HB 939

Department of Legislative Services

Maryland General Assembly
2018 Session

FISCAL AND POLICY NOTE
First Reader

House Bill 939 (Delegates Kramer and Fraser-Hidalgo)
Economic Matters

Regional Carbon Cost Collection Initiative

This bill establishes the Regional Carbon Cost Collection Initiative (RCCCI) within the Maryland Department of the Environment (MDE). As a funding source, the bill establishes a greenhouse gas (GHG) pollution charge on all GHG-producing substances distributed or used in the State. Revenue from the charge is deposited into two special funds created by the bill, which are used to provide rebates to households and employers and to fund specified State and local GHG reduction activities. **The bill takes effect July 1, 2018, but is contingent on the enactment of substantially similar legislation in at least two other states, as specified.**

Fiscal Summary

State Effect: Assuming the bill's contingency is met, special fund revenues increase by an estimated $554.2 million in FY 2019 from charges collected; future year revenue estimates are annualized and reflect the increasing charges. Special fund expenditures increase correspondingly for rebates, projects, and administrative costs. State expenditures (all funds) increase significantly due to higher energy prices. General fund revenues increase from interest earnings.

($ in millions)	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
GF Revenue	-	-	-	-	-
SF Revenue	$554.2	$1,297.1	$1,674.6	$2,052.0	$2,429.4
SF Expenditure	$554.2	$1,297.1	$1,674.6	$2,052.0	$2,429.4
GF/SF/FF Exp.	-	-	-	-	-
Net Effect	(-)	(-)	(-)	(-)	(-)

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

Local Effect: Significant increase in local grant revenues and corresponding expenditures. Local expenditures for gas/electricity also increase significantly.

Small Business Effect: Meaningful.

Analysis

Bill Summary:

Regional Carbon Cost Collection Initiative, Generally

RCCCI provides for (1) the assessment of GHG pollution charges for GHG emissions that are measured according to carbon dioxide (CO_2) equivalents associated with various activities in the State; (2) the funding of GHG reduction activities in the State; and (3) rebates to households and employers in the State to mitigate the impact of the charge under the initiative. The Secretary of the Environment must implement the charges and rebates initiative established under the bill if at least two applicable states enact legislation or adopt regulations that are substantially equivalent, as specified.

The Secretary of the Environment must (1) administer the schedule of charges and (2) delegate the collection of the charge, the distribution of rebates, and any other appropriate functions to the Comptroller. The collection of the charge must begin upon the adoption of all rules necessary for collection, but not later than January 1, 2020, for emissions occurring in 2019.

The bill establishes several other requirements for MDE and the Secretary of the Environment, including several reporting requirements.

Greenhouse Gas Pollution Charge

The bill establishes a GHG pollution charge on all fossil fuels and other GHG-emitting priorities (natural gas, petroleum, coal, and fuels derived from those substances) that are distributed or used in the State. Revenue from the charge is deposited into the Green Infrastructure Fund and the Greenhouse Gas Pollution Charges Fund, which are discussed in more detail below.

The charge is calculated based on the average CO_2 equivalent per unit of each GHG-producing substance, as determined by the Secretary of the Environment in consultation with the Public Service Commission (PSC), as specified. The charge is $15 per ton of CO_2 equivalent in 2019 and increases by $5 each year until it reaches $45.

From 2025 on, the charge is $45 per ton of CO_2 equivalent. If implementation is delayed, the schedule of charges is similarly delayed.

Charges may not be assessed on certain sales and government agencies, as specified. In addition, charges may not be imposed on any GHG substance if the imposition of such a charge is superseded by federal law or regulation.

Green House Gas Pollution Charge on Petroleum Products and Natural Gas

The charge is assessed on all petroleum products at their first point of sale in the State for consumption or distribution in the State. The local distribution company for natural gas must pay the charge for all natural gas that the company distributes for use in the State. The charge for natural gas is calculated by multiplying the number of cubic feet of natural gas used by each customer by the amount of CO_2 equivalents released, as specified. MDE must determine the amount of CO_2 equivalents released from extraction, transport, or distribution of natural gas before the point of consumption and may add an additional charge, as specified.

Green House Gas Pollution Charge on Electricity Suppliers and Related Filing Requirements

Electricity suppliers must pay the GHG pollution charge at least quarterly on behalf of all of their electricity consumers based on each kilowatt-hour of electricity used by each distribution customer and the electricity fuel mix, as specified. However, an electricity supplier must deduct the amount the supplier paid for the same year on the Regional Greenhouse Gas Initiative (RGGI) clearing auctions; this deduction cannot exceed the charge. MDE must determine the fuel used to generate electricity at each generating plant in the State and the fuel used to generate imported electricity into the State, as specified. Electricity suppliers must reconcile annual charges paid at least once annually.

By October 1 annually, each electricity supplier must file the result of its projected calculation for the following year and supporting data with PSC. PSC must open a docket upon receipt of the filing and make a determination as to whether the calculation complies with the bill. If it does, PSC must issue an order approving the calculation by November 15 of the same year. If a supplier's calculation does not comply with the bill, PSC must issue an order that clearly states the errors, which the electricity supplier must correct within 21 days. If the supplier fails to correct the errors, PSC must issue an order establishing the calculation that the electricity supplier must use for the following calendar year.

Any person that generates more than 25,000 kilowatt-hours of on-site generated electricity using any combination of one or more fossil fuels must pay as a charge the carbon price of the fuels. The bill establishes a process for calculating the carbon price for such fuels, and the Secretary of the Environment must adopt regulations for the calculation, assessment, and collection of these carbon price amounts within one year after the date that the charges and rebates take effect. However, any charge already paid on the fuel under RCCCI must be deducted from the charge that would otherwise be due under this provision.

Green Infrastructure Fund

The Green Infrastructure Fund, which is administered by MDE, consists of (1) 10% of the proceeds of the GHG pollution charge; (2) money appropriated in the State budget; and (3) any other money from any source accepted for the benefit of the fund. Interest earnings are credited to the general fund. The stated purpose of the fund is to support investments in transportation, resiliency, and clean energy projects that (1) reduce GHG emissions; (2) prepare for climate change impacts; (3) assist low-income households and renters in reducing their energy costs; and (4) provide transitional assistance to specified displaced workers and communities in the State.

Up to 5% of the money in the fund may be used for administration. The Green Infrastructure Fund must then be distributed as follows:

- at least half the money must be distributed to local governments, in proportion to the charge collected within each jurisdiction, to (1) reduce GHG emissions from the transportation sector; (2) strengthen natural systems and infrastructure to increase resiliency to climate change impacts; and (3) support local government energy efficiency and renewable energy projects; and
- the remaining money in the fund must be used to support specified State programs that (1) reduce GHG emissions from the transportation sector; (2) strengthen natural systems and infrastructure to increase resiliency to climate change impacts; (3) support local governmental energy efficiency and renewable energy projects, as specified; (4) improve the energy efficiency of rental properties; and (5) provide transitional assistance to workers and communities negatively impacted by a shrinking fossil fuel industry.

The Secretary of the Environment must approve all funding awards, which must be prioritized as specified. The bill also creates a Green Infrastructure Fund Advisory Board to assist the Secretary of the Environment in developing criteria for providing grants from the fund.

Greenhouse Gas Pollution Charges Fund

The Greenhouse Gas Pollution Charges Fund, also administered by MDE, consists of (1) the remaining proceeds from GHG pollution charges after the required distribution to the Green Infrastructure Fund (or 90% of the proceeds); (2) money appropriated in the

State budget; and (3) any other money from any source accepted for the benefit of the fund. Interest earnings are credited to the general fund. The stated purpose of the fund is to provide (1) support for low-income and other residents of the State and (2) rebates to homeowners, residents, and employers in the State. Up to 5% of the money in the fund may be used for administration. The remaining money in the fund must be used to pay rebates. There are two separate rebate accounts in the fund: (1) the Household Rebate Account, which consists of 75% of the money in the fund; and (2) the Employer Rebate Account, which consists of 25% of the money in the fund.

Household Rebate Account

The money in the household rebate account must be distributed as follows: (1) 25% to households in specified income-based quintiles; (2) 10% of the money derived from charges on the direct sale of heating fuels to households must be allocated to the Department of Human Services (DHS) for use by the Maryland Energy Assistance Program (MEAP); (3) households that heat with fuel oil must receive an additional rebate, as specified; and (4) any remaining money in the account must be rebated to households in the State depending on the number of adult and minor residents in the household. The Secretary of the Environment must coordinate with the Comptroller and other specified agencies in rebating charge proceeds from the household rebate account, as specified.

Employer Rebate Account

The money in the employer rebate account must first be distributed to businesses in economic sectors identified, in consultation with specified agencies, as potentially experiencing significant negative impacts from the bill. The remaining money in the employer rebate account must be distributed to employers in the State based on their proportional share, in full-time equivalent employees, of total employment in the State.

Rebates, Generally

Rebates provided under the bill are not taxable income and, to the extent feasible, must be excluded from household income for the purposes of determining eligibility for, or the level of, any form of public assistance.

The Secretary of the Environment must make all reasonable efforts to return all charges collected but is not subject to penalties or actions for damages if the rebates are not precisely equal to charges collected. The Secretary of the Environment must also consider alternative calendar schedules for distribution of rebates, as specified. The Secretary may issue additional rebates or declare exemptions from charges if charges have been paid but no emissions occurred.

Current Law/Background: A "carbon dioxide equivalent" is the measurement of a given weight of GHG that has the same global warming potential, measured over a specified period of time, as one metric ton of carbon dioxide.

Maryland's Healthy Air Act and Greenhouse Gas Emissions Reduction Act

The Healthy Air Act of 2006 established emission limits for nitrogen oxides, sulfur dioxide, and mercury from specified electric generating facilities in the State. The Act also addressed CO_2 emissions by requiring the Governor to include the State in RGGI. In 2007, Maryland joined RGGI, a cap-and-trade program established in conjunction with eight other northeastern and mid-Atlantic states. Each state limits CO_2 emissions from electric power plants, issues CO_2 allowances, and establishes participation in CO_2 allowance auctions. In August 2017, the participating states agreed to further reduce the program's carbon pollution cap.

The Greenhouse Gas Reduction Act, originally enacted in 2009 and made permanent and expanded in 2016, was enacted in light of Maryland's particular vulnerability to the impacts of climate change. Under the Act, the State must develop plans, adopt regulations, and implement programs to reduce GHG emissions by 25% from 2006 levels by 2020 and must further reduce GHG emissions by 40% from 2006 levels by 2030; the 2030 reduction requirement terminates December 31, 2023. A draft plan to reach the 2030 requirement is expected to be released by MDE in 2018. In addition, by October 1, 2022, MDE must report on the progress toward achieving the 2030 reductions as well as the reductions needed by 2050 to avoid the most dangerous impacts of climate change, as specified.

Regional Greenhouse Gas Initiative

Nine states currently participate in RGGI: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. In January 2018, the Governor of New Jersey signed an Executive Order requiring the state to rejoin RGGI after withdrawing in 2012. Additionally, RGGI Inc. issued a press release in November 2017, indicating that Virginia may soon join RGGI.

In order to reduce CO_2 emissions from the power sector, each participating state limits CO_2 emissions from electric power plants, issues CO_2 allowances, and establishes participation in CO_2 allowance auctions. A single CO_2 allowance represents a limited authorization to emit one ton of CO_2. Total allowances in the Maryland program are 19.1 million in 2017, which decreases over time to 17.7 million by 2020. In August 2017, the participating states agreed to further reduce the program's carbon pollution cap.

Related Initiatives in Other States

Related measures have been introduced in a number of other states including Connecticut, Massachusetts, New Hampshire, New Mexico, New York, Oregon, Rhode Island, Vermont, and Washington. In particular, recent initiatives proposed in Massachusetts and Rhode Island would establish similar charges and rebate programs.

State Fiscal Effect:

Proceeds from the Greenhouse Gas Pollution Charge

Assuming the bill's contingency is met, special fund revenues from the GHG pollution charge increase by an estimated $554.2 million in fiscal 2019, increasing to nearly $3.2 billion by fiscal 2025, as shown in **Exhibit 1**. This estimate is based on the increasing charges established by the bill ($15 in 2019, increasing to $45 in 2025). Adjustments are made for imported electricity, the costs of RGGI allowances, and a calendar year to fiscal year conversion; however, the estimate does not account for any exemptions from the charge. The following additional information/assumptions were used:

- data from the U.S. Energy Information Administration on the average CO_2 equivalent from the emissions associated with energy consumption (in metric tons) from calendar 2010 to 2015 in Maryland by sector;
- the GHG pollution charge begins to be collected on January 1, 2019; and
- consumption remains constant over time.

To the extent that the collection of charges is delayed, the increase in special fund revenues is similarly delayed.

Exhibit 1
Revenue Generated by the Charge and the Allocation of Funds
Fiscal 2019-2025
($ in Millions)

		FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Total Charges Collected		**$554.2**	**$1,297.0**	**$1,674.5**	**$2,051.9**	**$2,429.4**	**$2,806.8**	**$3,184.3**
Green Infrastructure Fund	**10%**	**$55.4**	**$129.7**	**$167.4**	**$205.2**	**$242.9**	**$280.7**	**$318.4**
Administrative Costs	5%	2.8	6.5	8.4	10.3	12.1	14.0	15.9
Available for Projects		52.6	123.2	159.1	194.9	230.8	266.6	302.5
GHG Pollution Charges Fund	**90%**	**$498.7**	**$1,167.3**	**$1,507.0**	**$1,846.7**	**$2,186.4**	**$2,526.1**	**$2,865.8**
Administrative Costs	5%	24.9	58.4	75.4	92.3	109.3	126.3	143.3
Employer Rebate Account	25%	118.5	277.2	357.9	438.6	519.3	600.0	680.6
Household Rebate Account	75%	355.4	831.7	1,073.8	1,315.8	1,557.8	1,799.9	2,041.9

GHG: greenhouse gas

Source: Department of Legislative Services

Available Funds for the New Special Funds Established by the Bill

As shown in Exhibit 1, based on the estimated revenues collected under the bill from the GHG pollution charge, an estimated $55.4 million is available to the Green Infrastructure Fund in fiscal 2019, which reflects 10% of the total proceeds; by fiscal 2025, an estimated $318.4 million is available to the fund. Based on the anticipated revenue stream, an estimated $498.7 million is available to the Greenhouse Gas Pollution Charges Fund in fiscal 2019, which reflects 90% of the proceeds; by fiscal 2025, an estimated $2.9 billion is available to the fund.

For the purposes of this fiscal and policy note, it is assumed that MDE spends all the special fund revenue collected in each year under RCCCI. As a result, special fund expenditures increase correspondingly. However, it is possible that, at least initially, MDE may carry a significant fund balance until the program is fully established.

As noted earlier, up to 5% of the money in both funds may be used for administration. Because the total administrative costs to implement RCCCI cannot be reliably estimated at this time, as discussed below, it is difficult to estimate the amount of funding that will be available in both funds for their primary purposes (State/local projects from the Green Infrastructure Fund and rebates from the Greenhouse Gas Pollution Charges Fund). However, Exhibit 1 shows the amounts available for projects/rebates in each fund assuming the full 5% is used to cover administrative costs. As shown in the exhibit, the following amounts are available for the primary purposes of each fund:

- Green Infrastructure Fund: $52.6 million in fiscal 2019, increasing to $302.5 million by fiscal 2025;
- Household Rebate Account in the Greenhouse Gas Pollution Charges Fund: $355.4 million in fiscal 2019, increasing to $2.0 billion by fiscal 2025; and
- Employer Rebate Account in the Greenhouse Gas Pollution Charges Fund: $118.5 million in fiscal 2019, increasing to $680.6 million by fiscal 2025.

Among other required uses, funding from the Household Rebate Account must be used to support MEAP in DHS. Thus, special fund revenues and expenditures for DHS increase beginning in fiscal 2019. It is assumed that DHS can distribute the additional funding under the bill with existing staff.

Administrative Costs for Maryland Department of the Environment and the Comptroller

MDE is broadly responsible for administering the schedule of charges, but must delegate the collection of charges, distribution of rebates, and any other appropriate functions to the Comptroller. As noted above, up to 5% of the money in each fund may be used for administrative costs. Thus, special fund administrative expenditures for the Comptroller increase by at least $512,492 in fiscal 2019, which accounts for a 90-day start-up delay. This estimate reflects the cost of hiring one field auditor, one tax consultant, one revenue specialist, and two revenue examiners to begin collecting charges and distributing rebates. It includes salaries, fringe benefits, one-time start-up costs (including costs to design a new tax form and develop a database), and ongoing operating expenses.

Positions	5
Salaries and Fringe Benefits	$235,698
New Tax Form Costs	150,000
Development of Database	100,000
Operating Expenses	26,795
FY 2019 Comptroller Administrative Expenditures	**$512,492**

Costs could be higher to the extent MDE delegates any additional responsibilities to the Comptroller that are not currently anticipated. Future year administrative expenditures for the Comptroller reflect full salaries with annual increases and employee turnover and ongoing operating expenses.

Although MDE's administrative costs cannot be reliably estimated at this time given the magnitude of RCCCI, the breadth of the affected entities, the complex system of charges established by the bill, the amount of funding available for State projects and local grants under the Green Infrastructure Fund, and the complex rebate system established by the bill, MDE needs to create a new functional unit within the department. Several dozen staff are likely needed, beginning in fiscal 2019, to administer and oversee RCCCI and to implement the bill's various requirements. To the extent MDE delegates additional responsibilities to the Comptroller, the need for staff within MDE decreases somewhat.

Despite the fact that a reliable estimate of the total administrative costs incurred by MDE and the Comptroller cannot be made, it is assumed that total administrative costs are well within the 5% of the money in both funds that is authorized for administration, which is estimated to total $27.7 million in fiscal 2019 and $159.2 million by fiscal 2025 (as shown in Exhibit 1). The Department of Legislative Services advises, however, that although the bill authorizes the use of special funds to cover the administrative costs incurred to implement RCCCI, it is possible that MDE and the Comptroller incur costs prior to collecting any charges. To the extent this occurs, general funds may be needed until special funds are available.

State Expenditures for Energy

Increased energy supplier costs resulting from the GHG pollution charge will ultimately be passed on to ratepayers in the form of higher energy prices. Thus, State expenditures (all funds) increase significantly due to an increase in the price of gas and electricity. This estimate assumes the charges, and thus the increase in State expenditures, begin January 1, 2019. The actual amount of this increase is unknown but could easily exceed $10 million annually when the charges are fully phased in.

Public Service Commission and the Office of People's Counsel

Under the bill, PSC must review electricity supplier's calculations, open a docket, make determinations on the calculations of charges, as specified, and issue various orders. PSC can likely comply with these requirements using existing budgeted resources. However, special fund expenditures for the Office of People's Counsel increase by at least $75,000 annually beginning in fiscal 2019 to help review calculations and provide testimony on the level of charges. This estimate includes the costs to procure and hire one expert witness and consultant. Special fund revenues increase correspondingly from assessments imposed on public service companies, as authorized under current law.

Interest Earnings on the Two New Special Funds

As required by the bill, interest earnings on both funds are credited to the general fund. Thus, general fund revenues increase beginning in fiscal 2019.

Other Agencies

It is assumed that the various agencies identified in the bill that are required to consult with MDE on various activities and/or participate in the Green Infrastructure Advisory Board can do so with existing budgeted resources.

Local Fiscal Effect: Local government expenditures increase significantly beginning in fiscal 2019 due to an increase in the price of gas and electricity resulting from the establishment of the GHG pollution charge. However, the bill specifies that at least half of the money in the Green Infrastructure Fund (after administrative costs) must be distributed to local governments in proportion to the charges collected within the jurisdiction. Thus, local grant revenues increase significantly from grants made by MDE from the Green Infrastructure Fund, and expenditures increase correspondingly as local governments use the grants to reduce GHG emissions from the transportation sector, strengthen natural systems and infrastructure to increase resiliency to climate change impacts, and support local energy efficiency and renewable energy projects. In addition, local governments also benefit from State support of local energy efficiency and renewable energy projects, as that is one of the authorized uses for the remaining money in the Green Infrastructure Fund that is dedicated for State governmental programs.

Small Business Effect: Small businesses throughout the State incur a significant increase in expenditures due to an increase in the price of gas and electricity resulting from the establishment of the GHG pollution charge. As employers, however, small businesses are slated to receive rebates under the bill. In addition, small businesses that provide services and products related to reducing GHG emissions (for example, renewable energy installers and maintenance companies; engineering and construction companies; environmental mitigation companies; heating, ventilation, and air-conditioning companies; landscape architects; etc.) likely see a meaningful increase in the demand for their services as a result of the significant funding available for these types of projects under RCCCI.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Anne Arundel and Montgomery counties; Maryland Association of Counties; Maryland Municipal League; City of Westminster; Town of Leonardtown; Comptroller’s Office; Maryland Department of the Environment; Department of Housing and Community Development; Department of Labor, Licensing, and Regulation; Maryland Energy Administration; Office of People’s Counsel; Public Service Commission; U.S. Energy Information Administration; Department of Legislative Services

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