**STWG Draft Recommendations 2024**

*Woody Biomass:*

Woody biomass burning for thermal energy is a suboptimal choice (e.g., low energy yield per ton of carbon dioxide emitted), but strategic use of wood from thinning for forest fire protection or various waste streams can be considered. Harvesting live forests for woody biomass burning is NOT recommended.

*Hydrogen:*

Use funding associated with the regional clean hydrogen hubs created in the Department of Energy Office of Clean Energy Demonstrations (both the Appalachian Hydrogen Hub and the Mid-Atlantic Hydrogen Hub) to develop technologies to decompose methane into hydrogen and carbon.

*Methane:*

Continue to accelerate efforts to reduce nutrients entering Chesapeake Bay and its tributaries to mitigate unconstrained methane production associated with eutrophication. Investigate incorporating methane fluxes from Maryland, lakes, reservoirs and Chesapeake Bay in the Maryland Greenhouse Gas inventories.

Since restored wetlands support high methane production, especially with restoration using amendments (e.g., biosolids, hay, manure, wood chips), investigate methods to restore wetlands that do not lead to additional methane production.

Develop funding mechanisms (e.g., Maryland Department of Agriculture’s Animal Waste Technology Fund) to support capital investments to build anaerobic digestion facilities, particularly targeting Maryland dairy farms.

Create public education programs including outreach to the Maryland state delegation, energy producers to support decarbonization technologies. Use examples from other states (e.g., California and North Carolina) to incentivize constructive peer pressure.

**2023 STWG Recommendations from Final MCCC Report and Their Outcomes**

*1. Improve public health preparedness for the challenges posed by climate change*

**1.1** The state should develop a Ready-Set-Go framework for public health adaptation based on early warning systems leveraging subseasonal-to-seasonal (S2S) forecasts. Early health warnings with seasonal lead time should inform contingency planning, and personnel/volunteer training (Ready phase), while sub- seasonal lead time should inform resource allocation, and personnel/ volunteer activation (Set phase). Finally, warnings with short range lead time (days) should inform the activation stage, including evacuation, opening of shelters, and distribution of aids (Go phase).

*Outcome: No announced updates*

**1.2** The state should issue a report on the background, status, and needs associated with the Centers for Disease Control and Prevention (CDC) funding for the Climate and Health Program. Additionally, the state should compensate for the loss of the CDC funding for the Climate and Health program within the Maryland Department of Health to enhance Maryland’s public health preparedness to climate change.

*Outcome: Not sure of the status*

**1.3** The Maryland Climate and Health Profile Report, published in 2016, should be updated by the Maryland Department of Health and Mental Hygiene in collaboration with university expertise every five years to accommodate more recent scientific evidence and provide relevant future projections of health burden in Maryland, with a particular emphasis on climate justice by implementing meaningful community engagement.

*Outcome: No announced updates*

*2. Establish a Climate and Equity Innovation Fund*

While Maryland’s climate goals now lead the nation in terms of carbon reduction policy, it does not match those goals with investment in the technology development necessary to achieve those goals like is done in states such as California and New York. Unlike biotech and cyber there are no energy specific programs/priorities in the Department of Commerce.

**In fact, Maryland is dead last in the nation when it comes to diversity of how it spends its research funding with 85% of that going to biotech.**

Biotech and cyber are now well-established contributors to the Maryland economy. Given the preeminence of Maryland’s energy research, as demonstrated by its leadership in obtaining US Department of Energy research awards, it’s time to create similar programs for energy from early-stage seed funding through tax incentives for established companies.

To facilitate and incentivize the translation of promising viable technologies that can be scaled, it is recommended that a Climate and Equity Innovation Fund be established. This fund should be commensurate with the magnitude of the challenge and comparable on a percentage of state GDP to other climate conscious states like California and New York. This competitive and peer-reviewed program would accelerate Maryland’s research leadership to become a national leader in climate technology innovation through partnerships and supporting workforce development programs that focus on creativity, diversity, and equity. The program would be managed by existing accelerator programs, for energy and climate technology the Maryland Energy Innovation Institute (MEI2) in partnership with Maryland Energy Innovation Accelerator (MEIA) and Maryland Clean Energy Center (MCEC) as previously established by Maryland legislation, and the Maryland Sea Grant (MDSG) for adaptation. These programs have a demonstrated history of managing such competitive programs on behalf of Maryland and moreover providing a greater than 10X return on investment in terms of bringing federal and private investment to the State of Maryland.

*Outcome:* Climate Technology Founder’s Fund created <https://www.mdcleanenergy.org/climate-technology-founders-fund-will-accelerate-economic-opportunities-and-carbon-reduction-solutions-for-maryland/>

*3. Inclusivity of All Marylanders*

Populations that are most vulnerable to the impacts of climate change include individuals at the lower income levels, minorities, immigrants where English is their second language, and those with disabilities, among others. The reasons for these disparities vary but include the inability to financially afford adaptation strategies, the lack of access to information, and inequitable distribution and access to programs from governments, non-profits, and the private sector. Consequences of these vulnerabilities can exacerbate health disparities. Therefore, prioritization and support should be given to MDE’s current effort to identify communities disproportionately affected by climate impacts and to ensure they are adequately accounted for and included in mitigation and adaptation planning. This is an integral part of the equity and underserved and overburdened community underpinnings of the 2022 Climate Solutions Now Act and the State’s response to climate change.

*Outcome:*Two new working groups (Just Transition Employment and Retraining Working Group, Energy Industry Revitalization) will address parts of this. MDE appointed its first Assistant Secretary for Environmental Justice (Aneca Y. Atkinson). Governor Moore signed a new [executive order](https://governor.maryland.gov/news/press/pages/governor-moore-signs-executive-order-to-advance-maryland%E2%80%99s-pollution-reduction-plan.aspx) to advance Maryland’s climate goals. Agencies are required to submit Climate Implementation Plans by November 1 and they must consider Justice40 goals, initiatives, and funding to support environmental justice.