



March 31, 2021

The Honorable Kumar P. Barve, Chair  
Environment and Transportation Committee  
House Office Building, Room 251  
Annapolis, MD 21401

**Re: Senate Bill 414- Climate Solutions Now Act of 2021**

Dear Chair Barve and Members of the Committee:

The Maryland Department of the Environment (MDE or the Department) has reviewed Senate Bill 414 - *Climate Solutions Now Act of 2021*, and would like to support the bill pending the acceptance of some amendments included at the end of this letter.

The Department strongly supports the bill's overall objective to reduce greenhouse gas (GHG) emissions. Climate change is an urgent threat, and all levels of government and nongovernment organizations must take increasingly aggressive and balanced actions to reduce GHG emissions and increase community resilience. Maryland is a national leader in this area, realizing substantial reductions in emissions since the first Greenhouse Gas Reduction Act (GGRA) was passed in 2009, with the Hogan administration taking bold new actions to achieve significant progress. The World Resources Institute recently recognized Maryland's leadership with their finding that Maryland was the number one state for reducing GHG emissions while growing our economy.<sup>1</sup> While the Department welcomes efforts to accelerate action to combat climate change, we would like to provide information and express some concerns with the bill as currently drafted.

*Overall*

The Department has some concerns with the language changes to existing law. The language in the 2009 GGRA and 2016 GGRA was the result of a very comprehensive process that resulted in strong environmental protection and economic growth. Those bills were agreed upon by a wide array of interested parties, including environmental advocacy groups, labor and industry representatives, state agencies and public citizens. Some of the language changes to the existing GGRA that are proposed by this bill threaten to unravel the consensus underlying current law. Other language changes to the current law are vague and ambiguous or seem to provide for what is already implemented under current law, such as the requirement to "ensure that the greenhouse gas emissions reduction measures implemented in accordance with the plans: 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."

The bill declares new goals to achieve a 60% reduction in statewide GHG emissions by 2030 and net zero GHG emissions by 2045. While the Department generally finds more ambitious goals to be laudable, the Committee should be aware that developing a plan for Maryland to achieve those goals through state programs while still meeting the law's requirements for economic impacts will be difficult and may even be impossible. Such rapid reductions will require improvements in federal programs to advance new technologies and make major infrastructure investments, and those improvements may be beyond what the new federal administration will put forward. The Department believes that such federal action is necessary and long overdue, but when developing a state plan, the Department cannot assume that federal action at that scale will occur.

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<sup>1</sup> [wri.org/blog/2020/07/decoupling-emissions-gdp-us](https://www.wri.org/blog/2020/07/decoupling-emissions-gdp-us)

Recently, the bipartisan, independent Maryland Commission on Climate Change (MCCC), which includes the Senate and House sponsors of this legislation in its membership, unanimously approved a recommendation for Maryland to adopt similar ambitious GHG reduction goals. The Commission, informed by the latest scientific findings on necessary action by developed nations to limit global temperature increases, and by the research and analysis of reduction opportunities by the MCCC's Greenhouse Gas Mitigation Working Group, recommended a different reduction goal for 2030 – a 50% reduction rather than a 60% reduction – and the same net-zero goal for 2045.<sup>2</sup> These paths are not mutually exclusive, as the goal in the GGRA sets a floor on reductions, not a ceiling. The Department has always aimed to develop plans to exceed the required reductions by as much as possible, given available technology, constraints on state authority, and the requirements in the law relating to economic benefit and other impacts.

In February 2021, the Department submitted its final *2030 GGRA Plan* to the Governor and General Assembly wherein the Department and the other Maryland state agencies advanced a portfolio of measures that will reduce Maryland's 2030 GHG emissions to 48.7% below 2006 levels, very nearly achieving the Commission's recommended 2030 goal. The Department intends to supplement that plan shortly with updated estimates incorporating additional federal policies that will almost certainly bring Maryland's emissions below the 50% goal, once the new federal administration provides more detail on its immediate climate policy actions.

#### *Timeline and Methodology*

The bill would require the Department to issue a proposed plan to achieve the new 2030 GHG reduction goals by June 30 of next year, followed by a final plan by December 31 of next year. The Department would like to provide feedback on that timeline. The bill's requirement for a final plan following a draft by only six months does not allow for public comment and review of the numerous new mitigation programs that such a plan would need to propose in order to achieve a 60% reduction, followed by material changes to program design and analysis. The Department and other state agencies would be incapable of meeting that deadline, as development of new mitigation programs requires significant time for research, careful analysis, and consultation among agencies and with outside experts, including other states and the MCCC. Also, the bill's requirement that MDE perform measure-by-measure emissions impact analysis would add significant time and expense to the analysis process.

The bill also places some narrower methodological requirements on the GHG plan that give MDE some concern. First, the bill requires the plan to use the 20-year global warming potential for methane to estimate GHG emissions. While the Department recognizes the need to focus on short-lived climate pollutants like methane, and uses the 20-year value in methane-specific policy analysis, it notes that using the 20-year value in the economywide plan would violate established standards for GHG accounting. Both national standards, including the Greenhouse Gas Protocol,<sup>3</sup> and international standards, including the rules for implementing the Paris Climate Agreement,<sup>4</sup> require the use of 100-year global warming potentials in GHG reduction plans. MDE's practice is to use the 100-year value to be consistent with national and international standards, and then supplement that with estimates using the 20-year value to understand the important near-term impacts of methane emissions.

Secondly, the bill requires the plan to include "specific estimates of the reductions expected from each greenhouse gas reduction measure included in the plan." Older versions of the GGRA plan did include such "measure-by-measure"

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<sup>2</sup> [mde.maryland.gov/programs/Air/ClimateChange/MCCC/Documents/MCCCAnnualReport2020.pdf](https://mde.maryland.gov/programs/Air/ClimateChange/MCCC/Documents/MCCCAnnualReport2020.pdf)

<sup>3</sup> "...users are required to estimate GHG effects using 100-year GWP values in Chapters 8, 9, and 11. ['Estimating Baseline Emissions', 'Estimating GHG Effects Ex Ante', and 'Monitoring Performance Over Time', respectively]" [ghgprotocol.org/sites/default/files/standards/Policy%20and%20Action%20Standard.pdf](https://ghgprotocol.org/sites/default/files/standards/Policy%20and%20Action%20Standard.pdf)

<sup>4</sup> "Pursuant the modalities, procedures and guidelines (MPGs) for the transparency framework for action and support adopted by decision 18/CMP.1, Parties agreed to use the 100-year time-horizon GWP values from the Fifth Assessment Report of the IPCC (see [table 8.A.1](#)), or 100-year time-horizon GWP values from a subsequent IPCC assessment report as agreed upon by the CMA, to report aggregate emissions and removals of GHGs, expressed in CO<sub>2</sub> eq ([decision 18/CMA.1, annex, paragraph 37](#))."  
[unfccc.int/process-and-meetings/transparency-and-reporting/methods-for-climate-change-transparency/common-metrics](https://unfccc.int/process-and-meetings/transparency-and-reporting/methods-for-climate-change-transparency/common-metrics)

analysis, but methodologies and models have advanced since then, and best practice is now to analyze the effects of multiple measures simultaneously within an economy-wide modeling framework. That is because many programs interact with one another in fundamental ways, so they do not have independently attributable impacts (for example, the future reductions achieved by the EmPOWER program's energy efficiency investments depend profoundly on how the electricity generation system changes due to the Renewable Portfolio Standard's renewable energy deployments and the Regional Greenhouse Gas Initiative's (RGGI) declining pollution cap). By analyzing such measures together, analysts can capture those interactive effects and correctly estimate what all measures achieve together, which is the most important question for economy-wide planning. After this request in the 2020 version of this bill, MDE increased its analysis budget for 2021 in order to roughly estimate measure-by-measure reductions by adding subsequent analyses wherein programs are removed from the modeling process one-by-one to see how the overall results change. That supplemental analysis of a subset of the most significant programs will be available in the spring, but the Department notes that, while that analysis is of interest, such measure-by-measure analysis is conceptually flawed because of the interactions among measures, and a full analysis of every one of the dozens of measures in the GGRA Plan would be a substantial and expensive undertaking.

Lastly, the bill requires the Department to incorporate aircraft-borne estimates of methane emissions from landfills into the GGRA Plan and to require landfill operators to take various actions in response to those estimates. The Department recognizes the value of aircraft-borne estimates and continues to support the University of Maryland's work to gather those estimates. The Department and the university's researchers continue to collaborate on how those estimates can improve Maryland's GHG management. However, those estimates cannot replace the facility-level estimates the Department currently uses for regulatory purposes and for the GGRA Plan. The Department requires estimates that are (1) specific to a facility and (2) annual for those purposes. Aircraft-borne measurements do not provide estimates specific to a particular landfill or other source, since they measure methane emitted from numerous upwind sources and areas, and do not provide annual estimates since they only provide snapshots in time that are heavily dependent upon immediate conditions including weather. Therefore, these provisions in the bill cannot/will not be implemented.

#### *Fiscal and Operational Impact*

In addition to the Department's concerns noted above, SB 414 would have a fiscal and operational impact on the Department in several ways. The first impact is tied to the increase in the GHG emissions reductions to 60% from 2006 levels by 2030. Under the bill, MDE would be required to adopt the first of two new plans by December 31, 2022, adopt regulations, and implement programs that reduce statewide GHG emissions to meet these more stringent emission reduction levels. The revised 2030 GHG reduction goal would require that MDE repeat the comprehensive emissions and economic impact analysis included in the current GGRA plan process using extended contracts with emissions and economic impact modelers. For the 2019 GGRA Plan and forthcoming, 2030 GGRA Plan, emissions modeling was done on an economy-wide scale, consistent with best methodological practices and best available models. SB 414 requires that emissions reductions be calculated for each individual measure included in the plan, despite the fact that relevant measures profoundly interact with one another, so do not have independently attributable impacts. MDE can, however, estimate theoretical independent impacts by supplementing its economy-wide analysis approach with additional modeling scenarios that each evaluate the presence or absence of individual measures. MDE is performing supplemental analysis to explore that for a limited number of the most significant programs. Satisfying the requirements in this bill would have substantial additional impact because of the dozens of emissions reduction measures that Maryland has implemented, and that the Department includes in the GGRA Plan.

SB 414 would establish a new Just Transition Employment and Retraining Working Group under the MCCC to perform a study and provide recommendations and a report to the Commission and General Assembly. The working group would be staffed by MDE. The bill also requires the Commission on Environmental Justice and Sustainable Communities (CEJSC) to perform numerous tasks, including establishing a methodology to identify disproportionately affected communities, developing recommendations relating to state spending, holding public hearings and providing additional reports to the General Assembly. The Department appreciates the efforts of the legislature to promote justice, equity, diversity and inclusion. However, both commissions are volunteer bodies with other responsibilities,

so the majority of the work required under this bill would be performed by MDE. MDE would need to hire additional positions to staff the new working group of the MCCC and perform the additional tasks required of the CEJSC. The bill would also require MDE to perform an annual analysis of spending by all state agencies on GHG reduction programs, including an evaluation of the portion of spending that benefits disadvantaged communities, according to criteria established by the CEJSC. Implementing agencies could also face additional recordkeeping and reporting costs to provide the necessary information to MDE.

The bill also has a goal of “planting and helping to maintain in the State 5 million sustainable trees of species native to the State by the end of calendar year 2030.” The Department would be the lead agency required to help the State reach this goal. To this end, the bill would require the creation of a 5 million tree program coordinator within the Department who would be primarily responsible for leading DNR, MDA, and the Chesapeake Bay Trust to promote, facilitate, and align the State’s efforts to achieve the goals established under the amendments in this bill. In each fiscal year from 2023 through 2031, inclusive, \$1.25 million of the Chesapeake and Atlantic Coastal Bays Trust Fund shall be used to fund: the 5 million tree program coordinator position at MDE and 13 contractor positions in the forest service of the DNR to provide technical assistance, planning, and coordination related to tree plantings on public, private, and agricultural lands and in “underserved areas.”

This legislation transfers \$15 million per year in fiscal years 2023 through 2031 from the Bay Restoration Fund (BRF) to other entities for tree planting activities. Specifically \$10 million will be transferred to the Chesapeake Bay Trust for a new Urban Trees Program established in this bill; \$2.5 million of the \$15 million annually will be transferred to the Chesapeake and Atlantic Coastal Bays Trust Fund in DNR to be used for tree planting on public and private land; lastly, \$2.5 million of the \$15 million annually will be transferred to MDA to fund tree plantings under the Conservation Reserve Enhancement Program (CREP) and other tree-planting programs on agricultural land. Funds transferred from the BRF under the bill would be after making payments on existing bonds, operation and maintenance funding for Enhanced Nutrient Removal (ENR) wastewater treatment plants (WWTP), and major and minor WWTP upgrades. These funds are being diverted from the BRF Wastewater account, which would affect projects needed for Chesapeake Bay cleanup and restoration, including stormwater control measures, sewer overflow abatement, and septic connections to BNR or ENR WWTPs. Bay Restoration Funding is allocated on a competitive basis and projects are ranked based on water quality, climate resiliency, flood control and public health benefits. The Department recently updated its project scoring system to incorporate nutrient reductions from riparian forest buffers that are planted with native species. The highest ranked funding applications are awarded BRF grant funding annually. Additionally, there are a large number of eligible applications that do not receive grant funding annually due to fiscal limitations. If this legislation is enacted, there will be less funding available in the BRF to go to local governments for stormwater control measures, septic connections, and sewer overflow abatement. This will likely make it more difficult for local governments to meet their MS4 permits and consent decrees for sewer overflows, as well as making it more difficult for the State to meet its obligations under the Chesapeake Bay TMDL, which has a court ordered 2025 deadline.

Lastly, this bill would create a new commission entitled the Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings. This Commission would be in effect from June 1, 2021 to June 30, 2023. The Secretary of the Environment, or his designee would chair the Commission and the Department would provide staff for the Commission. Among other items, the Commission would be responsible for developing: a plan to achieve the tree planting goals mentioned above; a plan to ensure that trees planted are properly maintained; recommendations regarding the establishment of a Maryland-based carbon offset market to support the State’s tree-planting goals; and recommendations on reviewing State policies to mitigate the clearing of trees during the construction of State transportation projects. The Department would require additional staff and contractual assistance to perform these tasks.

All of these provisions would create many new responsibilities for MDE, and have a very large fiscal and operational impact. MDE would need to hire additional staff and procure contractor(s) to meet the requirements in this bill. Given

Chair Barve

Page 5

the short timeline provided in this bill, MDE anticipates that hiring staff, even on a contractual basis, and procuring contracts would be difficult, if not impossible.

Furthermore, the bill would change how funding from RGGI is allocated from the Strategic Energy Investment Fund (SEIF) by, among other items, identifying the Department's climate planning work as an eligible spending category for annual revenues in excess of \$50 million per year. The Department's Climate Change Program is currently funded by SEIF funds, under the 20% credited to the renewable and clean energy programs account. Funds taken from this account to support the newly created climate solutions account, where any additional support for MDE's climate change planning efforts is a low priority, could cause significant financial issues for MDE.

Thank you for your consideration. We will monitor SB 414 during the Committee's deliberations, and I am available to answer any questions you may have. Please feel free to contact me at [tyler.abbott@maryland.gov](mailto:tyler.abbott@maryland.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Tyler Abbott", written over a horizontal line.

Tyler Abbott

**MDE Amendments to SB 414**

Beginning on p. 43, line 20 – Urban Tree Program Amendments

**8–1911.**

**(A) (1) IN THIS SECTION THE FOLLOWING WORDS HAVE THE MEANINGS INDICATED.**

**(2) “PROGRAM” MEANS THE URBAN TREES PROGRAM.**

**(3) “QUALIFIED ORGANIZATION” MEANS:**

**(I) A NONPROFIT ORGANIZATION;**

**(II) A SCHOOL;**

**(III) A COMMUNITY ASSOCIATION;’**

**(IV) A SERVICE, YOUTH, OR CIVIC GROUP;**

**(V) AN INSTITUTION OF HIGHER EDUCATION;**

**(VI) A COUNTY OR MUNICIPALITY; OR**

**(VII) A FOREST CONSERVANCY DISTRICT BOARD.**

**(4) “UNDERSERVED AREA” MEANS AN AREA OF THE STATE FALLING WITHIN THE BOUNDARIES OF:**

**(I) AN URBAN AREA, AS DELINEATED BY THE UNITED STATES CENSUS BUREAU; AND**

**(II) 1. A NEIGHBORHOOD THAT WAS, AT ANY POINT IN TIME, REDLINED OR GRADED AS “HAZARDOUS” BY THE HOME OWNERS’ LOAN CORPORATION;**

**2. A CENSUS TRACT WITH AN AVERAGE RATE OF UNEMPLOYMENT FOR THE MOST RECENT 24–MONTH PERIOD FOR WHICH DATA ARE AVAILABLE THAT EXCEEDS THE AVERAGE RATE OF UNEMPLOYMENT FOR THE STATE; [OR]**

**3. A CENSUS TRACT WITH A MEDIAN HOUSEHOLD INCOME FOR THE MOST RECENT 24–MONTH PERIOD FOR WHICH DATA ARE AVAILABLE THAT IS EQUAL TO OR LESS THAN 75% OF THE MEDIAN HOUSEHOLD INCOME FOR THE STATE DURING THAT PERIOD; OR**

**4. A HOUSING PROJECT AS DEFINED IN § 12–101 OF THE HOUSING AND COMMUNITY DEVELOPMENT ARTICLE; OR**

**(B) THERE IS AN URBAN TREES PROGRAM ADMINISTERED BY THE TRUST.**

**(C) THE PURPOSE OF THE PROGRAM IS TO PLANT N IMO ATIVE SPECIES OF TREES IN UNDERSERVED AREAS, IN FURTHERANCE OF THE GOALS ESTABLISHED UNDER § 2–1212 OF THE ENVIRONMENT ARTICLE.**

**(D) (1) THE TRUST SHALL MAKE GRANTS TO QUALIFIED ORGANIZATIONS FOR THE MOST COST-EFFECTIVE TREE-PLANTING PROJECTS IN UNDERSERVED AREAS.**

**(2) ELIGIBLE PROGRAM EXPENSES INCLUDE PERSONNEL COSTS, SUPPLIES, SITE PREPARATION, AND OTHER EXPENSES AND MATERIALS RELATED TO PLANNING, IMPLEMENTING, AND MAINTAINING TREE-PLANTING PROJECTS IN UNDERSERVED AREAS.**

**(3) IN AWARDING PROGRAM GRANTS UNDER THIS SECTION, THE TRUST SHALL PRIORITIZE:**

**(I) GRANT APPLICATIONS FROM QUALIFIED ORGANIZATIONS LOCATED IN THE UNDERSERVED AREAS WHERE THE PROPOSED TREE-PLANTING PROJECTS WILL BE IMPLEMENTED; AND**

**(II) GRANT APPLICATIONS THAT INCLUDE PLANS FOR ENGAGING INDIVIDUALS, ORGANIZATIONS, OR BUSINESSES LOCATED IN UNDERSERVED AREAS TO IMPLEMENT AND MAINTAIN TREE-PLANTING PROJECTS IN THEIR COMMUNITIES.**

**(4) NO MORE THAN 5% OF EACH GRANT MAY BE EXPENDED FOR PERSONNEL COSTS.**

**(E) (1) THE PROGRAM SHALL BE FUNDED WITH:**

**(I) THE AMOUNT SPECIFIED IN § 9-1605.2(I)(11)(I) OF THE ENVIRONMENT ARTICLE;  
[AND]**

**(II) FUNDING PROVIDED BY MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR SUPPLEMENTAL ENVIRONMENTAL PROJECTS AS CONSISTENT WITH RECOMMENDATIONS MADE BY THE COMMISSION ON ENVIRONMENTAL JUSTICE AND SUSTAINABLE COMMUNITIES AS SPECIFIED IN §1-701 OF THE ENVIRONMENT ARTICLE;  
AND**

**(III) ANY ADDITIONAL FUNDS THAT MAY BE ALLOCATED BY THE TRUST THROUGH ITS ANNUAL BUDGET PROCESS.**

**(2) THE TRUST SHALL SEEK FEDERAL FUNDS AND GRANTS AND DONATIONS FROM PRIVATE SOURCES TO BE MADE TO THE TRUST FOR THE PURPOSE OF THE PROGRAM.**

**(F) A GRANT AGREEMENT REGARDING FUNDS FROM THE TRUST FOR THE PROGRAM SHALL:**

- (1) SPECIFY THE ALLOWED USE OF THE FUNDS PROVIDED UNDER THE GRANT; AND**
- (2) INCLUDE PROVISIONS FOR VERIFICATION THAT TREE-PLANTING PROJECTS ARE BEING IMPLEMENTED AND MAINTAINED AS PLANNED.**

**(G) THE TRUST MAY USE UP TO 5% OF THE FUNDING TRANSFERRED FROM THE BAY RESTORATION FUND AS SPECIFIED IN § 9-1605.2(I)(11)(I) OF THE ENVIRONMENT ARTICLE FOR ITS ADMINISTRATIVE COSTS:**

**([G]H) ON OR BEFORE OCTOBER 1 EACH YEAR, THE TRUST SHALL REPORT TO THE DEPARTMENT AND THE DEPARTMENT OF THE ENVIRONMENT ON THE GRANTS**

**AWARDED BY THE PROGRAM DURING THE IMMEDIATELY PRECEDING FISCAL YEAR, INCLUDING:**

- (1) THE NAMES AND DESCRIPTIONS OF GRANT RECIPIENTS;**
- (2) THE NUMBER AND LOCATION OF TREES PLANTED BY GRANT RECIPIENTS; AND**
- (3) ANY OTHER INFORMATION REQUIRED BY THE DEPARTMENT OR THE DEPARTMENT OF THE ENVIRONMENT.**

**Beginning on p.46, line 3; and on page 47, line 24 – Bay Restoration Fund (this statute is double drafted and these amendments need to be included in two different places in the legislation)**

Environment 9-1605.2 i(2)(iv) & (XIV)

(i)

(2) Funds in the Bay Restoration Fund shall be used only:

(iv) In fiscal years 2018 and thereafter, after payment of outstanding bonds and the allocation of funds to other required uses of the Bay Restoration Fund for funding in the following order of priority:

1. For funding the eligible costs to upgrade a wastewater facility to enhanced nutrient removal at wastewater facilities with a design capacity of 500,000 gallons or more per day;

2. **A.** For funding **100% OF THE** eligible costs of the most cost-effective enhanced nutrient removal upgrades at **PUBLICLY-OWNED** wastewater facilities with a design capacity of less than 500,000 gallons per day; and

**B. FOR FUNDING 50% OF THE ELIGIBLE COSTS OF THE MOST COST-EFFECTIVE ENHANCED NUTRIENT REMOVAL UPGRADES AT PRIVATELY-OWNED WASTEWATER FACILITIES WITH A DESIGN CAPACITY OF LESS THAN 500,000 GALLONS PER DAY; AND**

3. As determined by the Department and based on water quality, climate resiliency, flood control, and public health benefits, for the following:

A. For costs identified under item (ii) of this paragraph;

B. For costs identified under subsection (h)(2)(i)1 of this section; and

C. With respect to a local government that has enacted and implemented a system of charges to fully fund the implementation of a stormwater management program, for grants to the local government for a portion of the costs of the most cost-effective and efficient stormwater control measures, including stormwater measures relating to water quality, climate resiliency, or flood control, as determined and approved by the Department, from the restoration fees collected annually by the Comptroller from users of wastewater facilities under this section;



(xii) For costs associated with the implementation of alternate compliance plans authorized in § 4–202.1(k)(3) of this article; [and]

(xiii) After funding any eligible costs identified under item (iv)1 and 2 of this paragraph, for costs associated with the purchase of cost-effective nitrogen, phosphorus, or sediment load reductions in support of the State's efforts to restore the health of the Chesapeake Bay, not to exceed \$4,000,000 in fiscal year 2018, \$6,000,000 in fiscal year 2019, and \$10,000,000 per year in fiscal years 2020 and 2021; AND

**(XIV) AFTER FUNDING ANY ELIGIBLE COSTS IDENTIFIED UNDER ITEM (IV)1 AND 2 OF THIS PARAGRAPH, FOR THE TRANSFERS REQUIRED UNDER PARAGRAPH (11) OF THIS SUBSECTION.**

**(11) (I) IN FISCAL YEARS [2022]2023 THROUGH 2030 THE DEPARTMENT SHALL TRANSFER FROM THE BAY RESTORATION FUND:**

**1. \$[10,000,000] 5,000,000 PER FISCAL YEAR TO THE CHESAPEAKE BAY TRUST FOR THE URBAN TREES PROGRAM ESTABLISHED UNDER § 8–1911 OF THE NATURAL RESOURCES ARTICLE;**

**2. \$[2,500,000]1,250,000 PER FISCAL YEAR TO THE CHESAPEAKE AND ATLANTIC COASTAL BAYS 2010 TRUST FUND IN THE DEPARTMENT OF NATURAL RESOURCES, TO BE USED, SUBJECT TO THE REQUIREMENTS OF SUBPARAGRAPH (II) OF THIS PARAGRAPH, FOR TREE PLANTING ON PUBLIC AND PRIVATE LAND; AND**

**3. \$[2,500,000] 1,250,000 PER FISCAL YEAR TO THE MARYLAND DEPARTMENT OF AGRICULTURE TO FUND, TREE PLANTINGS UNDER THE CONSERVATION RESERVE ENHANCEMENT PROGRAM IN ACCORDANCE WITH § 8–706 OF THE AGRICULTURE ARTICLE AND OTHER TREE-PLANTING PROGRAMS ON AGRICULTURAL LAND.**

**(II) FUNDS TRANSFERRED TO THE CHESAPEAKE AND ATLANTIC COASTAL BAYS 2010 TRUST FUND UNDER SUBPARAGRAPH (I)2 OF THIS PARAGRAPH:**

**1. MAY BE DISTRIBUTED IN ACCORDANCE WITH §8–2A–04(C)(2) OF THE NATURAL RESOURCES ARTICLE;**

**2. MAY BE USED TO COVER THE COSTS OF:**

**A. SITE PREPARATION, LABOR, AND MATERIALS FOR TREE-PLANTING PROJECTS;**

**B. MAINTAINING TREES FOLLOWING A TREE-PLANTING PROJECT; AND**

**C. LANDOWNER INCENTIVE PAYMENTS OR SIGNING BONUSES OF UP TO \$[1,000]500 PER ACRE OF TREES PLANTED;**

**3. MAY NOT BE USED TO PLANT TREES INTENDED FOR TIMBER HARVEST; AND**

**4. MAY BE USED ONLY FOR TREE PLANTINGS ON PRIVATE LAND IF THE LANDOWNER ENTERS INTO A BINDING LEGAL AGREEMENT TO MAINTAIN THE PLANTED AREA IN TREE COVER FOR AT LEAST 15 YEARS.**

**(III) FUNDS TRANSFERRED FROM THE BAY RESTORATION FUND UNDER THIS PARAGRAPH ARE SUPPLEMENTAL TO AND MAY NOT TAKE THE PLACE OF FUNDING THAT OTHERWISE WOULD BE APPROPRIATED FOR THE PROGRAMS AND INITIATIVES SPECIFIED IN SUBPARAGRAPH (I) OF THIS PARAGRAPH.**

GGRA/GHG Amendments

1- Set 2030 goal at 50%, consistent with MCCC recommendations

On page 8, in line 28 strike “60%” substitute “(50%)”.

On page 15, in line 6 strike “60%” substitute “(50%)”; in line 14 strike “60%” substitute “(50%)”.

2- Remove the new plan deadlines for 2022 (redundant after 1 above).

Page 15:

- strike the changes in lines 12-17 (i.e. leave existing language intact, don't add new plan requirement)

3- Set 60-by-35 Goal

Page 8, insert new 2-1204.2:

**2-1204.2 THE STATE SHALL REDUCE STATEWIDE GREENHOUSE GAS EMISSIONS BY 60% FROM 2006 LEVELS BY 2035**

Page 8, line 30, change 2-1204.2 to **2-1204.3**

4- Set 2035 deadline for 60% plan

Page 15, line 22, insert after (1):

**ON OR BEFORE DECEMBER 31, 2025, ADOPT A FINAL PLAN THAT REDUCES STATEWIDE EMISSIONS BY 60% FROM 2006 LEVELS BY 2035**

And shift the existing (1) and (2) to (2) and (3), respectively (this lists the 2035 plan before the 2045 plan)

5- Add a 60-by-30 policy pathway to the existing 2022 report.

Additional text for section 2-1211:

2-1211.

The Department shall monitor implementation of the plans required under 2-1205 of this subtitle and shall submit a report, on or before October 1, 2022, and every 5 years thereafter, to the governor and , in accordance with 2-1246 of the State Government Article, the General Assembly that describes the State's progress toward achieving:

(1) The reductions in greenhouse gas emissions required under this subtitle, or any revisions conducted in accordance with 2-1210 of this subtitle; [and]

(2) The greenhouse gas emissions reductions needed by [2050] **2045** in order to avoid dangerous anthropogenic changes to the Earth's climate system, based on the predominant view of the scientific community at the time of the latest report[.] ; **AND**

Chair Barve

Page 11

**(3) ADDITIONAL PROGRAMS, POLICIES, INVESTMENTS, AND OTHER STATE MEASURES NECESSARY TO ACHIEVE GREATER EMISSIONS REDUCTIONS THAN REQUIRED UNDER THIS SUBTITLE, INCLUDING A REDUCTION OF STATEWIDE GREENHOUSE GAS EMISSIONS BY 60% FROM 2006 LEVELS BY 2030.**

6- Delete methane landfill provisions and measure-by-measure analysis, amend methane GWP provisions.

On page 14, strike beginning with “(A)” in line 6 down through “LANDFILLS.” in line 22.

On page 16, in line 8 insert “**AND**”; in line 10, after “**OVER**” insert “**BOTH A 100-YEAR AND**”; in line 11 after “**CHANGE**” insert “**AND CONSISTENT WITH THE MOST RECENT RULES FOR COMMON METRICS ADOPTED BY THE PARTIES TO THE PARIS AGREEMENT ON CLIMATE CHANGE**”; in line 12 strike “;**AND**”; in line 13 strike beginning with “(3)” down through “**PLAN.**” in line 15.

On page 18, in line 10 insert “**AND**”; strike lines 11 and 12 in their entirety; and in line 13 strike “(10)” and substitute “(9)”.

#### CEJSC Amendments

1- Amend CEJSC requirements on identifying communities disproportionately impacted by climate change

On page 12, strike beginning with “**REDUCE**” in line 25 down through “**POLLUTANTS,**” in line 26; in line 28 strike “**PERCENTAGE OF**” and substitute “**USE OF APPLICABLE**”.

On page 13, after “**CRITERIA**” strike “comma” in line 6 down through “**ETHNICITY**” in line 14.