



SF 473 – Electric Vehicle Registration (LSB1803SV)

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Fiscal Note Version – New

Description

[Senate File 473](#) applies an additional registration fee to electric vehicles, an excise tax on hydrogen used as fuel, and an excise tax on electricity used as electric fuel. The registration fees and the hydrogen fees provisions of the Bill would take effect on January 1, 2020. The excise tax on electricity would take effect on July 1, 2020. The Department of Agriculture and Land Stewardship (IDALS) would inspect and license vehicle charging stations. The additional registration fees would be as follows:

- \$130 for a battery electric vehicle (BEV).
- \$65 for a plug-in hybrid electric vehicle (PHEV).
- \$9 for a battery electric or plug-in hybrid motorcycle.
- \$0.65 per gallon of hydrogen used as fuel (under the Bill, 2.49 pounds of hydrogen are equivalent to 1.00 pound of diesel fuel).
- A \$.026 tax on each kilowatt hour (kWh) of electricity purchased at a nonresidential location. Electricity used for powering vehicles is exempt from State and local sales tax.

Background

While hydrogen-powered vehicles are not currently in use outside of California, BEV uptake in Iowa is comparatively small but growing. In June 2016, the Iowa Economic Development Authority (IEDA) identified 163 BEVs and 854 PHEVs in the State. The [LSA Issue Review “Electric Vehicle and Hybrid-Electric Vehicle Registration Fees”](#), states there were 397 BEVs registered in Iowa in April 2017. A December 2018 report by the Iowa Department of Transportation, citing September 2018 data, found around 800 registered electric vehicles. A follow-up IEDA study found that as of December 2018, there were 1,043 BEVs vehicles registered in Iowa.

Compared to electric vehicles, PHEVs are more ubiquitous and continue to grow. In June 2016, there were approximately 854 PHEVs in the State of Iowa. As of December 2018, there were 1,964 PHEVs.

While electric vehicles and plug-in hybrids contribute to the Road Use Tax Fund (RUTF) through vehicle registration fees, they contribute little or no revenue to the RUTF through fuel taxes. Fuel tax constitutes more than 40% of revenues to the RUTF.

Assumptions

- The energy usage of a BEV is 27 kWh per 100 miles; a PHEV uses 30 kWh per 100 miles.
- There would be a 6.0% sales tax exemption per kWh at a price of 10 cents per kWh on nonresidential charging.
- There would be an 80.0% residential charge rate for vehicles and a 20.0% nonresidential charge rate.
- There would be 11,500 miles driven annually by electric vehicles, with PHEVs driving 55.0% of those miles using electric power.

- Half of the additional registration fees would be collected for FY 2020, the first year of implementation.
- There would be no excise taxes collected during FY 2020.
- After FY 2020, there would be an excise tax of \$16.15 per year per vehicle for BEVs, and \$9.87 per year for PHEVs.
- There would be sales tax of \$3.73 per year per vehicle for BEVs, and \$2.28 per year for PHEVs
- Hydrogen-powered vehicles and electric motorcycles are not included in this analysis.
- Vehicles registered per year are estimated as follows:

Estimated Vehicle Registration by Type		
Fiscal Year	Number of PHEVs	Number of BEVs
2020	2,835	1,431
2021	3,528	1,970
2022	4,462	2,748
2023	5,698	3,860
2024	7,320	5,447

PHEV = Plug-in Hybrid Vehicle
BEV = Battery Electric Vehicle

Fiscal Impact

[Senate File 473](#) would affect revenues deposited into the Road Use Tax Fund and the General Fund by the amounts shown in **Table 1**.

Table 1

Senate File 473 – Estimated Impact					
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
RUTF					
Registration Fees	\$ 185,000	\$ 485,000	\$ 647,000	\$ 872,000	\$ 1,184,000
Excise Tax	-	67,000	88,000	119,000	160,000
Total Revenue Increases	\$ 185,000	\$ 552,000	\$ 735,000	\$ 991,000	\$ 1,344,000
General Fund					
Sales Tax Revenues	\$ -	\$ -12,000	\$ -20,000	\$ -27,000	\$ -37,000
Total Revenue Decreases	\$ -	\$ -12,000	\$ -20,000	\$ -27,000	\$ -37,000

This Bill would also increase IDALS expenses by approximately \$82,100 to implement metering and licensing of charging stations in the first year and an estimated \$14,600 in subsequent years.

The Department of Revenue indicated that they would incur additional excise tax administrative expenses, but the cost could not be estimated. Any increased administrative costs to the Department of Transportation are estimated to be minimal.

Sources

Iowa Department of Revenue
Iowa Department of Transportation
Iowa Economic Development Authority
Iowa Department of Agriculture and Land Stewardship
LSA calculations

/s/ Holly M. Lyons

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The fiscal note for this Bill was prepared pursuant to Joint Rule 17 and the Iowa Code. Data used in developing this fiscal note is available from the Fiscal Services Division of the Legislative Services Agency upon request.
