

Statement of Estimated State Revenue Impact

Date: February 10, 2014

Bill Number: H.B. 4619

Author: Loftis

Committee Requesting Impact: House Ways & Means Committee

Bill Summary

A bill to amend the Code of Laws of South Carolina, 1976, by adding Section 12-6-3378 so as to provide a tax credit for the in-state purchase or lease of a new qualified hybrid electric vehicle, new qualified battery electric vehicle, or new qualified alternative fuel motor vehicle under 8,500 gross vehicle weight rating, to provide a ten percent credit for the in-state purchase or lease of a new qualified hybrid electric vehicle, new qualified battery electric vehicle, or new qualified alternative fuel motor vehicle, to provide that the amount of the credit varies based on the gross vehicle weight rating, and to provide the process by which the credit may be claimed; to amend Section 1-11-220, as amended, relating to the fleet management program, so as to provide that the program shall seek to promote the use of clean, domestic, and efficient fuels; to amend Section 1-11-310, as amended, relating to the acquisition of the state fleet, so as to add preference for compressed natural gas, liquefied natural gas, liquefied petroleum gas, and battery electric vehicles when practical; to amend Section 1-11-315, relating to the feasibility of using alternative fuels for the state vehicle fleet, so as to require the Division of Motor Vehicle Management to provide a plan for the replacement of state-owned vehicles with vehicles using alternative fuels, and to require the division to submit the plan to the General Assembly and Governor; to amend Section 59-67-585, relating to the use of biodiesel fuel in the state school bus fleet, so as to provide a preference in purchasing hybrid, plug-in hybrid, biodiesel, hydrogen, fuel cell, compressed natural gas, liquefied natural gas, liquefied petroleum gas, battery electric, or flex-fuel school buses when performance, quality, and life cycle costs are comparable to other school buses; and to repeal Section 12-6-3377 relating to the tax credit for the purchase of certain vehicles that are similar to the vehicles for which the credit in section 12-6-3378 is established.

REVENUE IMPACT ^{1/}

This bill is not expected to affect General Fund income tax revenue in FY2014-15. This bill, however, is expected to reduce General Fund income tax revenue by an estimated \$2,232,201 in FY2015-16. The amount of the income tax credit is expected to increase over time until the tax credit expires in FY2021-22, but tax credit carry forwards, however, will continue to affect General Fund revenue collections through FY2026-27.

Explanation

The following is a section-by-section analysis of the bill.

Section 1. This section would add Section 12-6-3378 to allow a resident taxpayer a nonrefundable income tax credit for the in-state purchase or lease of a new qualified hybrid electric vehicle, a new battery electric vehicle, or a new qualified alternative fuel motor vehicle. The nonrefundable income tax credit is based upon the GVW of the alternative motor vehicle as shown in Table 1. A taxpayer may claim the credit for the taxable year in which the vehicle is purchased, leased, or converted. Any unused credits may be carried forward for five years. The credit is not allowed for purchases or conversions made after December 31,

Statement of Estimated State Revenue Impact

2021.

**Table 1. Allowance of the Alternative Motor Vehicle Credit
Based on Gross Vehicle Weight (GVW)**

Credit Amount	GVW Bracket
\$500	0 lbs. to 8,500 lbs.
\$100	8,500 lbs. to 13,999 lbs.
\$2,500	14,000 lbs. to 25,999 lbs.
\$5,000	26,000 lbs and over

Based on latest data available through tax year 2011 (FY2011-12) from the South Carolina Department of Revenue, over \$1,100,000 in alternative fuel tax credits have been claimed by 1,578 taxpayers. The state alternative motor vehicle tax credit was first available for qualified vehicles purchased in tax year 2006. This represented the infancy of the alternative fuel vehicles when the Toyota Prius and the Honda Insight first rolled off the assembly line. According to data from the United States Department of Energy, Environmental Protection Agency, Ward's Automotive Group, and individual automaker's websites, all types of hybrid fueled motor vehicles amounted to three percent of total new motor vehicle sales in calendar year 2012. In 2011, hybrid vehicles amounted to two percent of the new motor vehicle market. This is a market segment that is growing relative to the total motor vehicle market, and therefore, the total amount of state tax credits claimed will grow into the future.

There are several types of alternative fueled motor vehicles eligible for a state income tax credit. These include a new qualified hybrid electric vehicle, a new battery electric vehicle, and a new qualified alternative fuel motor vehicle. A new qualified hybrid electric vehicle is defined as a light duty (under 8,500 GVW vehicle listed in the most recent edition of the United States Department of Energy Clean Cities Vehicle Buyer's Guide, or is a heavy duty vehicle (more than 8,500 GVW) with an on board hybrid propulsion system listed in the most recent edition of the United States Department of Energy Clean Cities Guide to Alternative Fuel and Advanced Medium and Heavy Duty Vehicles. Based upon this criterion and data on annual hybrid vehicle sales, there were 361,355 qualified hybrid electric vehicles sold in the United States in calendar year 2012.

A new battery electric vehicle is defined as a vehicle that is used primarily on the public streets, roads, and highways and propelled by an electric motor which draws electricity from a battery which has a capacity of not less than four kilowatt hours and is capable of being recharged from an external source of electricity. The battery electric vehicle may be obtained from an original equipment manufacturer or can be converted to operate as a battery vehicle by a third party. Based upon this criterion and data on annual battery electric vehicle sales, there were 50,622 qualified battery electric vehicles sold in the United States in calendar year 2012.

Statement of Estimated State Revenue Impact

A new qualified alternative fuel motor vehicle is defined as a vehicle that operates on compressed natural gas (CNG), liquefied natural gas (LNG), liquefied petroleum gas (propane), or hydrogen. The alternative fuel motor vehicle may be obtained from an original equipment manufacturer or can be converted to operate on a qualified alternative fuel by a third party. The third party must possess a current legal Certificate of Conformity from the Environmental Protection Agency's Office of Transportation and Air Quality. Based upon this criterion and data on annual alternative fuel motor vehicle sales, there were 1,462 qualified alternative fuel vehicles sold in the United States in calendar year 2012. Collectively, there were 413,439 new qualified hybrid electric, battery electric, and alternative fuel motor vehicles sold in the United States in calendar year 2012.

According to the United States Department of Energy's Long Term forecast of the qualified alternative motor vehicles discussed above, annual growth is forecast to average 11.4% each year by calendar year 2015. Multiplying 413,439 new qualified alternative fuel motor vehicle sales in calendar year 2012 by an annual growth rate of 11.4% for three years yields an estimated 571,567 of new qualified alternative fuel motor vehicle sales in calendar year 2015. After adjusting this figure to South Carolina sales, applying a nonrefundable income tax credit of \$500 per vehicle, and recognizing that an estimated 60% of state taxpayers do not have enough taxable liability to take advantage of the credit, yields a reduction of General Fund income tax revenue of an estimated \$1,714,701 in FY2015-16.

There are several types of heavy duty alternative motor vehicles that would be eligible for the income tax credit or for the cost of eligible cost of conversion. Many of these are commercial trucks. Examples include school, shuttle, and transit buses, refuse trucks, tractors, vans, and vocational trucks used by tradesmen. Any type of vehicle that operates regularly on a fixed-route or within a designated territory would be prime candidates for the use of alternative fuels. Based on a review of the alternative fuel motor vehicle literature, we expect that the first industries to adopt and use alternative fuel vehicles on a large scale will be buses, refuse trucks, and delivery companies, such as FedEx and UPS. Since federal, state, and local governments are not eligible to receive income tax credits, only the private sector will benefit from the income tax credit.

According to the latest data from the U.S. Department of Transportation, Federal Highway Administration, there were 2,500 private and commercial buses registered in South Carolina. This represents nearly one percent of all private and commercial operating buses in the nation. Based on 2,500 privately-operated school and commercial buses and applying a three percent share of all motor vehicles purchases are new qualified alternative fueled motor vehicles and applying a \$2,500 income tax credit based on the GVW of a standard bus yields a reduction of General Fund income tax revenue of an estimated \$187,500 in FY2015-16.

Also, according to the latest data from the U.S. Department of Transportation, Federal Highway Administration, there are an estimated 179,000 refuse trucks operating in the United States. This figure represents garbage trucks, transfer vehicles, and dedicated recycling vehicles. About 82% are privately-owned refuse trucks and 18% are publically-owned. Less than one-half of one percent of all refuse trucks is alternative fueled vehicles. After adjusting this figure for South Carolina privately-owned vehicles, applying a three percent share of all motor vehicles purchases are new qualified alternative fueled motor vehicles, and applying a

Statement of Estimated State Revenue Impact

\$5,000 income tax credit based on the GVW of a standard refuse truck yields a reduction of General Fund income tax revenue of an estimated \$330,000 in FY2015-16.

Federal Express and the United Parcel Service are currently testing the feasibility of alternative fueled delivery trucks. Federal Express is currently testing all-electric and hybrid electric vehicles in New York City, Los Angeles, and Chicago, as well as CNG trucks in Europe and Latin America. The United Parcel Service is currently testing CNG delivery trucks in Hartford and Westbury, Connecticut. UPS has reported the cost of converting an existing delivery truck to a CNG fueled vehicle at \$15,000 per vehicle. Although testing is still ongoing, it may only be a matter of time before this technology becomes more feasible and accepted.

Collectively, this section is expected to reduce General Fund income tax revenue by an estimated \$2,232,201 in FY2015-16. The use of this credit will expand in the future as additional makes and models of alternative fueled vehicles are released by the automobile manufacturers, additional refueling stations are added statewide, the prices of alternative fueled vehicles come down, advances in the technology of these vehicles continues, and the acceptance of alternative fuel vehicles by the driving public increases.

Section 2. This section would amend Section 1-11-220 concerning the objectives of the Fleet Management Program within the Division of Motor Vehicles of the Budget and Control Board to add an objective to promote the use of clean, domestic, and efficient fuels. This section is not expected to affect state General Fund revenue in FY2014-15, or the fiscal years thereafter.

Section 3. This section would amend Section 1-11-310(H) to add a preference in purchasing state motor vehicles for the state fleet to include compressed natural gas, liquefied natural gas, liquefied petroleum gas, and/or battery electric vehicles in comparison to other available motor vehicles for purchase. This section is not expected to affect state General Fund revenue in FY2014-15, or the fiscal years thereafter.

Section 4. This section would amend Section 1-11-315 by rewriting the section to require the State Budget and Control Board's Fleet Management Office to establish a plan providing for the replacement of state-owned or operated vehicles with alternative fueled vehicles on or before January 1, 2014. The plan must include a proposed timeline for implementation and a cost/benefit model analysis of proposed changes. The plan must be submitted to the General Assembly and the Governor. This section is not expected to affect state General Fund revenue in FY2014-15, or the fiscal years thereafter.

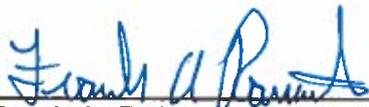
Section 5. This section would amend Section 59-67-585 to allow the State Department of Education to provide a preference in purchasing for the state school bus fleet to use hybrid, plug-in-hybrid, biodiesel, hydrogen, fuel cell, compressed natural gas, liquefied natural gas, liquefied petroleum gas, battery electric, or flex-fuel school buses that are comparable to other available school buses. This section is not expected to affect state General Fund revenue in FY2014-15, or the fiscal years thereafter.

Section 6. This section would repeal Section 12-6-3377 to delete several types of alternative fuel credits that were eligible for a federal income tax credit pursuant to Internal Revenue

Statement of Estimated State Revenue Impact

Code 30B, but have since expired. The new advanced lean burn technology motor vehicle credit, the new qualified hybrid motor vehicle credit based on the combined city/highway metric or standard pursuant to Internal Revenue Code Section 30B, and the new qualified alternative fuel motor vehicle credit have expired at the federal level, therefore, the state nonrefundable income tax credit for these vehicles has expired as well. This section is not expected to affect state General Fund revenue in FY2014-15, or the fiscal years thereafter.

Section 7. This act takes effect upon approval by the Governor.



Frank A. Rainwater
Chief Economist

Analyst: Martin

¹¹ This statement meets the requirement of Section 2-7-71 for a state revenue impact by the BEA, or Section 2-7-76 for a local revenue impact of Section 6-1-85(B) for an estimate of the shift in local property tax incidence by the Office of Economic Research.