

Department of Legislative Services
Maryland General Assembly
2016 Session

FISCAL AND POLICY NOTE
Third Reader - Revised

House Bill 610

(Delegate Barve, *et al.*)

Economic Matters and Environment and Education, Health, and Environmental Affairs
Transportation

Greenhouse Gas Emissions Reduction Act - Reauthorization

This bill repeals the termination date of the current requirement to reduce greenhouse gas (GHG) emissions by 25% from 2006 levels by 2020 and requires the State to develop plans, adopt regulations, and implement programs to reduce GHG emissions by 40% from 2006 levels by 2030. The Maryland Department of the Environment (MDE) must develop proposed and final plans in accordance with specified requirements. The bill also requires an independent academic study of the economic impact of requiring GHG emissions reductions from the manufacturing sector; the Maryland Commission on Climate Change (MCCC) must oversee the study. Finally, the bill requires MDE to submit a report by October 1, 2022, and every five years thereafter, on the progress toward achieving the 2030 GHG emissions reduction goal and the reductions needed by 2050 to avoid specified climate changes, based on contemporary science.

The bill's requirement to reduce GHG emissions by 40% below 2006 levels by 2030 terminates December 31, 2023.

Fiscal Summary

State Effect: Special fund expenditures for MDE to implement programs to reduce GHG emissions in the State and develop required plans and reports are maintained beyond FY 2017. MDE can continue to implement the program with existing budgeted special funds from the Strategic Energy Investment Fund. Revenues are not affected.

Local Effect: The bill does not materially affect local government finances or operations.

Small Business Effect: None.

Analysis

Bill Summary: MDE must submit its proposed GHG emissions reduction plan to the Governor and the General Assembly by December 31, 2018. The proposed plan is to be publicly available, and MDE must convene public workshops to provide interested parties with an opportunity to comment on the proposed plan. After consultation with appropriate State and local agencies, MDE must adopt the final emissions reduction plan by December 31, 2019. The final plan must include adopted regulations that implement all of the plan's measures and a timeline for seeking additional legislative authority. **Exhibit 1** provides a timeline of key dates and activities specified in the bill.

MDE must include the Maryland Department of Agriculture, the Maryland Farm Bureau, the Maryland Association of Soil Conservation Districts, the Delmarva Poultry Industry, the Maryland Dairy Industry Association, and the Maryland Agricultural Commission in discussions on the role to be played by agriculture to reduce GHG emissions while developing plans, adopting regulations, and implementing programs to reduce GHG emissions in accordance with the bill's provisions.

Exhibit 1

Key Dates under the Greenhouse Gas Emissions Reduction Act Reauthorization

<u>Date</u>	<u>Action</u>
December 31, 2018	MDE deadline to submit proposed 40% emissions reduction plan to Governor and General Assembly, following public workshops
December 31, 2019	MDE deadline to adopt final 40% emissions reduction plan
Calendar 2020	State deadline to reduce GHG emissions by 25% below 2006 levels
October 1, 2022	Deadline for submission of independent academic study of economic impact on manufacturing sector; and MDE deadline for submission of report on progress toward required 2030 reduction and toward achieving reductions needed by 2050 based on contemporary science
December 31, 2023	Termination of the 2030 reduction goal

<u>Date</u>	<u>Action</u>
October 1, 2027	MDE deadline for submission of report on progress toward achieving the 2030 reduction goal and toward achieving reductions needed by 2050 based on contemporary science
Calendar 2030	State deadline to reduce GHG emissions by 40% below 2006 levels, unless otherwise specified

Upon receipt of the required independent study, the October 1, 2022 progress report, and future progress reports, the General Assembly (1) may act to maintain, revise, or eliminate the 40% reduction requirement and (2) must consider whether to continue specified provisions related to the manufacturing sector.

The bill's provisions are severable if any are held invalid in court.

Current Law/Background: According to the Intergovernmental Panel on Climate Change, the world's temperatures are climbing, and human activities are very likely contributing to this increase. Continued global warming is expected to affect sea levels and weather patterns, resulting in impacts on human health, the environment, and the economy. Maryland is already experiencing significant loss of land from sea level rise, which has risen about 8 inches in the last 100 years.

In light of Maryland's particular vulnerability to the impacts of climate change, the Greenhouse Gas Reduction Act of 2009 (Chapters 171 and 172), was enacted to require the State to develop plans, adopt regulations, and implement programs to reduce GHG emissions by 25% from 2006 levels by 2020. This reduction goal evolved from MCCC's Climate Action Plan, which was released in August 2008. MCCC was established by executive order in April 2007 to address the causes and results of climate change in Maryland and was codified by Chapter 429 of 2015. The 25% by 2020 emissions reduction requirement established in 2009 terminates December 31, 2016, unless it is reauthorized by legislation.

The Greenhouse Gas Reduction Act of 2009 required MDE to (1) develop a proposed statewide GHG emissions reduction plan by 2011; (2) solicit public comment on the proposed plan from interested stakeholders and the public; and (3) adopt a final plan by 2012. The State was also required to demonstrate that the reduction goal could be achieved in a way that has a positive impact on Maryland's economy, protects existing manufacturing jobs, and creates significant new "green" jobs in Maryland. The Act specifically exempts the manufacturing sector from control under the Act unless those controls are required by federal law or regulation or were part of existing State law in effect

prior to 2009. The Act also required MDE to submit a progress report to the Governor and the General Assembly by October 1, 2015. That report, the [2015 Greenhouse Gas Emissions Reduction Act Plan Update](#), summarized the progress made toward achieving the 2020 emissions reduction requirement.

To achieve GHG emissions reductions, the State developed a comprehensive, multi-sector, multi-agency plan with assistance from more than a dozen State agencies and nongovernmental organizations. According to MDE, Maryland is on target to not only meet, but to exceed, the 25% required emissions reduction. **Exhibit 2** shows that with the combined emissions reductions of all programs in the *2015 Greenhouse Gas Emissions Reduction Act Plan Update*, Maryland will exceed the 25% required reduction in GHG emissions by 3.71 million metric tons of carbon dioxide-equivalent. Further, projections show that the 2012 Greenhouse Gas Reduction Act Plan will result in an estimated economic benefit of between \$2.5 billion and \$3.5 billion in increased economic output by 2020 and help create and maintain between 26,000 and 33,000 new jobs. Among the suite of Maryland’s programs, EmPOWER Maryland, the Maryland Renewable Energy Portfolio Standard, and the State’s participation in the Regional Greenhouse Gas Initiative are projected to provide some of the greatest reductions in GHG emissions.

Exhibit 2
Projected GHG Emissions Reductions in Maryland
(In MMtCO₂e)

Required 25% Reduction in Statewide GHG Emissions	34.66
Projected Emissions Reductions from All Programs	38.37
Difference	3.71

GHG: greenhouse gas

MMtCO₂e: million metric tons of carbon dioxide-equivalent

Source: *2015 Greenhouse Gas Emissions Reduction Act Plan Update*

Despite this progress, MDE also reports in its *2015 Greenhouse Gas Emissions Reduction Act Plan Update* that the scientific consensus is that worldwide GHG emissions reductions as high as 72% by 2050, or earlier, will be needed to minimize the impacts of climate change. While Maryland has a head start in reducing GHG emissions, more reductions will be needed. In response, MDE recommends that the 2020 goal be maintained and that additional enhancements to existing programs should be considered as long as the enhancements have a clear positive impact on Maryland’s economy and job creation, while also protecting consumers. MDE also recommends (1) adopting a “next step” of incremental progress toward deeper science-based reductions needed by 2050, including

increasing the emphasis on improving Maryland's economy by establishing goals for economic growth, job creation, and wages; (2) requiring an every three-year check-in on GHG emissions reductions; (3) analyzing emerging issues linked to continuing the State's progress in reducing GHG emissions; and (4) increasing efforts on climate resiliency to ensure that the State is prepared for extreme weather and changing climate conditions. Finally, MDE recommends that the existing exemption for the manufacturing sector be maintained.

MCCC also published its [2015 final report](#), which provides background and recommendations on key challenges and opportunities related to Maryland's response to climate change. In the report, MCCC explicitly recommends adopting a goal and developing a plan to reduce GHG emissions by 40% from 2006 levels by 2030, with continued inclusion of safeguards, exemptions, studies of those exemptions, reassessment provisions, and other relevant language contained in the Greenhouse Gas Reduction Act of 2009. MCCC also recommends analyzing several priority areas to identify strategies that will further reduce GHG emissions while having a clear positive impact on the State's economy and on job creation, including (1) reporting; (2) methane leakage; (3) additional strategies and programs to put Maryland on the path of leadership toward GHG emissions reductions by 2050; and (4) building resilience to advance Maryland's ability to address threats and vulnerabilities to climate change.

Additional Information

Prior Introductions: None.

Cross File: SB 323 (Senator Pinsky, *et al.*) - Education, Health, and Environmental Affairs.

Information Source(s): Maryland Department of the Environment, Maryland Commission on Climate Change, University System of Maryland, Maryland Department of Agriculture, Department of Natural Resources, Department of Legislative Services

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Analysis by: Kathleen P. Kennedy

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