Department of Legislative Services

Maryland General Assembly
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FISCAL AND POLICY NOTE
Revised

House Bill 1345 (Delegate McHale, *et al.*) (By Request - Maryland Electric Vehicle Infrastructure Council)

Environmental Matters Budget and Taxation and Finance

Electric Vehicles and Recharging Equipment - Rebates and Tax Credits

This bill alters the existing qualified plug-in electric vehicle excise tax credit by altering the value of the credit and extending through fiscal 2017 the termination date of the program. The bill also repeals the electric vehicle recharging equipment income tax credit and replaces the credit with a rebate program administered by the Maryland Energy Administration (MEA). MEA may award an annual maximum of $600,000 in rebates in fiscal 2015 through 2017, with funding for these rebates provided by transfers from the Strategic Energy Investment Fund (SEIF).

The bill takes effect July 1, 2014.

Fiscal Summary

State Effect: SEIF revenues decrease by at least $1.3 million in FY 2015. Transportation Trust Fund (TTF) revenues decrease by $0.5 million annually in FY 2015 through 2017. Future year estimates reflect extension of the credit and impact of the rebate program and required SEIF transfers. To the extent MEA does not award the maximum amount of tax credits, revenue impacts will be less than estimated. No effect on expenditures.

($ in millions)	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
SF Revenue	($1.8)	($1.8)	($1.8)	$0	$0
Expenditure	0	0	0	0	0
Net Effect	($1.8)	($1.8)	($1.8)	$0	$0

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect

Local Effect: Local highway user revenues decrease by $49,250 annually in FY 2015 through 2017. Local expenditures are not affected.

Small Business Effect: Minimal.

Analysis

Bill Summary:

Qualified Electric Vehicle Excise Tax Credit

The bill alters the existing qualified plug-in electric vehicle excise tax credit by:

- extending the tax credit through fiscal 2017;
- altering the calculation of the credit, thereby increasing the value of the tax credit provided to most vehicles; and
- specifying that the tax credit is only available for qualified vehicles that are purchased new and titled for the first time on or after July 1, 2014, but before July 1, 2017.

Under current law, the maximum value of the credit ranges from $600 to $1,000 based on the battery capacity of the qualifying vehicle. The bill changes the value of the credit to equal the lesser of (1) $125 times the number of kilowatt-hours battery capacity of the vehicle; or (2) $3,000. **Exhibit 1** compares the proposed value of the credit compared with current law for four of the most popular vehicles that have qualified for the tax credit.

Exhibit 1
Electric Vehicle Excise Tax Credit
Current Law and Proposed

	Current Law	Proposed	Difference
Chevy Volt	$1,000	$2,063	$1,063
Nissan Leaf	1,000	3,000	2,000
Tesla Model S	1,000	3,000	2,000
Toyota Prius Plug-in Hybrid	600	550	-50

Source: Maryland Department of Transportation, Department of Legislative Services

The bill requires a transfer from SEIF to TTF of up to $1,287,000 in fiscal 2015, 2016, and 2017 for electric vehicle excise tax credits. A maximum of $1,800,000 in credits may be claimed in each fiscal year.

Electric Vehicle Recharging Equipment Income Tax Credit

The bill repeals the electric vehicle recharging equipment income tax credit effective July 1, 2014, and replaces the credit with a rebate program administered by MEA. MEA may award an annual maximum of $600,000 in rebates in fiscal 2015 through 2017, with funding for these rebates provided by a transfer from SEIF. **Exhibit 2** compares the value of the credit provided under current law and the proposed value of the rebate program. MEA may provide rebates to (1) the State or local governments for up to 50% of the qualified costs, not to exceed $5,000 and (2) retail gasoline service stations for up to 50% of the qualified costs, not to exceed $7,500.

Exhibit 2
Electric Vehicle Recharging Equipment
Current Tax Credit and Proposed Rebate Program

		Limitation on:	
	% Credit	**Maximum Value**	**# of Qualifying Systems**
Current Tax Credit			
Individual	20%	$400*	1
Business	20%	400*	30
Proposed Rebate			
Individual	50%	$900	1
Business**	50%	5,000	none
Retail Gasoline Service Station	50%	7,500	none

*Lesser of $400 or the State income tax liability imposed in the taxable year.
**Includes State and local governments.

In addition, MEA may provide a reimbursement for the reasonable installation costs of qualifying equipment. Under current law, a taxpayer can claim the credit only if the electric vehicle recharging equipment qualifies under Section 30C of the Internal Revenue Code (IRC). The bill allows MEA to provide rebates for property in the State that is used for recharging vehicles propelled by electricity. MEA may adopt regulations to implement the rebate program including (1) specifying further limitations on the value of the rebate; (2) requiring an applicant to demonstrate compliance with applicable federal, State, or local laws; and (3) any additional application and qualification requirements.

MEA and the Maryland Department of Transportation must report by January 1, 2015, to the Senate Budget and Taxation, House Appropriations, and House Ways and Means committees on (1) the amount of TTF revenue that is paid by owners of electric vehicles to TTF for the construction and maintenance of State roadways; and (2) a plan for electric vehicle owners to contribute to TTF for State roadway construction and maintenance.

Current Law:

Electric Vehicle Recharging Equipment Income Tax Credit

Chapter 402 of 2011 created a tax credit against the State income tax equal to 20% of the cost of qualified electric vehicle recharging equipment placed in service by a business or individual during the tax year. Chapter 389 of 2013 extended the tax credit program through tax year 2016. Taxpayers seeking the credit must first apply for approval from MEA. MEA can issue a maximum of $400,000 in credits in tax year 2011, $500,000 in tax year 2012, and $600,000 annually in tax years 2013 through 2016.

In order to offset the reduction of revenues from the credit, Chapter 402 and Chapter 389 required a transfer of $400,000 from SEIF to the general fund in fiscal 2013, $500,000 in fiscal 2014, and $600,000 annually in fiscal 2016 through 2018. SEIF revenue transfers in each year are reduced if MEA does not award the maximum amount of credits.

Qualified Electric Vehicle Excise Tax Credit

Chapter 490 of 2010 established a tax credit against the motor vehicle excise tax for the purchase of a qualified plug-in electric vehicle. Chapter 389 of 2013 altered the value of the credit and extended, subject to available funding, the tax credit through fiscal 2014. MEA may award a maximum of $1,287,000 in credits and a transfer from SEIF to TTF is required to offset revenue losses resulting from the credit. The credit is limited to 1 vehicle per individual and 10 vehicles per business entity.

A qualified plug-in electric vehicle is an unmodified motor vehicle that (1) is made by a manufacturer primarily for use on public streets; (2) is acquired for use or lease by the taxpayer and not for resale; (3) is rated at no more than 8,500 pounds unloaded gross vehicle weight; (4) has a maximum speed of at least 55 miles per hour; and (5) is propelled to a significant extent by an electric motor that draws electricity from a battery capable of being recharged from an external source of electricity with a capacity of at least 4 kilowatt hours for a four-wheeled vehicle and a capacity of at least 2.5 kilowatt hours for a two- or three-wheeled vehicle.

The credit may not be claimed (1) unless the vehicle is registered in the State; (2) unless the manufacturer has already conformed to any applicable State or federal laws or regulations governing clean-fuel vehicle or electric vehicle purchases during the calendar year in which the vehicle is titled; and (3) for a vehicle that was originally registered in another state.

Federal Credits

Qualified plug-in hybrid vehicles may qualify for a federal income tax credit of up to $7,500 under Section 30D of IRC. The tax credit begins to phase out for a manufacturer's vehicles after the manufacturer has sold 200,000 vehicles (after December 31, 2009).

Section 30C of IRC allows taxpayers to claim a credit for the cost of installing qualified alternative vehicle recharging property to be used in a trade or business of the taxpayer or installed at the principal residence of the taxpayer. The credit is generally equal to the lesser of 30% of the property's cost or $1,000 ($30,000 for business use property). The credit can be claimed for property placed in service before January 1, 2014, except for hydrogen property, which must be placed in service before January 1, 2015.

Strategic Energy Investment Fund

Chapters 127 and 128 of 2008 created the Maryland Strategic Energy Investment Program, and the implementing SEIF, to decrease energy demand and increase energy supply to promote affordable, reliable, and clean energy. SEIF is primarily funded through the proceeds from the auction of carbon allowances to power plants under the Regional Greenhouse Gas Initiative.

Maryland Electric Vehicle Infrastructure Council

Chapter 400 of 2011 established the Maryland Electric Vehicle Infrastructure Council and required it to develop a plan to expand the adoption of electric vehicles and develop an infrastructure charging network. In its final report issued in December 2012, the council issued several recommendations, including (1) extending the council through June 2015; (2) increasing the amount of zero-emission State fleet vehicle purchases to 10% by 2020 and at least 25% by 2025; (3) establishing a grant program for electric vehicle support equipment installation and procurement of transaction management software for multi-unit dwellings; and (4) extending the recharging equipment tax credit through December 2016 and the qualified electric vehicle excise tax credit through July 1, 2016.

Impacts of Electric Vehicles

Many researchers and analysts, including the National Academy of Sciences, have concluded that the United States has compelling reasons to reduce its consumption of oil for geopolitical and national defense reasons and to reduce emissions of carbon dioxide and pollutants for environmental reasons. In recent years, there has been increasing focus in the tax code on energy conservation and renewable energy production standards. While the federal Joint Committee on Taxation (JCT) notes that economists generally agree that the most efficient means of addressing pollution would be a direct tax on the pollution-causing activities, the more indirect approach of targeting tax credits for certain technologies has been utilized. JCT states that many provisions of federal law provide for tax credits for investments in, or expenditures on, certain assets that reduce the consumption of conventional fuels and the attendant pollutants and emissions of gases related to atmospheric warming. JCT notes that the design of tax benefits is important to how close they will come, individually and collectively, to achieving their intended consequences in a cost-effective and efficient manner. Important policy decisions include what to subsidize and how much, and only by equalizing tax provisions with the same policy (*i.e.*, paying the same price for fossil fuel displacement) will the incentives be technologically neutral and cost effective.

In addition to tax credits for electric vehicles, the federal government has adopted several policies to encourage the production and purchase of electric vehicles. JCT estimates that these policies will have a total federal budgetary impact of $7.5 billion through federal fiscal 2019. A recent analysis by the Congressional Budget Office (CBO) examined the effects of federal tax credits for the purchase of electric vehicles on gasoline consumption and greenhouse gas emissions. CBO concluded that the tax credits will have little or no impact on total gasoline use and greenhouse gas emissions over the next several years, primarily due to the interaction with corporate average fuel economy standards. CBO stated that the tax credits could impact gasoline consumption and emissions in the long-term if the sales of electric vehicles lead to revisions in fuel economy standards and/or if the credits play an important role in helping the electric vehicle industry become self-sustaining. A recent analysis by the National Research Council of the National Academy of Sciences concluded that subsidies of tens to hundreds of billions of dollars will be needed if electric vehicles are to achieve rapid penetration of the U.S. automotive market and even with these efforts, these vehicles are not expected to significantly impact oil consumption or carbon emissions before 2030.

State Revenues: The bill (1) repeals the existing electric vehicle recharging equipment tax credit effective July 1, 2014; (2) replaces the tax credit with a rebate program whereby MEA may award a maximum of $600,000 in rebates annually in fiscal 2015 through 2017; and (3) extends through fiscal 2017 the termination date of the qualified plug-in electric vehicle excise tax credit. **Exhibit 3** shows the projected State revenue loss from the bill.

Under current law, MEA may award a maximum of $600,000 in qualified electric vehicle recharging equipment credits in calendar 2014 through 2016. MEA will transfer up to

$600,000 from SEIF to the general fund annually in order to offset the revenue losses that result from the credit. The transfers occur in fiscal 2016, 2017, and 2018. The bill repeals the tax credit and replaces it with a rebate program. The Comptroller's Office advises that a total of $2,553 in credits were claimed in tax year 2011, the latest year of available data. It is anticipated that replacing the tax credit with the rebate program with enhanced subsidies and additional rebates to the State and local governments will cause additional SEIF revenue losses. However, the total amount of the additional loss may not exceed $600,000 annually.

In addition, the rebate program will be available through fiscal 2017, an additional six months beyond the current tax credit. Under current law, SEIF revenues are transferred in fiscal 2016, 2017, and 2018 to cover the costs of the tax credit. The bill does not specify when SEIF revenues are to be transferred to reimburse MEA for the rebate program. It is assumed the transfers occur in the fiscal year in which the rebates are issued.

Accordingly, SEIF revenues will decrease in fiscal 2015, 2016, and 2017 due to additional transfers to reimburse MEA for rebates. SEIF revenues may increase in fiscal 2018 due to any acceleration of SEIF transfers.

Exhibit 3
Projected State Revenue Loss

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Vehicle Excise Tax Credit					
SEIF	($1,287,000)	($1,287,000)	($1,287,000)	$0	$0
TTF	(513,000)	(513,000)	(513,000)	0	0
Total	**($1,800,000)**	**($1,800,000)**	**($1,800,000)**	**$0**	**$0**
Equipment Rebate Program					
SEIF	(-)	(-)	(-)	-	$0
Total					
SEIF	($1,287,000)	($1,287,000)	($1,287,000)	-	$0
TTF	(513,000)	(513,000)	(513,000)	0	0
Total	**($1,800,000)**	**($1,800,000)**	**($1,800,000)**	**-**	**$0**

Local Revenues: Local governments receive a portion of vehicle excise tax revenues to support the construction and maintenance of local roads and other transportation facilities. Under the assumptions above, local highway user revenues will decrease by $49,250 annually in fiscal 2015 through 2017.

Additional Information

Prior Introductions: None.

Cross File: SB 908 (Senator Manno, *et al.*) - Budget and Taxation and Finance.

Information Source(s): Comptroller's Office, Congressional Budget Office, Joint Committee on Taxation, Maryland Energy Administration, Maryland Department of Transportation, Department of Legislative Services

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