



## DEPARTMENT OF AUDITS AND ACCOUNTS

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March 7, 2017

Honorable Jay Powell  
Chairman, House Ways and Means  
133 Capitol  
Atlanta, Georgia 30334

SUBJECT: Fiscal Note  
House Bill 421 (LC 40 1438ER)

Dear Chairman Powell:

The bill would provide an income tax credit for qualified clean-burning motor vehicle fuel property. The tax credit is 50% of the cost or \$5,000, whichever is less, in FY 2018 through FY 2020 and 25% of the cost or \$7,500, whichever is less, during FY 2021 and 2022. Total income tax credits are capped at \$2 million annually and limited to \$150,000 annually for a single taxpayer. The credit is non-refundable but may be carried forwarded up to five years. The bill also extends tax credits for alternative fuel medium and heavy-duty vehicles to FY 2019. This bill would become effective July 1, 2017.

Georgia State University's Fiscal Research Center (FRC) estimated that the bill would result in a state revenue reduction of \$1.6 million to \$3.5 million in fiscal year 2019, the first year of the bill's impact (Table 1). The reduction would be between \$1.2 million and \$2.0 million in fiscal year 2022, dropping due to the impact of the vehicle credit ending in FY 2020. The scenarios differ in assumptions as to how quickly the caps are reached. Details of FRC's analysis are contained in the appendix.

**Table 1. Estimated State Revenue Effects of LC 40 1438ER**

(\$ millions)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Clean-Burning Fuel Property:					
High	-	(\$1.3)	(\$1.8)	(\$2.0)	(\$2.0)
Low	-	(\$0.8)	(\$0.9)	(\$1.1)	(\$1.2)
Alternative Fuel Vehicles:					
High	-	(\$2.2)	(\$2.5)	-	-
Low	-	(\$0.9)	(\$1.1)	-	-
Total High Case	-	(\$3.5)	(\$4.3)	(\$2.0)	(\$2.0)
Total Low Case	-	(\$1.6)	(\$2.0)	(\$1.1)	(\$1.2)

The Department of Revenue estimated that the tax exemption will result in approximately \$56,000 in one-time costs. These include approximately \$43,000 to update and test IT systems, \$8,600 for training, and \$4,000 for updating forms and other documents.

Sincerely,



Greg S. Griffin  
State Auditor



Teresa A. MacCartney, Director  
Office of Planning and Budget

GSG/TAM/mt

### **Analysis by the Fiscal Research Center**

Section 1 of the bill expands the definition of personal property eligible for the tax credit under code section 48-7-40.16, to include:

- Clean-burning motor vehicle fuel property used for the delivery, for commercial purposes or for a fee, compressed natural gas (CNG), liquefied natural gas (LNG), liquefied petroleum gas (LPG), propane, or hydrogen into the fuel tank of a motor vehicle. This property could include compression equipment and storage tanks.
- Electric charging systems include systems that track consumption and can provide electricity from a non-vehicle source to charge the battery of one or more electric vehicles. Such equipment must be located on commercial, retail, or industrial real property, or in the common areas of a multiunit housing complex, but the area must have restricted access and not be available to the general public.

The bill would allow individuals or corporations, rather than “business enterprises”, to be eligible for the credit.

The credit rate as a percent of the cost of the qualified clean-burning motor vehicle fuel property and the maximum amount of the credit are both also increased from 10 percent and \$2,500, respectively, to:

- 50 percent or \$5,000, whichever is less, for the period July 1, 2017, through June 30, 2020, and
- 25 percent or \$7,500, whichever is less, from July 1, 2020, through June 30, 2022.

The bill caps the total amount of the income tax credits allowed under this code subsection at \$2 million annually and limits a single taxpayer to \$150,000 in credits annually. The credit is nonrefundable, but may be carried forward for up to five years, under code section 48-7-40.16. Under this section, the total annual cap for this credit is \$2 million.

#### *Electric Vehicle Charger Credits*

The Department of Revenue (DOR) reports that existing electric vehicle (EV) charger credits utilized on tax returns for tax years 2014 and 2015 were \$6,350 and \$18,366, respectively, with smaller amounts in previous years. At the current law 10 percent credit rate and assuming an average cost per charger of \$5,500, as estimated in 2014 by CleanTechnica, an industry news and analysis site, these credit amounts would represent about 12 charger installations qualifying in 2014 and 33 in 2015. The total amount of credits used is low relative to the per-taxpayer cap and the existing 637 charging stations (1,757 individual EV chargers) in the state, according to the U.S. Department of Energy’s Alternative Fuels Data Center (AFDC). Thus, the cap of \$150,000 per taxpayer is assumed not to be a constraint.

To estimate the current law baseline of EV charger credits for comparison to the high and low revenue impact estimates, growth from DOR’s reported credit utilization for TY 2015 is assumed to be 50 percent per annum in the high case through TY 2017 and 25 percent per annum in the low

case. For subsequent years, both the high and low case growth rates are assumed to decline by 10 percentage points per year until leveling out at 20 percent and 10 percent, respectively. Current law credits utilized in each tax year are assumed to impact state revenues in the following fiscal year, e.g. TY 2016 utilization would reduce FY 2017 collections.

Under the proposed law, qualifying charging stations must be restricted access, not open to unrestricted public use. AFDC data indicates that on average since 2011, 8 stations with 15 individual chargers for non-public and non-governmental access opened in Georgia per year. Openings since July 1, 2016 total 9 stations with 30 individual chargers. Including unrestricted public access locations (but still excluding government use only locations), 38 stations with 103 chargers opened per year, on average, since 2011.

Thus, for the high case estimates under the proposed law, the AFDC count of openings since July 1, 2016 is grown by 50 percent to estimate FY 2018 installations of 45 chargers, with growth after FY 2018 declining to 40 percent in FY 2019, 30 percent in FY 2020, and 20 percent per year thereafter. For the low case estimates, the AFDC annual average qualifying openings since 2011 (15 chargers per year) is grown by 25 percent to estimate FY 2018 installations of 19 chargers, with subsequent growth at half the rate of the high case. The cost per charger is assumed to remain constant at \$5,500. Table 2 provides high and low case estimates for EV charger credits under current and proposed law.

**Table 2. Electric Vehicle Charger Credits Earned by Fiscal Year**

(\$ thousands)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
High Case Estimate:					
HB 421 Credits Earned	\$124	\$173	\$226	\$135	\$162
Current Law Credits Earned	\$41	\$58	\$75	\$90	\$108
Change in Credits Earned	\$82	\$115	\$150	\$44	\$54
Low Case Estimate:					
HB 421 Credits Earned	\$52	\$63	\$72	\$40	\$44
Current Law Credits Earned	\$29	\$34	\$40	\$44	\$48
Change in Credits Earned	\$24	\$29	\$32	-\$4	-\$4

#### *Other Clean-Burning Fuel Property*

To estimate the impact of extending the credit under code section 48-7-40.16 to include non-EV clean-burning fuel property, we utilize data from the AFDC on alternative fueling locations in Georgia. The data also include fueling stations planned for completion in CY 2017. AFDC reports 139 CNG, LNG, and LPG fueling stations (zero hydrogen), not including government stations, operated by 67 unique entities. There are 5 new stations planned for opening by June 30, 2017, by 4 unique entities, according to the AFDC.

Note that while the bill limits the amount of income tax credits taken per qualifying piece of clean-burning motor vehicle fuel property, it is not clear from the bill how an individual piece of equipment should be defined. The cost of equipment for a CNG fueling station, for example, ranges from \$375,000 to \$650,000, according to NGV America, an industry organization. Thus, to reach the \$150,000 per-taxpayer cap, a firm would need to be able to divide the station equipment purchases into discrete units of qualified clean-burning motor vehicle fuel property, with each unit

costing over \$10,000 to claim the maximum credit in the first three years or \$30,000 in the final two years of the credit's availability.

For the low estimate, four unique entities are assumed construct stations in FY 2017, each reaching the \$150,000 maximum credit per taxpayer, with one additional taxpayer added per year after the first year. This corresponds roughly to station growth of about 3.6 percent annually. For the high estimate, it is assumed that an additional tax payer builds a fueling station in FY 2017, for five in the first year, each earning the maximum credit. For subsequent years, three additional entities are added per year.

**Table 3. Other Clean-Burning Fuel Property Credits Earned by Fiscal Year\***

(\$ millions)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
High Estimate	\$1.20	\$1.65	\$2.10	\$2.55	\$3.00
Low Estimate	\$0.75	\$0.90	\$1.05	\$1.20	\$1.35

\* Before application of \$2.0 million per year cap for all clean-burning fuel property.

Credits earned for clean-burning fuel property in each fiscal year are assumed, for simplicity, to impact collections in the subsequent fiscal year and to be fully utilized in that year. Revenue impacts are presented in Table 1.

Alternative Fuel Vehicles Credit

Section 2 of the bill amends code section 48-7-29.18, allowing income tax credits for purchasers of certain alternative fuel vehicles (AFVs). The bill extends the sunset dates in the current code by two years to July 1, 2019 for credits taken for the purchase of certain medium duty and heavy duty AFVs. The annual cap on the credit of \$2.5 million is also extended two years until the end of FY 2019. These credits are limited to \$250,000 annually per taxpayer, and to \$20,000 per vehicle for heavy-duty AFVs and \$12,000 per vehicle for medium-duty AFVs. This credit is not refundable and cannot be carried forward.

DOR reports that preapprovals for heavy-duty and medium-duty AFV credits, first available July 1, 2016, amounted to \$520,000 for three taxpayers for all of FY 2016. Estimates of the growth in utilization of the credit are based on the size of the natural gas fueled vehicle fleet and its expected growth. Data on the size of this fleet for Georgia are not readily available, so the Georgia fleet is estimated from national figures.

The Clean Cities initiative estimates that in 2015, the alternative fuel vehicle fleet that that meets the bills definition in the US was 134,000 vehicles. This is shared down to Georgia based on population, yielding an estimated Georgia fleet size of 4,288 in 2015. Growth of natural gas fueled vehicles is expected to be modest over the next several years, estimated by General Electric to be 3.7 percent annually. Applying this growth rate yields the addition of an estimated 159 new AFVs in CY 2016 (156 in FY 2016).

Depending on the medium versus heavy duty vehicle mix of FY 2016 preapproved credits, the share of vehicle purchases earning a credit is estimate at between 17 and 28 percent. For the low case estimates, the growth rate assumed after FY 2016 is assumed to be 3.0 percent, with half of qualifying vehicles being medium duty, resulting in an average credit per vehicle of \$16,000. The

share of vehicle purchases earning the credit is assumed to be 40 percent in FY 2018 and 50 percent in FY 2019. For the high case estimates, growth of 5 percent per year from FY 2016 is assumed with the share of vehicle purchases earning a credit assumed to be 60 percent in FY 2018 and 70 percent in FY 2019. The average credit per vehicle is again assumed to be \$16,000.

Estimated credit preapprovals for the two years of the proposed extension are presented in Table 3. Under the high case assumptions, the \$2.5 million cap is reached in FY 2019. Credits earned are assumed to be fully utilized for the tax year they are earned and to impact revenues in the fiscal year, at the time of filing. Because FY 2017 purchases are eligible for the credit under current law, the first year of revenue impact from extension of the credit is thus assumed to be FY 2019. The expiration date of June 1, 2019, rather than June 30 is not assumed to materially reduce qualified purchases in FY 2019 because purchasers are assumed to accelerate purchases that might otherwise have been planned for that month to qualify for the credit.

**Table 3. Estimated Tax Credit Preapprovals for Qualified Alternative Fuel Vehicles.**

<i>(\$ millions)</i>	<b>FY 2018</b>	<b>FY 2019</b>
High Estimate	\$2.2	\$2.5
Low Estimate	\$0.9	\$1.1