

Larry Hogan Governor

Boyd Rutherford Lieutenant Governor

Ben Grumbles Secretary

Maryland Commission on Climate Change Steering Committee

August 24, 2017, 10:00 am to 12:00 pm at MDE

Agenda (Notes in Blue)

In Attendance: Tad Aburn, Anne Lindner, Mike Powell, Susanne Brogan, Susan Payne, Colleen Turner, Don Boesch, Allison Rich, John Kumm, David Costello, Arjun Makhijani, Brian Hug, Lisa Nissley, Jess Herpel, Chris Hoagland

By Phone: Mike Tidwell, Jason Dubrow, Catherine McCall

1. Welcome & Introductions Brian and Tad discussed recent news of the RGGI agreement establishing a 30% reduction in the carbon cap from 2020 to 2030 and adding a new mechanism called the Emissions Containment Reserve, which will achieve even more emission reductions if reduction costs are lower than we anticipate.

2. Old Business

- Update Report Writing Timeline & Table of Contents Brian walked through the timeline and TOC. Highlighted that working group recommendations are due 9/6 and we will review recommendations at the 9/20 MCCC meeting
- Update State Agency Reports Agency reports are due on 9/13 and will be shared with the SC. MDE, DNR, and MIA have already completed.

3. Standing Reports

- Working Group Updates & Expectations for Report Recommendations See attached recommendations from STWG, MWG, and ECO. ARWG reported that they will circulate recommendations next week.
 - o Scientific and Technical Working Group Don
 - Adaptation and Response Working Group
 - Mitigation Working Group
 - Education, Communication, and Outreach Working Group

4. New Business

- 9/20 MCCC Agenda Don and others suggested they would like to see more input from the Commission on recommendations and more suggestions on how the working groups plan and implement work.
 - Report Writing Timeline & Table of Contents
 - Report Recommendations
- SC Call on September 12th at 2p This call will allow a preview of recommendations and we will finalize the agenda for 9/20.

5. Wrap Up

We hope you will be able to join us in person, however if you need to call in that day, the number is:

Conference Number: (605) 475-4000

Access Code: 997763#

MCCC Steering Committee Meetings take place on the fourth Thursday of each month at 10:00am. The next meeting is scheduled for September 28th.

Draft Recommendations

Education, Communication and Outreach Working Group Potential Recommendations for the 2017 Report Updated 08/15/2017

Developing Broad Public and Private Partnerships:

- Continue to provide event information, as applicable, to the "Climate Change and Environmental Health in Maryland" calendar, maintained by DHMH
- Continue to formalize partnerships with the Commission's diverse sectors to support a broader network of information regarding communities vulnerable to climate change
- Incorporate members from the private sector and maintain strong membership in the public sector, to broaden the group's expertise and maintain a balanced perspective

Developing products for use in education, communication, and outreach on climate change:

- Utilize the five one pagers developed by The Hatcher Group
- Continue to build resources for outreach (e.g. Tool Box, Communicators List)
- Supports the re-design of the Commission website by the Hatcher group and MDE

Developing strategy and process for education, communication, and outreach on climate change:

- Keep the Commission and Working Groups up-to-date on best practices and emerging methods which support the education, communication and outreach goals of the Commission
- Continue to support efforts to implement a Climate Ambassadors program
- Continue to support efforts to recognize companies engaged in efforts to reduce their greenhouse gas emissions (e.g. Climate Champions)
- Support the development of a workgroup to move forward with highlighting climate change in MSDE Environmental Literacy efforts

• Recognize and support efforts to integrate climate change into training for preservice teachers (e.g. by Laurie Jenkins of Montgomery County)

Education, communication, and outreach related to the Commission's Annual Report:

- The Executive Summary portion of the 2017 Commission Report should be translated into Spanish
- Support an effort to raise general awareness of the Annual Report and of the work of the Commission, coordinated around the release of the 2017 Report in the November time frame
- 2018 Annual Report outreach and campaign efforts should begin in 2018 prior to its release

Addressing Any Disproportionate Impacts of Climate Change on Low-Income and Vulnerable Communities:

- Support DHMH's project to identify Maryland communities vulnerable to the health impacts of climate change and build resiliency through education, intervention and adaptation strategies designed to meet specific community needs
- Support the education, communication and outreach goals of the Commission by engaging in and supporting work to identify communities vulnerable to the impacts of climate change
- · Work to identify and collaborate with existing trusted messengers in vulnerable communities
- Support the MWG's effort to incorporate considerations for environmental justice and underserved communities in its recommendations for the State's 40 by 30 Plan

2018 Priorities:

- ECO could reach out to local Chambers of Commerce to devise ways for them to help disseminate information about climate change and appropriate actions; one benefit for them might be the possibility of businesses being recognized in the green business registry; we could also find out if they would be willing to have a "green business day" in their community, where businesses would show off what they are doing to save energy or reduce emissions.
- ECO should consider investigating opportunities to utilize the wide popularity of the Baltimore Ravens and Orioles to highlight energy efficiency and reducing emissions.
- ECO should produce a brief guide to accompany the 2018 Report (to be posted online in conjunction with or shortly after the report), which may possibly include (1) information on appropriate educational usage and application of the Report; (2) FAQs about the Report; (3) ways to keep up-to-date on the State's climate change efforts; and/or (4) a timeline of upcoming events related to the State's climate change efforts, including expected opportunities for public engagement. This guide may make use of the Hatcher one-pager formatting, if available and appropriate.

Mitigation Working Group Potential Recommendations for the 2017 Report Updated 08/10/2017

The 40 Percent by 2030 Plan:

The MWG acknowledges the importance of early collaboration on the 40 by 30 Plan, due at the end of 2018, and is continuing to seek input on any recommendations for additional programs or considerations, to be presented to the State in sufficient time for incorporation into the drafting process.

Enhanced GHG Emissions Inventory:

The State should continue to pursue the most locally relevant and complete methods for calculating its GHG Emissions Inventory, including but not limited to consideration of (1) an expanded accounting for out-of-state extraction and processing of fossil fuels based on in-state consumption; (2) utilizing site-specific estimates for sequestration in forest cover such as provided by LiDAR technology; and (3) advanced methods to generate a more accurate accounting of agricultural soil management practices generating sequestration benefits.

EJ and Underserved Communities:

- The MWG plans to continue to incorporate considerations for environmental justice and underserved communities (both urban and rural) in its recommendations for the 40 by 30 Plan, and encourages the State to also use this lens, particularly when examining the results of the Health Impacts Study to be performed.
- · To further inform this perspective, the MWG encourages MDE to work with DNR in developing a personal query within the Coastal Resiliency Tool that would allow for spatially explicit demographic analysis of those that may be most heavily impacted by sea-level rise.

Clean Energy Businesses and Manufacturing Jobs, and Fossil Fuel Dependant Workers:

- The MWG supports the local labor and procurement language within the recent Maryland Public Service Commission (PSC) agreement for offshore wind farms to be constructed in Ocean City, and encourages the General Assembly and PSC to consider the following items (or similar measures) within legislation and rules for future utility-scale renewable electricity generation projects: (1) a labor agreement that protects Maryland workers and benefits the local economy (e.g. prevailing wage); and (2) a procurement requirement to ensure that all purchases, when possible, are from within Maryland first (within the U.S. second) in order to stimulate the local economy and generate manufacturing and supply chain jobs in-state.
- The MWG supports the promotion of green-energy manufacturing in-state, which will directly provide sustainable, high quality jobs and generate additional jobs along the supply chain. This has the potential to not only put Maryland at the forefront of an emerging market but also reduce life-cycle emissions for renewable energy projects both in-state and in the surrounding area by decreasing miles traveled and ensuring best practices during manufacturing.
- The State could consider incorporating climate goals within its procurement policies, requiring minimum qualifications for bidders related to attributes which will help meet the 40% by 2030 emissions reduction goals.
- The manufacturing study due in 2020 under the 2016 GGRA should explore the costs and benefits (both economic and environmental) of: (1) potential modifications or enhancements to the current "buy local" provisions in the GGRA Plan, such as agreements in contracting for "Buy Maryland/Buy USA" and "Hire Maryland"; and (2) the development of an in-state supply chain to create lasting manufacturing and other jobs related to renewable infrastructure.
- If possible more analysis could be done related to jobs and the economy, especially regarding the following topics: (1) small modular reactors (nuclear) and the workforce which would be involved in this type of plant; (2) numbers for actual expected displacement of workers, and geographic location; (3) how the future climate may impact worker productivity and construction seasons; (4) considerations for the quality of jobs that may replace fossil fuel industry work (i.e. union benefits, wages, sustainability), rather than just the quantity of jobs created; and (5) the potential impacts of combined heat and power (CHP) on industrial operational costs and job retention.

Healthy Soils and Carbon Sequestration:

- Additional analysis to determine (1) what practices are already being undertaken to meet Bay goals that can be amended to have additional climate benefits; and (2) what other best management practices are already being undertaken by Maryland farmers that have carbon sequestration benefits, and how they might get 'credit' for these practices.
- The MWG supports incentivizing Best Management Practices which also have climate benefits, including but not limited to no till farming, common-sense pasture management, and diversified grasses and grasses/cover crops with

deeper roots. In addition, these parties should consider climate benefits when allocating funding for the Cover Crop Program and other similar programs which improve soil health and increase carbon sequestration.

• The MWG and ECO Working Groups should work within their respective roles and charges to support the efforts of education campaigns similar to those run by the Healthy Soil Consortium, informing Maryland farmers regarding the benefits of improved soil health to both agricultural yield and climate goals, as well as programs and incentives they may access to support adoption of such practices.

Innovative Financing:

- The MWG sub-group lead by MEA should continue discussion on actionable recommendations for changes to legislation that would help make PACE loans more attractive to lenders and banks, and increase usage in Maryland.
- The MWG sub-group lead by MEA should continue to work with MACo and other appropriate parties to move forward with a decision regarding whether the counties wish to make use of the available QECBs, or if they will waive their allocations to be aggregated and distributed at the state level (in a manner to be discussed by the sub-group), to increase utilization of these funds.

Transportation:

Pending September's meeting

Scientific and Technical Working Group Updates and Expectations for Report Recommendations MCCC Steering Committee, August 24, 2017

September 13 STWG Meeting

- · Maryland Energy Innovation Institute
- · Beyond 2030: energy alternatives to approach carbon neutrality
- · Draft contributions to the MCCC Annual Report
- · STWG assessment of quantifying & reducing net GHG emissions from forest, fields and wetlands
- · STWG assessment of emissions from and climate change impacts on Maryland agriculture

STWG Contributions to Annual Report

- 1. Implications for science of new federal administration positions
- 1.1. Human responsibility for observed climate change
- 1.2. Retreat from public communication about climate change
- 1.3. National Climate Assessment
- 1.4. Defunding relevant science and technology
- 2. Growing evidence of consequential changes in global climate
- 2.1. Record breaking warmth continues
- 2.2. Attribution to increase in greenhouse gas concentrations
- 2.3. Early 21st century acceleration in sea-level rise
- 2.4. Destabilization and loss of mass of polar ice sheets and shelves
- 3. Urgency in rapid reductions of emissions
- 3.1. Limiting warming to 2°C less likely, C0₂ removal required this century
- 3.2. Rapid advances in renewable energy make transitions more cost effective
- 3.3. Maryland's Climate Action Plan should be develop in the context of achieving carbon neutrality around mid-century

- 4. Maryland's greenhouse gas emissions inventories
- 4.1. Measurements and estimations for energy production, heating, transportation and industry reliable for the purpose
- 4.2. Projections of future emissions less reliable because of assumptions, multiple scenarios prudent
- 4.3. Net emissions from forests, fields and wetlands more poorly quantified, yet import with regard to total emissions and sequestration options
- 5. Priorities for the STWG
- 5.1. Conduct assessments of landscape emissions and agriculture
- 5.2. Improve routine tracking and reporting of GHG emissions