



This summary has been compiled in response to questions posed by members of the Connecticut Hydrogen and Electric Automobile Purchase Rebate Program (CHEAPR) Board and from the recent discussions regarding eligibility requirements under the CHEAPR program. Currently, the CHEAPR program rebates are only eligible for the purchase or lease of light duty vehicles which include battery electric vehicles (BEVs), plug-in hybrid electric vehicles (PHEVs) or fuel cell electric vehicles (FCEVs).

The Department of Energy and Environmental Protection (DEEP) initiated CHEAPR as a pilot program in 2015 as a complementary policy to advance the deployment of zero-emission vehicles (ZEVs) to meet the targets established under the Multi-state ZEV Memorandum of Understanding (ZEV MOU).¹ In addition, the CHEAPR program was intended to achieve price parity between EVs and their internal combustion engine (ICE) counterparts.

DEEP, at the request of the CHEAPR board, is addressing three questions:

1. Are electric bicycles eligible for incentives under the CHEAPR program?
2. Why are FCEVs still eligible for incentives under the CHEAPR program?
3. What, if any, income level restrictions are considered for eligibility under the CHEAPR Program?

1. Are Electric Bicycles (E-Bikes) eligible for incentives under the CHEAPR Program?

Below is a legal analysis concerning whether e-bikes are in fact “vehicles” and therefore within the scope of eligibility under the CHEAPR program, or are categorized as a different mode of transportation. This analysis requires consideration of how e-bikes are defined and regulated under state law. DEEP’s CHEAPR Program was enacted through Public Act 19-117, which included a sustainable funding source as well as the creation of a board to review and approve rebates authorized under the program.

Public Act 19-117, section 94(b) specifies that a Connecticut resident who purchases or leases a BEV, PHEV or FCEV – each of which is a *vehicle* - is eligible for a rebate under the program. Therefore, in order to be considered eligible under the statute, an e-bike would need to be considered a BEV. Under Connecticut General Statutes (CGS) section 16-19eee, the definition of BEV, states a BEV is a “vehicle” that “operates solely by use of a battery pack.” In addition, the Department of Motor Vehicles (DMV) defines “vehicle” in CGS section 14-1(106), and excluded from this definition are devices propelled or drawn by human power. The DMV also excludes e-bikes from the definition of “motor vehicle” in CGS section 14-1(58).

¹ The ZEV MOU establishes a goal of putting between 120,000-155,000 electric vehicles on the road in the state by 2025.



The guiding principle for statutory construction is the doctrine of the plain meaning rule. The plain meaning rule requires that if the language is not ambiguous, the plain meaning is controlling. The objective is to ascertain and give effect to the apparent intent of the General Assembly. “If, after examining such text and considering relationship to other statutes, the meaning of such text is plain and unambiguous and does not yield absurd or unworkable results, extra textual evidence of the meaning of the statute shall not be considered.” CGS section 1-2z.

With this rule as a guide, DEEP looks at the term “vehicle” and whether e-bikes reasonably fall under this term, and also how both vehicles and e-bikes are regulated under the statutes. As stated above, the term “vehicle” is used in conjunction with the words battery electric, plug-in hybrid electric and fuel cell electric in both title 14 and title 16 of the CGS.

E-bike legislation was introduced and became law in 2018, through Public Act 18-165, “An Act Revising Motor Vehicle Statutes.” This legislation classifies e-bikes into three categories and mostly requires e-bikes to be treated like regular bicycles. It generally gives e-bike riders the same rights, privileges, and duties as existing law provides for regular bicycle riders. The act also generally allows municipalities to regulate e-bikes, to the extent that state law does not conflict with such regulations. The Office of the State Traffic Administration is authorized to regulate e-bikes within its jurisdiction (i.e., on state highways and roads on state-owned property). The office already had this authority with respect to regular bicycles.

- **Electric bikes criteria**—Connecticut defines an electric bicycle pursuant to CGS sections 14-1(13)-(15) and (31) as a motorized bicycle that engages only when the rider operates the electric bicycle's foot pedals, and disengages when the rider stops pedaling or such electric bicycle reaches a speed no more than 20 mph for Class 1 and 2 or 28mph for Class 3.
- **Electric bikes are expressly excluded from the definition of “motor-driven cycles” and “motor vehicles.”**-The only age prohibition is that a person under age 16 cannot ride a Class 3 e-bike, but both class 1 and 2 have no age restrictions.
- **Electric bikes are exempt from motor vehicle requirements** - E-bikes under DMV laws do not need to be registered or have insurance coverage.
- **Electric bikes are allowed only on certain roadways**—In Connecticut, e-bike riders must stay off of sidewalks, limited access highways, and turnpikes. If an e-bike is utilized on a roadway with a speed limit greater than 20 mph, the rider must stay in the right-hand lane or on a usable shoulder.

DEEP’s internal analysis concludes that the General Assembly clearly considers an e-bike distinguishable from the definition of vehicle, and by extension also the definition of battery electric vehicle. Through Public Act 18-165, the General Assembly created a regulatory framework for e-bikes that is more closely related to bicycles and treated as such under DMV laws. For these reasons, DEEP believes that the CHEAPR program is limited to the definition of



vehicles as referenced in title 14 and tile 16 and it would be outside the scope of the program to offer rebates for e-bikes under the existing statute.

2. Why are FCEVs still eligible for Rebates under the CHEAPR Program?

FCEVs were part of the original DEEP CHEAPR program and the General Assembly, through the enactment of Public Act 19-117, maintained that a purchase or lease of an electric vehicle qualifies whether that electric vehicle is a BEV, PHEV or FCEV.

There are multiple policy reasons why FCEVs remain in the CHEAPR program. While FCEVs are currently not available for sale in the state, the ZEV regulatory framework may count purchases of those vehicles out-of-state towards a manufacturer's regulatory obligation to meet its ZEV requirement.

Connecticut also has a strong connection to fuel cell innovation and technology rooted in the state and it would be counterproductive not only to the state's economic development goals but also to the objective of meeting our clean air goals and advancing more sustainable alternative vehicles. Although fuel cell vehicles are still in their infancy, they remain as a proven technology, cleaner option and will provide us with another tool to mitigate climate change.

3. What, if any, income level restrictions are considered for eligibility under the CHEAPR Program?

A substantive change to the original CHEAPR program is found in section 94 of Public Act 19-117, which provides for the addition of used electric vehicles into the CHEAPR program. The initial purchase price remains a significant barrier to the uptake of EVs when compared to ICE vehicles. An initial goal of the CHEAPR program was to achieve price parity between EVs and ICE vehicles until the market reached price parity on its own. However, five years after CHEAPR most EVs remain out of reach for low-moderate income individuals.

Specifically, subsection b of section 94 states:

(b) On and after January 1, 2020, until December 31, 2025, inclusive, the board shall establish and administer a program to provide rebates that total at least three million dollars annually to residents of this state who (1) purchase or lease a battery electric vehicle, plug-in hybrid electric vehicle or fuel cell electric vehicle, *or* (2) purchase a used hydrogen vehicle or electric vehicle. The board shall establish and revise, as necessary, appropriate rebate levels and maximum income eligibility for rebates for used hydrogen vehicles or electric vehicles. The board shall evaluate such program on an annual basis. [Emphasis added.]

The use of the disjunctive “or” is used as a function word to indicate an alternative. On its face, the language of section (2) of 94(b) of the act introduces the term “used vehicles” into the program as an option. Section (1) maintains the original CHEAPR program purchase or lease provision of EVs, while section (2) expands the program to used vehicles.



The sentence which follows section (2) modifies and is subordinate to subsection (2). Using the plain meaning rule of statutory construction, used vehicle purchase rebates are subject to maximum rebate levels established by the Board. The sentence which directly follows section (2) creates a new option of incentives for used vehicles into the program, and clarifies the eligibility of used vehicle purchases as intended for income eligible applicants. Specifically, the sentence directly follows section (2) to modify it and clarifies this option for used vehicle purchases and the reference which repeats the same term “used vehicles” serves as a link. It can be reasonably read together to limit the option to those who meet a maximum income eligibility requirement which the CHEAPR Board is authorized to prescribe.

Whether limiting the option of purchasing used EVs to individuals with a maximum income is successful as a means to reduce emissions and meet the needs of low-moderate income individuals remains to be seen. The CHEAPR Board has the opportunity to evaluate the program on a yearly basis and can collect data to continue the program as structured or to suggest further changes.



Statutory References

Sec. 16-19eee. Definitions. As used in this section and sections 14-12, 16-19fff, 16-19ggg, 16a-3e and 43-3a:

(1) “Battery electric vehicle” means any vehicle that operates solely by use of a battery or battery pack, or that is powered primarily through the use of an electric battery or battery pack and uses a flywheel or capacitor that stores energy produced by an electric motor or through regenerative braking to assist in vehicle operation.

Section 14-1 (13) “Class 1 electric bicycle” means an electric bicycle equipped with a motor that engages only when the rider operates the electric bicycle's foot pedals, and disengages when the rider stops pedaling or such electric bicycle reaches the speed of twenty miles per hour;

Section 14-1 (14) “Class 2 electric bicycle” means an electric bicycle equipped with a motor that may be used exclusively to propel the electric bicycle, and disengages when the brakes are applied or such electric bicycle reaches the speed of twenty miles per hour;

Section 14-1(15) “Class 3 electric bicycle” means an electric bicycle equipped with a motor that engages only when the rider operates the electric bicycle's foot pedals, and disengages when the rider stops pedaling or such electric bicycle reaches the speed of twenty-eight miles per hour;

Section 14-1(31) “Electric bicycle” means a bicycle equipped with operable foot pedals and an electric motor of fewer than seven hundred fifty watts of power that is either a class 1, class 2 or class 3 bicycle. “Electric bicycle” does not include a dirt bike or an all-terrain vehicle;

Section 14-1 (58) “Motor vehicle” means any vehicle propelled or drawn by any nonmuscular power, except aircraft, motor boats, road rollers, baggage trucks used about railroad stations or other mass transit facilities, electric battery-operated wheel chairs when operated by persons with physical disabilities at speeds not exceeding fifteen miles per hour, golf carts operated on highways solely for the purpose of crossing from one part of the golf course to another, golf-cart-type vehicles operated on roads or highways on the grounds of state institutions by state employees, agricultural tractors, farm implements, such vehicles as run only on rails or tracks, self-propelled snow plows, snow blowers and lawn mowers, when used for the purposes for which they were designed and operated at speeds not exceeding four miles per hour, whether or not the operator rides on or walks behind such equipment, motor-driven cycles as defined in section 14-286, special mobile equipment as defined in section 14-165, mini-motorcycles, as defined in section 14-289j, electric bicycles and any other vehicle not suitable for operation on a highway; and



Sec. 14-1 (106) “Vehicle” includes any device suitable for the conveyance, drawing or other transportation of persons or property, whether operated on wheels, runners, a cushion of air or by any other means. The term does not include devices propelled or drawn by human power or devices used exclusively on tracks.