

# HOUSE BILL REPORT

## E2SHB 1287

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### As Passed Legislature

**Title:** An act relating to preparedness for a zero emissions transportation future.

**Brief Description:** Concerning preparedness for a zero emissions transportation future.

**Sponsors:** House Committee on Transportation (originally sponsored by Representatives Ramel, Hackney, Bateman, Fitzgibbon, Berry, Goodman, Santos, Kloba, Macri, Bergquist, Ormsby and Pollet).

#### Brief History:

##### Committee Activity:

Environment & Energy: 1/28/21, 2/4/21 [DPS];

Transportation: 2/16/21, 2/18/21 [DP2S(w/o sub ENVI)].

##### Floor Activity:

Passed House: 3/3/21, 65-31.

Senate Amended.

Passed Senate: 4/10/21, 25-23.

House Concurred.

Passed House: 4/14/21, 54-43.

Passed Legislature.

#### Brief Summary of Engrossed Second Substitute Bill

- Requires the Washington State Department of Transportation's Public-Private Partnership Office to develop and maintain a publicly available mapping and forecasting tool that provides locations and essential information of charging and refueling infrastructure to support forecasted levels of electric vehicle adoption, travel, and use.
- Requires electric utilities to analyze how their resource plans account for modeled load forecast scenarios that consider anticipated levels of zero-emission vehicle use in the utility's service area, assumed use case scenarios that consider anticipated levels of zero-emission vehicle use,

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*This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not part of the legislation nor does it constitute a statement of legislative intent.*

and information from the utilities' transportation electrification plans.

- Requires the State Building Code Council to implement rules for residential R-3 occupancies by July 1, 2024, to require electric vehicle charging capability at all new buildings that provide on-site parking, in an amount that is the greater of at least one parking space, or 10 percent of parking spaces.
- Establishes a goal that all publicly and privately owned passenger and light duty vehicles of model year 2030 or later sold, purchased, or registered in Washington state be electric vehicles, contingent upon vehicle participation in a new road usage charge or equivalent tax or fee policy.

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## HOUSE COMMITTEE ON ENVIRONMENT & ENERGY

**Majority Report:** The substitute bill be substituted therefor and the substitute bill do pass. Signed by 8 members: Representatives Fitzgibbon, Chair; Duerr, Vice Chair; Berry, Fey, Harris-Talley, Ramel, Shewmake and Slatter.

**Minority Report:** Do not pass. Signed by 5 members: Representatives Dye, Ranking Minority Member; Klicker, Assistant Ranking Minority Member; Abbarno, Boehnke and Goehner.

**Staff:** Jacob Lipson (786-7196).

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## HOUSE COMMITTEE ON TRANSPORTATION

**Majority Report:** The second substitute bill be substituted therefor and the second substitute bill do pass and do not pass the substitute bill by Committee on Environment & Energy. Signed by 17 members: Representatives Fey, Chair; Wylie, 1st Vice Chair; Bronoske, 2nd Vice Chair; Ramos, 2nd Vice Chair; Berry, Chapman, Duerr, Entenman, Hackney, Lovick, Paul, Ramel, Riccelli, Slatter, Taylor, Valdez and Wicks.

**Minority Report:** Do not pass. Signed by 5 members: Representatives Griffey, McCaslin, Orcutt, Sutherland and Walsh.

**Minority Report:** Without recommendation. Signed by 7 members: Representatives Barkis, Ranking Minority Member; Eslick, Assistant Ranking Minority Member; Robertson, Assistant Ranking Minority Member; Volz, Assistant Ranking Minority Member; Dent, Goehner and Klicker.

**Staff:** Jennifer Harris (786-7143).

## **Background:**

### Electric Utility Resource Plans and Transportation Electrification Plans.

Electric utilities may be operated by municipalities (municipal electric utilities), public utility districts (PUDs), which are special purpose districts which may be formed to generate and distribute electricity, and privately owned electrical companies (investor-owned utilities). Investor-owned utility rates are subject to review and approval by the Utilities and Transportation Commission (UTC).

Each electric utility must develop a Resource Plan. Utilities with 25,000 or more customers that are not fully served by the Bonneville Power Administration (BPA) must develop Integrated Resource Plans (IRPs). An IRP must include forecasts of projected customer demand and assessments of commercially available conservation and efficiency resources and renewable and nonrenewable technologies. Utilities with fewer than 25,000 customers or that are fully served BPA customers must complete a Resource Plan with fewer required components than IRPs. Integrated Resource Plans and other Resource Plans must be updated at least every two years.

Since 2019 the governing body of a municipal electric utility or PUD may adopt an electrification of transportation plan that, at a minimum, establishes a finding that utility outreach and investment in the electrification of transportation infrastructure does not increase net costs to ratepayers in excess of 0.25 percent. In addition, an investor-owned utility may submit to the UTC an electrification of transportation plan that deploys electric vehicle supply equipment (EVSE) or provides other electric transportation programs, services, or incentives to support electrification of transportation, provided that such EVSE programs or services do not increase costs to customers in excess of 0.25 percent above the benefits of electric transportation to all customers over a period consistent with the utility's planning horizon under its most recent IRP. The UTC may allow an incentive rate of return on investment through December 31, 2030, on capital expenditures for EVSE that is deployed for the benefit of ratepayers, provided that the capital expenditures do not increase costs to ratepayers in excess of 0.25 percent. The incentive rate of return on investment applies to any EVSE project that is installed after July 1, 2015.

### Building Requirements for Electric Vehicle Infrastructure.

The State Energy Code (Code) is part of the State Building Code, which sets the minimum construction requirements for buildings in the state. The Code provides a maximum and minimum level of energy efficiency for residential buildings and the minimum level of energy efficiency for nonresidential buildings. The State Building Code Council (Council) maintains the Code. Unless otherwise amended by rule, the Code must reflect the 2006 edition. The Council reviews, updates, and adopts model state building codes every three years. The Council must adopt rules for electric vehicle infrastructure requirements. Rules adopted by the Council must consider applicable national and international standards.

In 2019 the Council was directed to develop rules for electric vehicle infrastructure that require electric vehicle charging capability at all new buildings that provide on-site parking. These rules must be implemented by July 1, 2021, and provide that:

- where parking is provided, the greater of one parking space or 10 percent of parking spaces, rounded to the next whole number, must be provided with wiring or raceway size to accommodate 208/240 V 40-amp or equivalent electric vehicle charging;
- electrical rooms serving buildings with on-site parking must be sized to accommodate the potential for electrical equipment and distribution required to serve a minimum of 20 percent of the total parking spaces with 208/240 V 40-amp or equivalent electric vehicle charging;
- load management infrastructure may be used to adjust the size and capacity of the required building electric service equipment and circuits; and
- for accessible parking spaces, the greater of one parking space or 10 percent of accessible parking spaces, rounded to the next whole number, must be provided with electric vehicle charging infrastructure that may also serve adjacent parking spaces not designated as accessible parking.

#### Zero-Emission Vehicle Program.

Under the federal Clean Air Act (federal CAA), most states, including Washington, are restricted from enacting their own emissions standards for new motor vehicles, which is an authority generally reserved to the federal government. California is the only state allowed under the federal CAA to adopt state standards for vehicle emissions. California's vehicle emissions standards must be at least as protective of public health as federal standards and must be approved by the United States Environmental Protection Agency (EPA). Other states may adopt vehicle emissions standards that are identical to California's vehicle emissions standards for specific vehicle model years. The motor vehicle emissions standards established by California contain two program components: low-emission vehicle (LEV) requirements and zero-emission vehicle (ZEV) requirements.

The California ZEV program requires that a specified percentage of the vehicles delivered for sale in the state by manufacturers must be ZEVs. California's current ZEV standards for passenger cars and light-duty trucks require that ZEV credits equal to 9.5 percent of vehicles produced by manufacturers and delivered for sale in California be ZEVs by 2020, increasing to 22 percent for model year 2025 and beyond. In 2020 the Legislature enacted a bill that requires the Department of Ecology (Ecology) to adopt all of California's motor vehicle emission standards, including the ZEV program.

#### Greenhouse Gas Emission Limits.

In 2008 Washington enacted legislation that sets a series of limits on the emission of greenhouse gases (GHGs) within the state. Ecology is responsible for monitoring and tracking the state's progress toward the emission limits. In 2020 additional legislation was

enacted to update the state limits to the following:

- By 2020, reduce overall emissions of GHGs in the state to 1990 levels, or 90.5 million metric tons.
- By 2030, reduce overall emissions of GHGs in the state to 45 percent below 1990 levels, or 50 million metric tons.
- By 2040, reduce overall emissions of GHGs in the state to 70 percent below 1990 levels, or 27 million metric tons.
- By 2050, reduce overall emissions of GHGs in the state to 95 percent below 1990 levels, or 5 million metric tons, and achieve net-zero GHG emissions.

#### State-Funded Electric Vehicle Charging Infrastructure.

In 2014 a Joint Transportation Committee study found that electric vehicle (EV) charging infrastructure required incentives to encourage investment in charging infrastructure until more EVs were on the road. Legislation was enacted in 2015 to establish an EV Infrastructure Pilot Program in the Washington State Department of Transportation's (WSDOT's) Public-Private Partnerships Office. In 2017 the WSDOT awarded \$1 million in grants for the EV Infrastructure Pilot Program.

In 2019 the EV Charging Infrastructure pilot program was expanded to include the opportunity for bidders to propose hydrogen fueling station infrastructure. Two million dollars was appropriated in the Transportation Budget in the 2019-21 biennium for the program, with ongoing funding programmed through the 2023-25 biennium of \$2 million per biennium. The WSDOT plans to conduct the next competitive bid process this spring.

Four-and-one-half million dollars was also awarded for 18 charging infrastructure projects by the Ecology beginning in 2019 with revenue from the Volkswagen Settlement fund. In addition, the 2019-21 Capital Budget made an appropriation to the Department of Commerce for the Clean Energy Fund, which included funding of public charging. Recent Clean Energy Fund grants have totaled \$9.8 million and were awarded to cities, public utility companies, counties, and other public entities to install charging infrastructure.

In 2019 the Legislature created an Electric Vehicle Account for expenditures on certain transportation electrification and alternative fuel related purposes. Revenues from an annual \$75 fee imposed on electric or hybrid vehicles are deposited into the Electric Vehicle Account.

#### **Summary of Engrossed Second Substitute Bill:**

##### Electric Vehicle Infrastructure Tool.

The Department of Transportation (Transportation) must develop and maintain a publicly available mapping and forecasting tool (tool) that provides locations and essential information of charging and refueling infrastructure to support forecasted levels of electric

vehicle adoption, travel, and use. Transportation must consult with the departments of Ecology and Commerce and the state Office of Equity in the development of the tool.

The tool must:

- be designed to enable deployment of charging and refueling infrastructure to support transportation electrification efforts that result in emission reductions consistent with state greenhouse gas (GHG) emission limits;
- initially prioritize on-road transportation;
- incorporate Transportation traffic data for passenger and freight vehicles;
- integrate population, health, environmental, and socioeconomic data; and
- integrate related analyses, such as the state energy strategy.

If feasible or to the extent feasible, the tool must also:

- provide the data necessary to support state agencies with a role in transportation electrification efforts;
- provide data at a scale that supports electric utility planning for system-wide impacts and for impacts on specific components of the distribution system;
- forecast zero-emission vehicle (ZEV) use that would achieve state emission reductions consistent with state emission limits;
- evolve over time to support future transportation electrification programs;
- address specified elements, including the amount, type, location, and year of installation of electric vehicle supply equipment, the electric vehicle characteristics necessary to model future electric vehicle penetration levels and use cases, the estimated energy and capacity demand, political boundaries, and existing infrastructure;
- integrate scenarios including varying levels of public transportation and active transportation use; and
- incorporate infrastructure located at or near the border with neighboring states and provinces.

Transportation must conduct a stakeholder process in developing the tool and must involve stakeholders early in the tool development process. Transportation may contract with consultants or Department of Commerce to develop and implement all or part of the tool, and may rely on or contract for privately maintained data. Funds in the Electric Vehicle Account may be used for the mapping and forecasting tool. To the extent that the tool is used to recommend future electric vehicle charging sites, Transportation must consider recommending sites that are colocated with small retailers and other amenities.

#### Utility Resource Plans.

The Integrated Resource Plans and Resource Plans of electric utilities must support and account for:

- modeled load forecast scenarios that consider anticipated levels of ZEV use in a

- utility's service area, including anticipated levels of ZEV use provided in the Transportation mapping and forecasting tool, if feasible;
- analysis, research, recommendations, actions, and other information found in utilities' transportation electrification plans; and
  - assumed use case forecasts and associated energy impacts, which may use forecasts from Commerce's mapping and forecasting tool. This applies only to plans due to be filed after September 1, 2023.

Building Requirements for Electric Vehicle Infrastructure.

The State Building Code Council's (Council) electric vehicle infrastructure requirements for buildings must exceed the minimum requirements established in 2019 for residential and commercial buildings to the extent necessary to support anticipated levels of ZEV use that result from the implementation of the ZEV program and that result in emission reductions consistent with state emission reduction limits. The Council must adopt rules to implement these electric vehicle infrastructure requirements by July 1, 2024, and may update those rules periodically thereafter.

By July 1, 2024, the Council must also implement rules for residential R-3 occupancies to require electric vehicle charging capability (by providing wiring or raceway to accommodate 208/240 V 40-amp electric vehicle charging) at all new buildings that provide on-site parking, in an amount that is the greater of at least one parking space, or 10 percent of parking spaces.

Electric Vehicle Goals.

A goal is established that all publicly and privately owned passenger and light duty vehicles of model year 2030 or later sold, purchased, or registered in Washington state be electric vehicles, contingent upon a road usage charge or equivalent vehicle miles traveled fee or tax being in effect in Washington with at least 75 percent of registered passenger and light duty vehicles in Washington participating.

**Appropriation:** None.

**Fiscal Note:** Available.

**Effective Date:** The bill takes effect 90 days after adjournment of the session in which the bill is passed.

**Staff Summary of Public Testimony (Environment & Energy):**

(In support) Automobile manufacturers and dealers are committed to an electric vehicle future. The transportation system needs to transition in order to support widespread electric

vehicle adoption. The forecasting, modeling, and mapping tool will be a helpful resource. Planning for vehicle electrification includes both battery-electric vehicles and hydrogen fuel cell vehicles. Providing clear direction to utilities in planning for new load growth will ensure downward pressure on utility customer rates during the transportation electrification process. It is important to ensure widespread access to electric vehicle charging infrastructure. New parking spaces should be designed to accommodate electric vehicle charging infrastructure. Gas stations and convenience stores can be part of the transition to transportation electrification.

(Opposed) None.

(Other) The funds to implement this bill were not included in the Governor's budget. State agencies are preparing for aggressive growth in electric vehicles, and associated impacts on infrastructure. It is an efficient use of public funding to develop an infrastructure planning tool that can be used by local governments, electric utilities, state budget leaders, and others. The tool will help identify gaps in planning for transportation electrification and ensure the equitable distribution of resources. Increasing the adoption of zero-emission vehicles will reduce greenhouse gas emissions and other forms of air pollution. Improved state planning for transportation electrification will help the state access federal funds that are expected to be allocated for this purpose. Electric utilities should be consulted in the adoption of the infrastructure planning tool by the Department of Commerce. Utilities should be allowed the discretion to plan for particular levels of zero-emission vehicles based on unique, local circumstances.

#### **Staff Summary of Public Testimony (Transportation):**

(In support) This is a scalable solution to our climate crisis. It is economical, affordable, and will create good jobs in the state. The transition will improve air quality and can put communities that have been overburdened with pollution at the front of the line. General Motors is shifting to all electric vehicles (EVs) and market demand is growing. The state needs to have the infrastructure in place to meet this growing need.

The State Energy Strategy Task Force has found that utilities do not have the appropriate guidance on what is needed. The planning and mapping tool will answer these questions to guide investments. Electric utilities play an essential role in EV infrastructure. This bill will help ensure utilities meet needs of current and future customers by helping to plan for new load growth. It will help enable widespread access to EV charging. The green hydrogen language still needs work.

Hydrogen fuel cell vehicles are EVs and ZEVs. Hydrogen fueling can take the place of gas stations. There are roles for hydrogen and lithium-based EVs in the state. Both battery charging ports and hydrogen refueling stations need this mapping tool. It will not be possible to install enough charging ports to cover estimated future needs for battery EVs—hydrogen refueling stations can help fill this need. The definition of "hydrogen" in



the bill is trying to make the law non-discriminatory regarding whether what is being charged is a hydrogen or a lithium molecule.

(Opposed) None.

(Other) This bill includes important and timely policy. Knowing where there are gaps in EV infrastructure will facilitate the citing of charging stations and ensure an equitable distribution of charging stations. This tool will facilitate a coordinated and comprehensive approach to statewide planning. The tool can also help secure federal funding for EV charging. The tool for planning will be an efficient use of state dollars.

The bill is not expansive enough because it does not include all the ramifications of EV adoption in the state. Small convenience stores throughout the state may have dwindling revenue during this transition and would like to be included in this discussion, so that convenience stores can be part of the EV infrastructure system in the state. Funding EV charging at convenience stores through public-private partnerships is a possibility. The green hydrogen language in the bill is wrong.

**Persons Testifying (Environment & Energy):** (In support) Representative Ramel, prime sponsor; Scott Hazelgrove, Washington State Auto Dealers Association; Dave Warren, Western States Hydrogen Alliance and Renewable Hydrogen Alliance; Annabel Drayton, Northwest Energy Coalition; Don Steinke; Carolyn Logue, Washington Food Industry Association; and Karen Messmer, Thurston Climate Action Team.

(Other) Nicolas Garcia, Washington Public Utility Districts Association; Michael Breish, Department of Commerce; Tonia Buell, Department of Transportation; and Kathy Taylor, Department of Ecology.

**Persons Testifying (Transportation):** (In support) Representative Ramel, prime sponsor; Annabel Drayton, Northwest Energy Coalition; and Dave Warren, Renewable Hydrogen Alliance and Western States Hydrogen Alliance.

(Other) Curt Augustine, Alliance for Automotive Innovation; Kathy Taylor, Department of Ecology; Tonia Buell and Michael Breish, Department of Commerce; and Carolyn Logue, Washington Food Industry Association.

**Persons Signed In To Testify But Not Testifying (Environment & Energy):** None.

**Persons Signed In To Testify But Not Testifying (Transportation):** None.