Department of Legislative Services

Maryland General Assembly
2022 Session

FISCAL AND POLICY NOTE
First Reader

House Bill 708 (Delegates Barve and Stein)
Economic Matters

Comprehensive Climate Solutions

This bill makes broad changes to the State's approach to reducing statewide greenhouse gas (GHG) emissions and addressing climate change. Among other things, the bill (1) increases the statewide GHG emissions reduction requirement and requires the State to achieve net-zero statewide GHG emissions by 2045; (2) establishes requirements for monitoring methane emissions from landfills; (3) increases and extends specified energy efficiency and conservation program requirements; and (4) establishes new entities to support related activities. **The bill takes effect June 1, 2022, and the net-zero Statewide GHG emissions goal terminates June 30, 2030.**

Fiscal Summary

State Effect: Known general fund expenditures increase by $1.6 million in FY 2023; out-years reflect ongoing costs and inflation. Special fund expenditures increase by $1.5 million in FY 2023 and by $1.1 million annually thereafter; special fund revenues increase correspondingly from assessments imposed on public service companies. State expenditures (multiple fund types) increase significantly beginning in FY 2023.

($ in millions)	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
SF Revenue	$1.5	$1.1	$1.1	$1.1	$1.1
GF Expenditure	$1.6	$1.6	$1.6	$1.6	$1.6
SF Expenditure	$1.5	$1.1	$1.1	$1.1	$1.1
GF/SF Exp.	-	-	-	-	-
Net Effect	(-)	(-)	(-)	(-)	(-)

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

Local Effect: Although a reliable estimate of the bill's impacts on local finances cannot be made at this time, the bill likely results in a significant increase in local expenditures. **This bill may impose a mandate on a unit of local government.**

Small Business Effect: Meaningful.

Analysis

Bill Summary:

Greenhouse Gas Emissions Reduction Goals, Planning, and Monitoring

Greenhouse Gas Emissions Reduction Targets and Related Plans

The bill modifies a stated finding of the General Assembly relating to reducing GHG emissions. Under the bill, the General Assembly finds that the State has the ingenuity to reduce the threat of global warming and make GHG reductions a part of the State's future by, among other things, achieving net-zero statewide GHG emissions by 2045. The bill explicitly requires the State to reduce statewide GHG emissions by 60% from 2006 levels by 2032 (increased from 40% by 2030 under current law). The bill also explicitly requires the State to achieve net-zero statewide GHG emissions by 2045; this requirement terminates June 30, 2030.

By June 30, 2023, the Maryland Department of the Environment (MDE) must submit a proposed plan to the Governor and the General Assembly that reduces statewide GHG emissions by 60% from 2006 levels by 2032. By December 31, 2023, MDE must adopt a final plan to meet the 2032 goal and that sets the State on a path toward achieving net-zero statewide GHG emissions by 2045. By December 31, 2030, MDE must adopt a final plan that achieves net-zero statewide GHG emissions by 2045; by December 31, 2035, MDE must review and, as necessary, revise that plan.

The bill establishes several new requirements and restrictions for a final plan developed under the bill. A final plan may not include highway widening or additional road construction as a GHG emissions reduction measure. Among other things, the final plan must (1) use specified data; (2) include specific estimates of the GHG emissions reductions that could be achieved through the expansion of mass transit options; and (3) include specific estimates of the expected reductions from each GHG emissions reduction measure in the plan. A final plan may include the use of carbon capture and storage technology as a GHG emissions reduction measure only if the technology has been scientifically proven to achieve verifiable carbon reductions. In addition to existing requirements relating to plan development, in developing its plans under the bill, MDE must use the best available scientific information, as specified, and incorporate specified emissions data. The plans must also produce a net economic benefit to the State's economy and a net increase in jobs in the State as compared with a no-action scenario. When evaluating the net economic benefit, MDE must include the social cost of GHGs, using either the rate developed by MDE or the U.S. Environmental Protection Agency (EPA), depending on which one is greater.

Monitoring Methane Emissions from Landfills

For a municipal solid waste landfill that is required to monitor and report methane emissions to MDE, if methane emissions data acquired from aircraft observations (where available) exceeds the ground-level emissions data reported by a municipal solid waste landfill by more than 25%, MDE must require the landfill operator to (1) investigate the difference between the data and (2) reassess the methodology and equipment used to obtain the ground-level data, as specified. MDE must publicly disclose on its website all methane emissions data obtained through airplane observations and any discrepancies between that data and the ground-level methane emissions data reported by municipal solid waste landfills.

Additionally, by January 1, 2023, MDE must adopt surface methane emissions standards for municipal solid waste landfills by regulation.

Environmental Justice Considerations

Environmental Justice Considerations

By December 31, 2023, MDE, in coordination with the Commission on Environmental Justice and Sustainable Communities (CEJSC), the Maryland Department of Health, the Maryland Department of Labor, and the Maryland Department of Planning, must (1) recommend a methodology, based on various economic, social, and health considerations, for identifying communities disproportionately affected by climate change; (2) develop specific recommendations to address environmental justice concerns, reduce emissions of GHGs and co-pollutants, and build climate equity and resilience within disproportionately affected communities; (3) set appropriate goals for the percentage of State funding for GHG emissions reduction measures that should be used for the benefit of disproportionately affected communities; and (4) report the criteria and recommendations developed pursuant to the bill to the Maryland Commission on Climate Change (MCCC). The bill establishes various requirements MDE must follow when evaluating the methodologies and when developing its recommendations and goals under these provisions.

The bill also requires MCCC to establish a Just Transition Employment and Retraining Working Group. MDE must provide staff for the working group. Members may not receive compensation but are entitled to reimbursement for expenses, as specified. The working group must identify, study, and advise MCCC on various issues and opportunities related to workforce development, training, job loss, and job creation as the State implements energy efficiency and GHG emissions reduction measures. In particular, the working group must conduct a study of (1) the number of jobs created to counter climate change, as specified; (2) the projected inventory of jobs needed and skills and training required to meet the future demand for jobs to counter climate change; (3) workforce disruption due to community changes caused by the transition to a low-carbon economy; and (4) strategies to target workforce development and job creation in fenceline communities that have historically borne the brunt of hosting carbon polluters. By December 31, 2023, the working group must report to MCCC and the General Assembly on the study findings.

The bill also expands the requirements of MCCC's existing annual report to the Governor and the General Assembly.

Maryland Climate Justice Corps Program and Board

The bill establishes the Maryland Climate Justice Corps Program, which is administered by the Chesapeake Bay Trust (CBT) in consultation with the Advisory Board of the Corps Program, which is established by the bill. Broadly, the purpose of the Corps Program is to employ young people to work on clean energy and/or climate mitigation projects, with a focus on promoting climate justice. The bill establishes standards that program projects and activities must meet and provides examples of climate mitigation and clean energy projects. By October 1 each year, CBT, in consultation with the board, must report to the Governor and the General Assembly. The report must include a complete operating and financial statement covering the operations of the board and a summary of its activities, as specified.

The bill provides for the membership of the board and requires the Governor to consider diversity and all geographic regions of the State when appointing members to the board. Board members may not receive compensation, but are entitled to reimbursement for expenses, as specified. CBT must provide staff support for the board.

CBT and the Corps Board must seek federal funds and grants and donations from private sources for long-term funding of the Corps Program. All fund seeking and program development efforts must be coordinated with the Maryland Conservation Corps and the Civic Justice Corps, and CBT and the Corps Board must seek assistance and advice from relevant public and private sources. The bill also requires the Corps Board and CBT to seek assistance and cooperate with other specified entities when developing its clean energy infrastructure and educational programs and volunteer programs.

CBT, in consultation with the Corps Board, must make grants to "qualified organizations" for the creation or expansion of full- and part-time Maryland Climate Justice Corps Programs that involve students and young adults throughout the State. Eligible expenses include personnel costs, stipends, supplies, and other materials for projects undertaken by program volunteers. CBT, in consultation with the Corps Board, must develop guidelines for evaluating applications from qualified organizations. Corps programs, the evaluation guidelines, and grant agreements must meet certain requirements and standards.

A "qualified organization" is (1) a nonprofit organization; (2) a school; (3) a community association; (4) a service, youth, or civic group; (5) an institution of higher education; (6) a county or municipality; or (7) a unit of State government. A qualified organization may not undertake a project if it would replace regular workers or duplicate or replace an existing service in the same locality.

For stipend volunteer programs, qualified organizations and CBT must principally recruit individuals to be stipend volunteers who are between ages 18 and 25 and for a minimum six-month commitment. Stipend volunteers are eligible to receive a stipend, as determined by CBT, based on the volunteer's needs and budgetary limits. The bill restricts stipend volunteer's participation in partisan, regulatory, and statutory enforcement activities, as specified.

CBT must provide technical assistance to qualified organizations upon request and may contract with an organization to provide technical assistance and training, as specified. CBT must also convene program participants on a regular basis to promote team building, develop an understanding of the overall purpose of the program, share best practice information, recognize excellence, and provide training and other learning opportunities.

Colleges and universities are explicitly authorized to (1) contract with CBT to carry out Corps Program work; (2) assign CBT resources to assist in its Corps Program work, as specified; and (3) assign faculty and staff to CBT for the purpose of carrying out or assisting with Corps programs.

Energy Efficiency and Clean Energy

Public Service Commission – Energy Efficiency and Conservation Programs/Services

The bill specifies that, with regard to the Public Service Commission's (PSC) review of program and services developed and implemented by gas and electric companies in compliance with the EmPOWER Maryland Energy Efficiency Act, beginning in calendar 2024, the programs and services provided under EmPOWER must (1) encourage and promote the replacement or enhancement of gas, oil, or propane heating systems with electric heat pumps, giving priority to low-income households and consumers and (2) encourage and promote beneficial electrification for the purposes of reducing energy consumption, reducing consumer costs, and reducing GHG emissions. Beginning with calendar 2024, EmPOWER programs and services may not provide financial assistance for equipment or appliances that use fossil fuel. Further, in determining whether an EmPOWER program or service is cost-effective, as specified, PSC must consider the social cost of GHGs, using either the rate adopted by MDE or EPA, whichever is greater.

The bill also extends the EmPOWER annual energy savings goals beyond their current 2021-2023 program cycles and increases the annual energy savings requirement beyond 2.0% beginning in 2024. Specifically, PSC must, by regulation or order, require each electric company to procure or provide cost-effective energy efficiency and conservation programs and services to its customers, as specified, that are designed on a trajectory to achieve a targeted annual incremental gross energy savings of at least the following annual percentages: (1) 2.25% annually in 2025 and 2026; (2) 2.5% in 2027; and (3) 2.75% per year in 2028 and thereafter.

Maryland Strategic Energy Investment Fund

The bill specifies that funding from the Maryland Strategic Energy Investment Fund (SEIF) may only be used for a project that uses fossil fuel only if it can be demonstrated that the lifecycle GHG emissions for the project are less than an all-electric alternative.

Utility Transition Plans

PSC must establish a process for gas and electric companies to develop utility transition plans to achieve a structured and just transition to near-zero GHG emissions from the building sector. The process must allow for stakeholder review of utility transition plans, and PSC must amend or reject a utility plan that does not meet the bill's criteria. Among other things, the gas utility plans must include (1) appropriate gas system investments and divestments for a shrinking customer base and reductions in gas throughput in the range of 50 to 500% by 2045 and (2) a comprehensive equity strategy to enable low-income and middle-income households to improve energy efficiency and electrification affordably. Among other things, the electric utility plans must include (1) electric system investments for a highly electrified buildings sector and (2) ratepayer protections, especially for low- and middle-income residents.

Climate Transition and Clean Energy Hub

The bill establishes the Climate Transition and Clean Energy Hub in the Maryland Energy Administration (MEA). The stated purpose of the hub is to serve as a clearinghouse for information on advanced technology and architectural solutions to reduce GHG emissions from the building sector. The hub must provide technical assistance to public and private entities to achieve GHG emissions reductions and comply with State and local energy efficiency and electrification requirements. A Position Identification Number (PIN) must be created in MEA for the coordinator of the hub. It is the intent of the General Assembly that, with the exception of the new coordinator position and salary, MEA handle the hub's responsibilities with existing resources.

Current Law:

Greenhouse Gas Emissions Reduction Act

The Greenhouse Gas Emissions 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 was required to develop plans, adopt regulations, and implement programs to 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. In February 2021, MDE finalized the Greenhouse Gas Emissions Reduction Act 2030 Plan.

Maryland Commission on Climate Change

MCCC, originally created by executive order, was codified in statute pursuant to Chapter 429 of 2015 to advise the Governor and the General Assembly on ways to mitigate the causes of, prepare for, and adapt to the consequences of climate change. MCCC is required to submit annual updates to the Governor and the General Assembly on the State's efforts to mitigate the causes of, prepare for, and adapt to the consequences of climate change, including any future plans and recommendations for legislation. MDE and the Department of Natural Resources jointly staff the commission.

Chesapeake Bay Trust

CBT is a nonprofit grant-making organization dedicated to improving the watersheds of the Chesapeake Bay, the Maryland Coastal Bays, and the Youghiogheny River. Created in 1985 by the Maryland General Assembly, CBT's goal is to increase stewardship through grant programs, special initiatives, and partnerships that support K-12 environmental education, on-the-ground watershed restoration, community engagement, and the underlying science of these three realms. Grantees include schools, local governments, community groups, faith-based groups, watershed organizations, and other not-for-profit entities.

Commission on Environmental Justice and Sustainable Communities

CEJSC within MDE is tasked with examining issues of environmental justice and sustainable communities for all Marylanders. To this end, CEJSC (1) uses data sets and mapping tools to review and analyze the environmental justice implications of current State policy, laws, and regulations; (2) assesses the adequacy of State and local laws, permits and actions, and policies to address the issue of environmental justice and sustainable communities; (3) coordinates with the Children's Environmental Health and Protection Advisory Council, the Maryland Office of Minority Health and Health Disparities, and the

Commission on Climate Change on recommendations to further environmental justice and sustainable communities; and (4) recommends options to the Governor and the General Assembly for addressing issues, concerns, or problems related to environmental justice.

EmPOWER Maryland

In 2008, the General Assembly passed the EmPOWER Maryland Energy Efficiency Act, which set target reductions of 15% in per capita electricity consumption and peak demand, respectively, by 2015 from a 2007 baseline. Legislation in 2017 extended the program through its 2018-2020 and 2021-2023 program cycles and established a new annual energy savings goal of 2.0% per year, based on each electric company's 2016 sales.

Strategic Energy Investment Fund

Chapters 127 and 128 of 2008 created the Maryland Strategic Energy Investment Program (and 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.

State Fiscal Effect: The bill has far-reaching impacts on State agencies. Several of the impacts are calculable (for example, the new PIN for MEA and certain administrative costs), but for most, a reliable estimate cannot be made at this time. Many of the impacts, particularly those resulting from the transition from a reliance on fossil fuels and longer-term GHG emissions reductions, will occur in the out-years. Regardless, State expenditures (multiple fund types) increase, potentially significantly, beginning as early as fiscal 2023. The PIN for MEA and some of the potential effects resulting from other provisions are described below. Despite the bill's June 1, 2022 effective date, it is assumed that State finances are not materially affected until fiscal 2023.

Effects on State Agencies from New Emissions Reduction Goals and Transition from Fossil Fuels

State expenditures (multiple fund types) likely increase (potentially significantly) to respond to the new GHG emissions reduction goals under the bill and the gradual transition from a reliance on fossil fuels. The magnitude and timing of any such impacts depend, at least in part, on the GHG emissions reduction plans and utility transition plans developed under the bill and cannot be predicted in advance.

State expenditures (multiple fund types) may also increase in the short term due to an increase in electricity costs resulting from the bill. The State uses about 1.5 million megawatt-hours of electricity per year, out of a statewide total of about

60 million megawatt-hours. While it is unknown how much the bill will raise electricity prices, for every $60.0 million increase in total electric costs in the State ($1 per megawatt-hour), State expenditures for electricity increase by about $1.5 million. State agencies also pay the EmPOWER surcharge that is assessed on utility customers to pay for the program. Since the bill expands and extends the program, all electricity customers, including State agencies, will ultimately pay for additional expenditures incurred.

Discussion of Fiscal Impacts Related to Some of the New Responsibilities

In addition to the broader impacts that affect State agencies overall, the bill establishes new responsibilities for several agencies, and some likely need to hire new staff to implement the initiatives and programs established under the bill. The bill also mandates that one PIN be created within MEA. In particular, the bill establishes substantial new responsibilities for MDE, CBT, and PSC. An estimate of the costs associated with the MEA PIN and administrative costs for CBT and PSC, as well as a descriptions of the bill's impact on MDE, are included below.

Maryland Energy Administration: The bill specifies that one PIN must be created in MEA to act as the Coordinator of the Climate Transition and Clean Energy Hub. These provisions take effect June 1, 2022, so it is assumed that the employee is hired beginning July 1, 2022, which accounts for a one-month start-up delay. Thus, general fund expenditures for MEA increase by $114,174 in fiscal 2023 to hire one program manager to act as the coordinator for the hub, as required by the bill. The estimate includes a salary, fringe benefits, one-time start-up costs, and ongoing operating expenses. Future year MEA expenditures associated with this PIN, which range from $104,806 in fiscal 2024 to $113,462 in fiscal 2027, include a salary with annual increases and employee turnover as well as annual increases in ongoing operating expenses.

MEA also advises that the bill's changes regarding the use of SEIF funds will require additional research for certain projects. Assuming such costs are covered with existing SEIF funds redirected from other activities, overall finances of SEIF are unaffected.

Maryland Climate Justice Corps: The bill establishes the Maryland Climate Justice Corps, which is administered by CBT, in consultation with the Corps Board. CBT is not a budgeted State agency and does not receive a direct appropriation. CBT does not have resources to administer the Corps program without general funds provided by the State. Thus, it is assumed that general fund expenditures increase by $1.5 million annually beginning in fiscal 2023 to provide funding to CBT for staff, stipends, and operating expenses to generally implement the new program.

Public Services Commission and Utility Transition Plans: The bill requires PSC to develop a new process for gas and electric companies to develop utility transition plans to achieve a structured and just transition to near-zero GHG emissions from the building sector, and for gas companies to include appropriate gas system investments and divestments for a shrinking customer base and reductions in gas throughput in the range of 50 to 100% by 2045. This results in additional work for PSC relating to the review of plans and the adoption of regulations, among other things. Thus, PSC special fund expenditures increase by approximately $1.5 million in fiscal 2023 to hire four new employees (two regulatory economists and two public utility auditors) to (1) develop a process for utility companies to develop utility transition plans; (2) hold evidentiary hearings and gather other stakeholder/witness input; (3) review the plans; and (4) oversee plan implementation. This estimate, which reflects the bill's July 1, 2022 effective date, includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses (including contractual services). Out-year costs, which total approximately $1.1 million annually, reflect salaries with annual increases and employee turnover as well as annual increases in ongoing operating expenses (including ongoing contractual services). Special fund revenues increase correspondingly from assessments imposed on public service companies, as authorized under current law.

Maryland Department of the Environment: The bill establishes several new responsibilities for MDE and alters and expands existing MDE requirements. The modifications to the Greenhouse Gas Emissions Reductions Act result in significant contractual costs for MDE to develop new plans. Further, MDE likely needs contractual assistance and/or additional staff to support MCCC, CEJSC, and the Just Transition Employment and Retraining Working Group to meet new study and reporting requirements. MDE estimates that its administrative costs resulting from the bill total at least $1.2 million in fiscal 2023, with ongoing costs of at least $300,000 annually. The Department of Legislative Services (DLS) cannot independently verify these estimates at this time; however, the bill establishes significant new responsibilities for MDE, and DLS advises that MDE likely incurs significant costs to hire staff and consultants.

Local Fiscal Effect: Overall, a reliable estimate of the bill's impact on local government finances cannot be made at this time. However, some of the potential fiscal effects on local governments are discussed below.

Similar to the effect described above for State agencies, local governments may incur an increase in electricity costs in the short term and incur an increase in EmPOWER surcharges on an ongoing basis. Further, there are likely impacts from the ultimate transition from a reliance on fossil fuels, but these impacts and the timing depend, at least in part, on the utility transition plans developed under the bill and cannot be determined in advance.

The bill's requirements related to methane emissions monitoring, reporting, and new regulatory standards for surface methane emissions (which MDE must adopt by January 1, 2023) likely increase operating expenditures for municipal landfills. Actual impacts depend on the regulations adopted by MDE.

Small Business Effect: Although a reliable estimate of the bill's impact on small businesses cannot be made at this time, the impact on small businesses is likely meaningful. Among other things, small businesses may incur an increase in electricity costs in the short term and an increase in EmPOWER surcharges on an ongoing basis. The prohibition on using SEIF funding for projects that use fossil fuels (unless the project can demonstrate that it leads to lower lifecycle emissions, as specified) may affect the mix of projects funded with SEIF funds, but any resulting impact on small businesses cannot be reliably predicted or described at this time. Further, there are likely impacts from the ultimate transition from a reliance on fossil fuel sources, but these impacts and the timing depend, at least in part, on the utility transition plans developed under the bill.

Additional Comments: While the bill's provisions result in significant costs, as described above, the various programs and activities undertaken as a result of the bill may result in long-term energy savings for the State, local governments, and small businesses. Any such savings cannot be estimated and therefore has not been addressed in this analysis.

Additional Information

Prior Introductions: None.

Designated Cross File: None.

Information Source(s): Carroll and Harford counties; City of Salisbury; Town of Bel Air; Morgan State University; Department of Commerce; Maryland Department of the Environment; Department of General Services; Maryland Department of Health; Maryland Department of Labor; Department of Natural Resources; Maryland Department of Planning; Maryland Department of Transportation; Maryland Energy Administration; Public Service Commission; Department of Legislative Services

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Analysis by: Kathleen P. Kennedy

Direct Inquiries to:
(410) 946-5510
(301) 970-5510