
OLR Bill Analysis

sHB 5485

AN ACT CONCERNING TRANSPORTATION INFRASTRUCTURE FOR ELECTRIC VEHICLES.

SUMMARY

This bill creates a 40-member Electric Vehicle Infrastructure Coordinating Council and makes several other changes related to electric vehicles (EVs). The bill charges the council with assessing and reporting on strategies and plans needed to ensure affordable, equitable, accessible, and reliable integration of battery electric vehicles (BEVs), fuel cell electric vehicles (FCEVs), plug-in hybrid electric vehicles (PHEVs), and extended range electric vehicles (EREVs) in the state (see BACKGROUND).

The council is made up of 20 members appointed by the legislative leaders and 20 ex-officio members (eight executive branch officials and 12 legislative committee leaders). It is part of the Department of Energy and Environmental Protection (DEEP) for administrative purposes only (see COMMENT).

Under the bill, the council's main responsibility is to give direction on, review, and recommend changes to the state's zero emission vehicle (ZEV) roadmap and hold public hearings on its draft. The bill requires the DEEP commissioner, Department of Transportation (DOT) commissioner, and Public Utilities Regulatory Authority (PURA) chairperson to develop the plan and, by November 15, 2024, submit it to the council for review. It prescribes the roadmap's required content and includes administrative and procedural requirements for the council.

The bill also does the following:

1. makes changes to the Connecticut Hydrogen and Electric

Automobile Purchase Rebate (CHEAPR) program related to vouchers for environmental justice community residents and program marketing,

2. authorizes \$10 million in general obligation bonds for EV incentives and rebates and EV infrastructure,
3. requires electric distribution companies (EDCs, i.e., Eversource or United Illuminating) to charge residential customer rates for electricity provided to certain EV chargers at multifamily or multiuse buildings, and
4. requires DOT to study rural mobility options.

EFFECTIVE DATE: Upon passage, except that the bonding authorization is effective July 1, 2024.

§ 1 — ELECTRIC VEHICLE INFRASTRUCTURE COORDINATING COUNCIL

The bill establishes the 40-member Electric Vehicle Infrastructure Coordinating Council and primarily charges it with reviewing the draft ZEV roadmap. The bill covers council membership and appointments, powers and duties, and administrative requirements and procedures, as well as the ZEV roadmap's required components.

The bill specifies that nothing in its council provisions may be construed to require the adoption of ZEV standards.

Council Membership

Under the bill, the council consists of 40 members, 20 of whom serve ex-officio and 20 of whom are appointed by legislative leaders (see below tables). Eight of the ex-officio members are executive branch officials (or their designees), and 12 are legislative committee leaders. The bill allows legislative leaders to appoint legislators to the council (see COMMENT).

Table: Ex-Officio Members

<i>Executive Branch Officials (or their designees)</i>	<i>Legislators</i>
Commissioners of DOT, DEEP, Department of Administrative Services (DAS), Department of Consumer Protection (DCP), and Department of Public Health (DPH) Office of Policy and Management (OPM) secretary PURA chairperson Consumer Counsel	Chairpersons and ranking members of the Transportation, Environment, and Energy and Technology committees

Table: Appointed Members

<i>Appointing Authority</i>	<i>Number</i>	<i>Qualification</i>
House speaker	4	None
Senate president pro tempore	4	None
House majority leader	3	<ul style="list-style-type: none"> • Recommended by the Connecticut Equity and Environmental Justice Advisory Council • Recommended by a nonprofit motor vehicle dealer's association or organization • Representative of a business that uses heavy-duty motor vehicles
Senate majority leader	3	<ul style="list-style-type: none"> • Representative of an environmental protection advocacy organization • Representative of a municipal electric utilities advocacy organization • Representative of an EV manufacturer
House minority leader	3	<ul style="list-style-type: none"> • Recommended by an organization representing large municipalities • Representative of an EDC with a service area of at least 18 municipalities • Representative of a professional organization for physicians in the state
Senate minority leader	3	<ul style="list-style-type: none"> • Representative of an electric distribution company with a service area of up to 17 municipalities • Representative of an EV charging station manufacturer • Recommended by an organization representing small municipalities

Under the bill, initial appointments must be made by June 1, 2024. Appointees generally serve two-year terms, except that initial appointments terminate on May 31, 2026, regardless of the initial appointment dates. Members may be reappointed or continue serving until their successor is appointed. Vacancies must be filled by the applicable appointing authorities. Council members serve without compensation.

Chairpersons and Meetings

The commission has the following three chairpersons: the DEEP commissioner and two members of the council selected by the House speaker and Senate president pro tempore. The chairpersons must schedule the first meeting, which must be held by July 1, 2024. The council must meet at least once every two months, or at other times the chairpersons or a majority of council members deem necessary and must allow for public comment at each meeting.

Under the bill, a majority of the membership constitutes a quorum for meeting to review and assess the draft roadmap or for any vote the council takes.

Powers and Duties

The bill charges the council with the following:

1. providing direction on the ZEV roadmap's scope;
2. holding informational meetings to get stakeholder input on the benefits and impacts of integrating BEVs, FCEVs, PHEVs, and EREVs into the state's transportation network;
3. recommending changes to the ZEV roadmap draft and each draft update; and
4. holding at least one public hearing on the ZEV roadmap draft and each draft update.

It also authorizes the council to get from any executive department, board, commission, or other state agency any data or assistance needed

and available to carry out its duties. However, the bill limits the agencies to doing this within available resources and subject to the limitations of pending adjudicatory proceedings.

ZEV Roadmap

The bill requires the DEEP and DOT commissioners and PURA chairperson to develop the ZEV roadmap in coordination with the DAS, DCP, and DPH commissioners; OPM secretary; and the Consumer Counsel. It specifies the information, assessments, strategies, and recommendations for the ZEV roadmap and the process for submitting the draft and final versions.

ZEV Roadmap Contents. Under the bill, the ZEV roadmap must analyze the costs and benefits associated with light-, medium-, and heavy-duty ZEVs, including public health, air quality, and consumer impacts, and the impact on meeting the state’s emissions reductions goals. It must include specific information on estimated future EV adoption and charging needs; cost trends and incentives; charging station installation and maintenance; and electric transmission, generation, and distribution. It must also (1) include any other assessments or information that promote BEV, FCEV, PHEV and EREV use in the state and (2) address other topics or include other information the council requests.

Under the bill, the ZEV roadmap must estimate future EV adoption and charging needs and include the:

1. number of BEVs, FCEVs, PHEVs, and EREVs (1) registered in the state and (2) estimated to be sold and registered in the state for the year of the report and over the next 10 years, based in part on the attainment of the state’s emissions reduction goals; and
2. estimated number and type of charging stations needed to support the vehicles estimated above in public and private settings, such as transit facilities and parking facilities at commercial, industrial, and residential (including multifamily) properties.

Regarding vehicle costs, trends, and incentives, the roadmap must:

1. identify BEV, FCEV, PHEV and EREV adoption and distribution trends using information from the CHEAPR program for the prior year;
2. identify costs trends for new BEVs, FCEVs, PHEVs and EREVs using the manufacturer's suggested retail price;
3. identify and evaluate the cost impact of applicable existing and future state and federal EV incentives and include information from the prior year on the availability and equitable distribution of CHEAPER incentives among residents of differing socioeconomic status; and
4. identify cost trends for new or used internal combustion engine vehicles as applicable state and federal motor vehicle emission laws take effect.

The roadmap must also have information, strategies, and recommendations on charging station installation and maintenance and the state's charging network. Specifically, it must:

1. recommend how to help government units or private entities install EV charging stations and associated infrastructure, equipment, and technology, including near on-street parking;
2. identify strategies, including non-ratepayer-funded ones, to ensure that EV charging stations are installed in urban, suburban, and rural areas, including low- and moderate-income communities;
3. recommend strategies for ensuring charging stations are maintained and continuously working; and
4. provide information on the state's implementation of the National Electric Vehicle Infrastructure Formula Program (including its status and results), which gives funding to states to strategically deploy EV charging stations and establish

interconnected networks to facilitate data collection, access, and reliability.

The roadmap must also include various information, assessments, and summaries on electric transmission, generation, and distribution and to EDCs' deployment of EV chargers. Specifically, it must:

1. report on the adequacy of electric transmission and generation supply and storage infrastructure to serve the EV charging stations needed to support the roadmap's estimated number of EVs;
2. summarize each EDC's progress toward meeting PURA-established statewide deployment targets for level 2 and level 3 charging stations (see BACKGROUND);
3. identify the percentage of level 2 and level 3 charging stations installed in environmental justice communities and housing authority-owned or -managed housing;
4. describe EDCs' methodology for tracking how EV charging infrastructure facilitates the deployment of BEVs, PHEVs, FCEVs, and EREVs throughout the state;
5. provide aggregated results of EDC-managed charging programs designed to integrate and optimize EV charging onto the electric distribution system; and
6. identify the available EV tariff offerings by customer class, charger type, and service territory.

Lastly, the roadmap must determine the impacts of electrification on state bus service. It must identify (1) battery electric buses' purchase and operating costs, (2) the level of funding needed to deploy electric buses, (3) the service territory of currently operating electric buses, and (4) battery electric bus service in low- and moderate-income communities.

Process for Review and Approval. DOT, DEEP, and PURA must submit the draft of the initial ZEV roadmap to the council by November

15, 2024. The council must then hold at least one public hearing on the draft after November 15, 2024, but before January 8, 2025. By January 8, 2025, DEEP must submit the final ZEV roadmap, covering all the information the bill requires, to the Environment, Energy and Technology, and Transportation committees and publish the roadmap on its website.

The bill requires DEEP, DOT, and PURA to annually update the draft roadmap in coordination with the same entities. They must submit the draft to the council by November 15 of each year and, by the following January 1, submit the final plan to the legislative committees and DEEP must post it on the department's website.

§ 2 — CHEAPR PROGRAM

Program Goal

By law, the CHEAPR program gives rebates and vouchers to residents, municipalities, businesses, nonprofits, and tribal entities that buy new or used BEVs, PHEVs, FCEVs. The bill establishes a CHEAPR program goal to distribute, by January 1, 2030, at least 40% of rebate and voucher funding to a U.S. Census block group in which 30% or more of the population has an income below 200% of the federal poverty level.

Vouchers for Environmental Justice Community Residents

Under current law, DEEP must prioritize granting rebates or vouchers to (1) environmental justice community residents, (2) residents with incomes up to 300% of the federal poverty level, and (3) residents participating in state or federal assistance programs (e.g., Supplemental Nutrition Assistance Program or Low Income Home Energy Assistance Program). The bill instead requires DEEP to prioritize environmental justice community residents that meet the above income or assistance program participation criteria. So, under the bill, DEEP no longer has to give priority to (1) environmental justice community residents that do not meet the income or assistance program requirements or (2) residents meeting the criteria but living outside environmental justice communities.

By law, CHEAPR rebate or voucher amounts are set administratively

by DEEP, subject to certain statutory parameters. Current law requires the rebate or voucher amount for residents of environmental justice communities be up to 100% more than a standard rebate. The bill increases the amount to at least 200% greater than the standard amount.

Marketing

Existing law requires DEEP to promote CHEAPR through outreach programs and a marketing campaign. The bill specifically requires that the campaign (1) target environmental justice communities, (2) be done in languages in addition to English, and (3) involve community-based organizations that serve environmental justice communities.

E-Bikes

By law, CHEAPR has an e-bike component, through which DEEP offers rebates or vouchers for e-bikes. The bill makes the same prioritization change for e-bike incentives as it does for EVs, giving priority for incentives to environmental justice community residents who meet the income or assistance program participation criteria (e.g., income of up to 300% of the federal poverty level, as described above).

The bill also requires DEEP to do marketing and outreach, subject to requirements under the bill and existing law (e.g., targeting environmental justice communities), at least 60 days before distributing any e-bike rebate or voucher.

§ 3 — BONDS FOR EVS AND CHARGING INFRASTRUCTURE

The bill authorizes up to \$10 million in general obligation bonds and requires DEEP to use the proceeds for:

1. grants to municipal electric utilities to install EV charging infrastructure in environmental justice communities within the utilities' service areas,
2. incentives and rebates for EVs and hybrid EVs and to install EV charging infrastructure, and
3. incentives to install EV charging infrastructure in the public rights-of-way.

The bonds are subject to standard statutory bond issuance procedures and repayment requirements.

§ 4 — ELECTRICITY RATES FOR EV CHARGERS

The bill requires EDCs to charge a customer for electricity provided to certain separately metered level-2 chargers at the same rate they charge residential customers (see BACKGROUND). The EDCs must do this for chargers available for residential use and located in either a (1) multifamily residential building or (2) multi-use building if residential use makes up at least 50% of the building's metered energy.

§ 5 — STUDY OF RURAL MOBILITY OPTIONS

The bill requires DOT to (1) study and make recommendations on the feasibility of expanding mobility options in rural communities and (2) submit a report with the study's results to the Transportation Committee by July 1, 2026. The study and recommendations must consider the following:

1. operation and maintenance costs, including new or additional services;
2. currently used vehicles' size and availability and their compatibility with rural operations;
3. viability of operating sustained services to rural communities, including operator availability and maintenance capacity; and
4. best practices from other rural communities in the country.

BACKGROUND

EV Definitions

Under existing law, EVs include the following vehicle types:

1. battery electric vehicle (BEV), which is a vehicle that (a) operates only by battery or (b) is primarily powered through a battery and stores energy produced by an electric motor or through regenerative braking;

2. fuel cell electric vehicle (FCEV), which is one operated exclusively by fuel cell;
3. plug-in hybrid electric vehicle (PHEV), which is capable of charging a battery used for propulsion from an off-vehicle source; and
4. extended range electric vehicle (EREV), which is a vehicle (1) powered predominately by a zero-emission energy storage device, (2) with a manufacturer rating of more than 75 all-electric miles, and (3) equipped with a backup power unit that does not operate until the energy storage is fully depleted (CGS § 16-19eee).

EV Charging Levels

There are three levels of EV chargers, which use different amounts of electricity and charge at different speeds:

1. Level 1 chargers use a common residential 120-volt outlet and can take 40-50 hours or more to charge an EV from empty to 80% and five to six hours for a PHEV.
2. Level 2 chargers use a 208- or 240-volt circuit and are common in home, workplace, and public charging. These chargers can charge an EV from empty to 80% in four to 10 hours and a PHEV in one to two hours.
3. Level 3 chargers (also called direct current fast charging, or supercharging) offer rapid charging and are most often used for public charging. They can charge an EV from empty to 80% in 20 minutes to one hour. Most PHEVs currently on the market do not work with these chargers.

Environmental Justice Communities

By law, an “environmental justice community” is (a) any U.S. census block group, as determined by the most recent census, for which at least 30% of the population consists of low-income people who are not institutionalized and have an income below 200% of the federal poverty

level or (b) a distressed municipality (CGS § 22a-20a).

COMMENT

Dual Job Ban

Connecticut has both a constitutional and statutory ban against legislators accepting or holding positions or offices in the executive or judicial branch, in Congress, or with the federal government (Conn. Const., art. III § 11; CGS § 2-5). Because this bill allows legislators to be appointed to a council that is explicitly part of the executive branch, the bill may violate the dual job ban.

COMMITTEE ACTION

Transportation Committee

Joint Favorable

Yea 22 Nay 13 (03/20/2024)