MARYLAND COMMISSION on **CLIMATE CHANGE**

Greenhouse Gas Mitigation Working Group (MWG)

Buildings Ad Hoc Group 2021 Work Plan

Updated 5/17/2021

Purpose and Overview

The Maryland Commission on Climate Change (MCCC) is charged with advising the governor and the Maryland General Assembly on ways to mitigate the causes of, prepare for, and adapt to the consequences of climate change and maintaining and strengthening the state's existing Greenhouse Gas Reduction Plan (GHG Plan). One of the working groups is the Greenhouse Gas Mitigation Working Group (MWG), which in 2020 created an Ad Hoc Group on buildings for the purpose of evaluating building decarbonization options. The purpose of the MWG is to recommend regulatory, market-based and voluntary programs to reduce greenhouse gas (GHG) emissions. These strategies are to be designed in support of a strong economy and job creation in Maryland.

The <u>2020 Mitigation Working Group Work Plan</u> committed to analyzing targets, timelines, and mechanisms for decreasing emissions from residential and commercial buildings

- Analyze and determine specific targets and timelines for decreasing emissions from residential and commercial buildings (or, information needed to determine such targets and timelines), including: annual building retrofit targets; specific energy efficiency targets; a timeline for requiring all new buildings be carbon neutral; and a timeline for replacing fossil-fuel heating systems with electric heating or other low-carbon systems.
- Analyze and identify specific mechanisms for decreasing emissions from residential and commercial buildings (or, information needed to determine appropriate mechanisms), including: expanding programs that support upgraded electric heating and cooling system; new programs to encourage combined heat and power; incentives and other strategies that support the replacement of fossilfuel heating with electrical systems.



The <u>2021 Mitigation Working Group Work Plan</u> builds on the work from 2020 and commits to the creation of a buildings transition plan by the end of 2021.

• Maryland should produce an Energy Transition Plan by the end of 2021. The State should develop an Energy Transition Plan to coordinate long-term activities and ensure that the overall buildings sector strategy achieves equitable benefits for disadvantaged communities, anticipates and prevents escalating distribution system costs for shrinking pools of natural gas customers, and takes advantage of opportunities for economic growth, including for the agricultural community from renewable fuel development and EmPOWER market optimization. In 2021, the MWG should coordinate the necessary research and planning process. As part of the Energy Transition Plan, MDE should commission a study of the market potential and consumer economics of renewable thermal / beneficial electrification examining incremental first costs, payback periods, appropriate incentive levels and source GHG savings associated with oil, propane, electric and natural gas options. The MWG should consult with PSC on a methodology or series of alternative methods to evaluate source emissions and electric loads associated with building electrification.

2021 Priorities

In 2021, the Ad Hoc Group will bring expertise and broad perspectives to the development of the Building Energy Transition Plan and will help coordinate the research and analysis performed on building energy systems in Maryland and potential building decarbonization pathways. The Ad Hoc Group will provide information and options to the Mitigation Working Group to inform its deliberations on what policy options to include in the plan.

Process and Membership

The Ad Hoc Group will be open to any interested members of the public as well as members of the MCCC and Mitigation Work Group. The Ad Hoc Group will represent a diverse set of perspectives, including from businesses, nonprofits, academia, state agencies, and local government. The Work Group will meet monthly and all applicable meeting information will be posted on the Mitigation Work Group website. The Ad Hoc Group will provide progress updates and deliverables to the Mitigation Work Group's building-focused meetings on July 20, September 21, and December 14. The Ad Hoc Group's work will be broken into three phases to correspond with those three meetings, described below.

Timeline

Phase 1: Scope Building Energy Transition Plan, Perform Research and Analysis

Goal: Will discuss scoping, process, research, and analysis priorities within the building energy transition plan.

~~~February 16 MWG Meeting: Overview and Discussion of 2020 Buildings Work and 2021 Priorities~~~

- March 18 Buildings Ad Hoc Group Meeting
  - This introductory meeting included a brief discussion on the goals of the workgroup, an overview of the work plan, introductions from participants, and a discussion of potential issues of discussion for the year.
- April 28 Buildings Ad Hoc Group Meeting
  - This meeting discusses a collection of research items provided by participants. Additionally, participants were invited to present on topics of their choice. Presentations included cost and other implications of electrification policies on residential construction, the economics of electrifying buildings, and net-zero potential of wastewater thermal energy.
- May 27- Buildings Ad Hoc Group Meeting
  - The ad-hoc group will shape the buildings decarbonization study being performed by E3 through a facilitated workshop.
- July 13th Buildings Ad Hoc Group Meeting
  - The Buildings Group will receive preliminary results from E3's study, and will discuss and provide feedback to E3 on interpretations and conclusions for the broader MWG meeting.

~~~July 20 MWG Meeting: Mid-year Check-in and Research/Analysis presentation~~~

Phase 2: Develop Recommendations for the Mitigation Work Group

Goal: Will discuss potential recommendations to the MWG for policies and programs to include in the draft building energy transition plan, informed by the results of the research and analysis in Phase 1.

- August 3 Buildings Ad Hoc Group Meeting
 - This meeting will begin to gather policy recommendations from participants and interpret results from the building analysis made by the contractor.
- August 24 Buildings Ad Hoc Group Meeting
 - Discussion of policy recommendations and options proposed by participants.
- September 7 Buildings Ad Hoc Group Meeting
 - Discussion of final recommendations and options to propose to MWG.

~~~September 21 MWG Meeting: Potential Recommendations / Options for Buildings Decarbonization~~~

## **Phase 3: Finalize Recommendations for the Mitigation Work Group**

Goal: Will finalize the draft building energy transition plan with policy recommendations after receiving feedback from interested stakeholders and the Mitigation Work Group on Phase 2.

- September 28 Buildings Ad Hoc Group Meeting
  - Input received from Mitigation Work Group will influence Energy Transition Plan
- October 26 Buildings Ad Hoc Group Meeting
  - Final Recommendations and Plan Development
- November 18 Buildings Ad Hoc Group Meeting
  - Final Recommendations and Plan Development
- December 7 Buildings Ad Hoc Group Meeting
  - Final Recommendations and Plan Development

~~~December 14th MWG Meeting: Final Building Energy Transition Plan~~~

