their annual ZEV requirement. Additionally, proportional FCEV values may only be used in the same model year and same state in which they are earned, and may not be banked, pooled, or traded.

How is a manufacturer's annual proportional FCEV allowance calculated?

The annual proportional FCEV allowance is calculated by multiplying the FCEV percentage share, or 10%, whichever is smaller, times the applicable model year annual ZEV requirement.

How does banking work?

Excess ZEV, PHEV, and EJ vehicle values may be banked for use in future model years in which a manufacturer has a shortfall. Banked ZEV and PHEV values expire five model years after the model year in which they were earned, and banked EJ vehicle values expire after the 2031 model year.

How does trading work?

Excess ZEV, PHEV, and EJ vehicle values, along with early compliance and converted ZEV and PHEV values, that have not expired may be traded to another manufacturer after offsetting any deficits from previous model years. Converted ZEV and PHEV values may not be traded after the 2030 model year, and early compliance vehicle values may not be traded after the third model year the annual ZEV requirements are implemented in a state.

ACC II ZEV Reporting and Recordkeeping

What type of reporting is required to determine compliance under the ACC II ZEV regulation?

On an annual basis, manufacturers are required to submit: (1) ZEV requirement performance reports for the model year and the resulting "shortfall" or "surplus" in vehicle values; and (2) end of the model year reports to verify compliance or deficit status. Each report is described in more detail below.

What information is required for the ZEV requirement performance report?

Each year by May 1, manufacturers must submit a report containing the following information:

1. Total number of LDVs produced and delivered for sale in the state for the model year and the four prior model years.
2. For each ZEV and PHEV delivered for sale in that model year: the vehicle identification number (VIN), model year, Executive Order number, make, model, test group, and state.
3. Data for each ZEV and PHEV qualifying for additional EJ vehicle values:

- a. New ZEVs/PHEVs Provided for Use in Community-Based Clean Mobility Programs: VIN, model year, make, model, test group, name, and Executive Order number (or Section 177 state equivalent) of community-based clean mobility program, MSRP, vehicle sales price, date of sale or lease, and vehicle purchase agreement.
 - b. ZEVs/PHEVs Sold at the End of Lease to Participating Dealerships: VIN, make, model, test group, MSRP, odometer reading at time of sale, participating dealer name and address, date vehicle sold to dealer, and, for vehicles sold to a financial assistance program participant, VIN and date of sale.
 - c. New ZEVs/PHEVs Below MSRP Threshold: VIN, model year, make, model, test group, and MSRP.
4. Calculation of the manufacturer's ZEV requirement performance, including calculations of any PHEV or EJ vehicle values earned in excess of the respective allowances.

What information is required for the end of model year report to verify a manufacturer's compliance or deficit status?

Each year by September 1, manufacturers must submit a report containing the following information:

1. Calculation of the manufacturer's ZEV requirement performance, usage of ZEV and PHEV values earned in the model year, EJ vehicle values, and early compliance vehicle values.
2. Designation of any excess vehicle values earned in the model year, including quantity and receiving state or manufacturer (if applicable) under the provisions for banking, usage for satisfying a deficit, transfer through pooling, or trading.
3. Designation of the usage of any vehicle values to resolve shortfalls earned in the model year, including quantity and originating state or manufacturer (if applicable) under the provisions for use of excess vehicle values of any type, converted ZEV and PHEV values, transfer through pooling, or trading.
4. Designation of the usage of any early compliance vehicle values for satisfying a deficit or trading.
5. Starting and ending balances of vehicle values for the model year, including trades to or from the manufacturer for each type of vehicle value with quantity and model year earned.

What are the reporting requirements for earning early compliance vehicle values?

A manufacturer electing to earn early compliance vehicle values must include in its annual report required per 13 CCR §1962.2 its qualification, calculation, eligibility for, and designation of, such vehicle values. If a state's first year of implementing ACC II is after the 2026 model year, the state may want to include language in its ACC II ZEV regulation requiring manufacturers to submit an annual report that includes such information for early compliance vehicle values earned during any years in which 13 CCR §1962.2 is not in effect in the state.

Are manufacturers required to report projected ZEV and PHEV sales?

Yes. While states may request projected ZEV and PHEV sales from manufacturers under the ACC I ZEV regulation and incorporated test procedures, the ACC II ZEV regulation explicitly requires manufacturers to report projected sales annually. Each year by April 1, each manufacturer must report its projected ZEV and PHEV sales in the state for the next five model years, along with the total LDVs to be delivered

for sale in the state, and, for each BEV, PHEV, and FCEV model, the model name, projected sales, and certain specifications.

What recordkeeping requirements are manufacturers subject to under the ACC II ZEV regulation?

Manufacturers must maintain the documents and information gathered to compile the reports for a minimum of five years after the submission of the report. Manufacturers must make such records available within 30 days upon request by the state to verify the accuracy of the reported information.

ACC II ZEV Gap Year

What is a gap year?

In this context, “gap year” refers to any model year between the end of ACC I ZEV (i.e., after the 2025 model year) and the start of ACC II ZEV implementation in a Section 177 state.

What happens to banked ZEV and PHEV credits in a state when there is a gap year?

Excess ZEV and PHEV credits earned under ACC I may be banked through model year 2025. After model year 2025, ZEV and PHEV credit balances will undergo a one-time conversion (divided by 2.1) to become “converted ZEV and PHEV values” under the ACC II regulation. Converted ZEV and PHEV values will be preserved and remain inactive until the first model year that ACC II is implemented in a state. Regardless of the ACC II implementation date, converted ZEV and PHEV values can only be used by manufacturers through the 2030 model year in accordance with the provisions of 13 CCR §1962.4(g).

How will deficits at the end of the 2025 model year be handled if there is a gap year?

Any deficits at the end of the 2025 model year must be made up within the time specified by 13 CCR §1962.2(g)(7)(A). Under this provision, deficits must be made up within one model year (note: intermediate volume manufacturers may request additional time). Therefore, as a general rule, deficits carried from the 2025 model year must be made up during the first model year that ACC II ZEV is implemented in a state.

Can manufacturers earn ZEV credits under ACC I or vehicle values under ACC II in a state during a gap year?

Manufacturers cannot earn ZEV credits under ACC I after the 2025 model year. For the two model years prior to the first model year of ACC II implementation in a state, manufacturers may elect to earn early compliance vehicle values for qualifying ZEVs and PHEVs delivered for sale above the threshold for earning early compliance vehicle values in accordance with the provisions in 13 CCR §1962.4(e)(3). Thus, manufacturers cannot earn ACC I ZEV credits or ACC II vehicle values for any vehicles delivered below the threshold for earning early compliance vehicle values during a gap year. For more information about early compliance vehicle values, see relevant questions above under “ACC II ZEV Compliance Flexibility Provisions.”

EXAMPLE: In State A, the 2026 model year is a gap year and ACC II implementation begins in the 2027 model year. The threshold for earning early compliance vehicle values is >7% of a manufacturer’s total LDV sales in State A.

In the 2025 model year, Manufacturer X delivers 100 qualifying ZEVs in excess of 7% of its total LDV sales in State A. ZEVs under the 7% threshold would earn ZEV credits under ACC I. For the remaining 100 ZEVs, Manufacturer X may elect to: (1) earn early compliance vehicle values under ACC II for the 100 ZEVs; (2) earn ZEV credits under ACC I for the 100 ZEVs; or (3) designate a portion to earn ACC II early compliance vehicle values and a portion to earn ACC I ZEV credits.

In the 2026 model year, a gap year, Manufacturer X delivers 200 qualifying ZEVs over the 7% threshold for earning early compliance vehicle values. Manufacturer X may elect to earn early compliance vehicle values under ACC II for all 200 ZEVs. Manufacturer X may not earn ZEV credits under ACC I for any ZEVs delivered for sale whether above or below the 7% threshold for earning early compliance vehicle values.

Do California or federal warranty provisions apply in the 2026 model year for ZEVs and PHEVs delivered for sale in a state with a gap year?

If a manufacturer elects to earn early compliance vehicle values in a state with a gap year during the 2026 model year, all model year 2026 ZEVs and PHEVs delivered for sale in the state, including vehicles under and over the threshold for earning early compliance vehicle values, must be California-certified and provide applicable California warranty provisions. Conversely, if a manufacturer chooses not to earn early compliance vehicle values in a state with a gap year during the 2026 model year, model year 2026 ZEVs and PHEVs delivered for sale would be subject to the federal warranty provisions.

ZEV Model Availability and Performance

How many light-duty ZEV models are currently available for lease/purchase?

As of July 2024, there are more than 110 models of light-duty BEVs, FCEVs, and PHEVs in various body types and vehicle segments available for lease or purchase across the U.S. It is anticipated this number will grow to nearly 200 electric vehicle (EV) models available nationwide by 2026.

Do BEVs have enough electric range to meet the average drivers' needs?

In 2019 (pre-COVID-19), the average American drove 39 miles per day and the average rural American drove 49 miles per day. Many BEVs can travel more than 200 miles on a full battery and at least 28 models have driving ranges greater than 300 miles.

How do BEVs perform in wintry weather?

BEVs generally have a lower center of gravity than ICE vehicles, making their weight more evenly distributed. As a result, BEVs gain traction more easily and demonstrate superior handling on snow- and ice-covered roads. Additionally, many BEVs have dual motors on the front and back axles, making for better maneuverability in wintry conditions. High BEV sales in Iceland and Norway speak to the ability of BEVs to perform in extreme winter climates.

How do cold temperatures impact an EV's driving range?

Similar to fuel economy for ICE vehicles, cold temperatures can reduce the driving range of BEVs. Electric range varies in response to several factors, including driver behavior, use of cabin climate controls, tire selection, etc. Manufacturers continue to innovate and pursue improvements in battery technology and range, driven by strong market pressures to deliver longer-range vehicles at lower prices. For example, several new BEV models include efficient heat pump operating systems that can significantly improve cabin heating efficiency and help maintain optimal battery performance when in operation in cold temperatures. There are also steps drivers can take to optimize performance such as pre-heating/pre-conditioning their vehicles while plugged in before driving. Technological advancements that improve cold weather operation, and range in general, are expected to progress along with adoption.

Are EVs safe?

BEVs and PHEVs must meet the same Federal Motor Vehicle Safety Standards as gas-powered vehicles. EV battery packs have extensive safety testing standards and are designed to shut down when a collision or short circuit is detected. Injury claims for EV drivers and passengers were 40% lower than that of identical gas-powered vehicles between 2011-2019.

Are EVs better for the environment than ICE vehicles?

Overwhelming research has found that compared to ICE vehicles, EVs release fewer emissions per mile over the lifetime of the vehicle, regardless of how their electricity was sourced from the grid. EVs will become increasingly cleaner as more energy from renewable sources supply electricity to the grid and fossil fuel electric generation diminishes.

Charging Infrastructure and the Electric Grid

Is there enough public charging infrastructure to support the increasing number of EVs we'll see as auto manufacturers ramp up vehicle production and sales to comply with ACC II?

Roughly 80% of charging for LDVs occurs at home. Drivers without access to at-home charging will rely on workplace and public charging infrastructure stations to refuel their EVs. The number of public charging stations in the U.S. is anticipated to grow rapidly as states receive and deploy \$5 billion in dedicated federal funding to implement their strategic National Electric Vehicle Infrastructure (NEVI) plans aimed at establishing an easily accessible and reliable DC fast charging infrastructure network. NEVI-funded charging stations will be installed every 50 miles along the interstate highway system and within 1 travel mile of the highway to help serve long distance travel. Further, utilities across the country are moving forward with make-ready infrastructure programs to accelerate the buildout of publicly accessible charging infrastructure needed to support widespread vehicle electrification. Adopting ACC II provides the market certainty needed to unlock additional infrastructure investments from auto manufacturers, utilities, and charging station developers, including at public charging locations along interstate corridors and in metropolitan and rural areas.

Will the electric grid be able to handle widespread electrification?

The electric grid can handle and benefit from widespread electrification. In order to plan ahead, utility regulators and utilities, like the auto manufacturers, need the certainty provided by ACC II to make the electric grid investments necessary to adapt to and meet the needs of EVs.

In California, the state with the most EVs, data shows that EVs incur very little grid upgrade costs. From 2012 to 2017, the number of EVs in three of California's largest utility service territories increased by a factor of 16, but fewer than 0.2% of EVs resulted in service line or distribution system upgrades. In addition, EV drivers with access to at-home charging may be able to participate in demand response programs, also referred to as managed charging programs, and lower their electric bills for charging their vehicles overnight or during other off-peak demand periods when electricity costs are cheapest. When drivers shift their charging to off-peak demand periods, EV charging benefits the electric grid and all electric ratepayers by limiting the potential negative impacts of increased demand for charging at times when it is most costly to operate the grid and utilizing excess capacity during off-peak periods.