

Submitted MWG Recommendations 2020

The following recommendations have been submitted for discussion at the 9/24 MWG meeting, with additional discussion and approval at the 10/6 MWG meeting. This compilation organizes them by topic; original submissions include important additional information and context and have been distributed for the 9/24 meeting.

GHG Reduction Goals in the GGRA

- MCCC: Consider 50 by 30 & net zero by 2045
- League Conservation Voters (LCV)/The Nature Conservancy (TNC)/Natural Resources Defense Council (NRDC): at least 50 by 30 & net-zero no later than 2045
- The Sierra Club (SC): 60 by 30 & net zero by 2045

Other provisions in the GGRA:

- Economic impact: no changes proposed.
- LCV/TNC/NRDC: Timeline/Planning Process: “Adopt and/or set in place a firm process and timeline for developing mitigation policies needed to achieve these targets”
- SC: MCCC should recommend that the General Assembly require climate change actions by all state agencies.
- Commercial Real Estate Development Association (NAIOP): Adopt World Resources Institute (WRI) accounting and reporting standard for greenhouse gas reduction goals.
- NAIOP: Create an open source on-line access point for the E3 Maryland Pathways model like the Chesapeake Assessment Scenario Tool (CAST) that provides model inputs and allows the public to do scenario planning.

Environmental/Climate Justice

LCV/TNC/NRDC & SC: MDE should work with the public, other agencies, and the General Assembly to identify environmental and climate justice communities and the threats those individual communities are facing.

- To supplement that practice, complete a thorough community environmental equity analysis regarding the impact of its suite of climate action policies, programs and proposals on communities of color, low-income communities, communities historically overburdened by pollution, and communities underserved by our historic energy and transportation systems.

Labor Network for Sustainability:

- Increased hiring from disadvantaged communities and populations (including returning citizens); pre-apprenticeship/apprenticeship training programs
- MCCC working with other State agencies should complete a study on State manufacturing
- Study policy solutions like California’s Buy Clean California Act (AB262)
- Study and report on long-term job impacts on industries and communities as energy transition policies are implemented

- conduct an equity analysis study
- Study the results of privatization and public-private partnerships on cost overruns, compliance and climate impacts

Transportation

- LCV/TNC/NRDC & SC: Maryland should lead in the interstate (TCI) discussions to develop, finalize, adopt, and implement an ambitious, equitable, and sustainable regional transportation cap-and-invest program that creates a new source of funding for clean transportation solutions that reduce greenhouse gas emissions; enhance public health protections, particularly for fence-line and frontline environmental justice communities; and rebuild our economy by creating new clean energy and clean transportation jobs. TCI program should begin as soon as possible, ideally by 2022
- LCV/TNC/NRDC & SC: Support Transit Safety & Investment Act, Electric Bus Transition Act
- LCV/TNC/NRDC & SC: Federal response or recovery aid for public transportation improves worker
- LCV/TNC/NRDC: Complete study on barriers to purchase of zero emissions vehicles and identify potential mechanisms to reduce the barriers.
- LCV/TNC/NRDC: Propose study on impact of rideshare companies/apps on greenhouse gas emissions
- SC: Recommend the state reverse MTA's harmful decisions to cut bus service by 20%, reduce MARC, commuter local bus, and paratransit service, and cut the MTA's already strained six year capital budget for critical safety needs by \$150 million.
- MDA/DNR/LCV/TNC/NRDC: Strongest vehicle emission standards, require charging infrastructure in multi-family dwellings, incentives for purchase of zero emissions vehicles
- SC: No later than 2024 all bus replacements be for zero-emissions buses.
- SC: Recommend the state ensure that the Purple Line Light Rail project gets built without further delay and build the East-West Baltimore Red Line.
- SC: Recommend the state withdraw the Maryland Department of Transportation's decision to widen I-495 and I-270 with toll lanes.

The Power/Electricity Sector

- LCV/TNC/NRDC: PSC to participate in a detailed study around the current function of our grid
- LCV/TNC/NRDC: Require the Public Service Commission to complete a cost-benefit analysis of energy storage that incorporates energy and non-energy benefits as well as avoided costs from storage deployment.
- LCV/TNC/NRDC: Develop a megawatt or megawatt hour storage mandate based on peak shaving/shifting and integration of renewable sources. Other states have used 5% of summer peak energy to develop their goals.
- LCV/TNC/NRDC: Develop a three-pronged incentive approach to battery storage
- LCV/TNC/NRDC & SC: Reintroduce HB 531 (2019) that requires the Public Service Commission to take a more active role in energy planning and elevate climate change as a component of all decision making.
- LCV/TNC/NRDC: Maryland should work with the other RGGI states to ensure that RGGI's third regional program review begins as soon as possible—ideally before the end of 2020, and



no later than January 2021. Maryland should also champion additional program improvements, including a more ambitious cap, as part of this next program review to further reduce greenhouse gas emissions; enhance public health protections, particularly for fence-line and frontline environmental justice communities; and rebuild our economy by creating new clean energy jobs.

- LCV/TNC/NRDC: Double the net metering cap to 3,000 MW to accommodate continued growth of the Community Solar Program and roof top solar projects.
- LCV/TNC/NRDC & SC: The General Assembly should establish a clear, enforceable schedule to responsibly manage Maryland's transition off its remaining coal-fired power plants by no later than 2030, including the creation of a workforce and community transition plan to support laid-off workers and impacted communities
- LCV/TNC/NRDC & SC: The General Assembly should set forth a 100% clean energy by 2040 plan that is made up of clean, renewable electricity from wind, solar, and storage technologies, and focused on providing the benefits of clean energy to overburdened and underserved communities first.
- LCV/TNC/NRDC & SC: The Commission should recommend the Governor and state agencies halt the construction or permitting of any gas-fired power plants in the state that are not already online and fully operational
- MDA/DNR: Increased storage capacity and grid improvements to facilitate the use and dependability of renewably sourced energy generation.
- MDA/DNR: Use waste from managed forests and the lumber industry in Maryland for energy. Need to ensure the demand for biomass would not contribute to unsustainable forest management practices that would deplete forest carbon stocks over the long run.
- MDA/DNR: Animal waste to energy projects reduce on-farm waste, produce valuable energy supplies for the farm and grid (qualify as Tier 1 renewables), and create marketable nutrient by-products that can supply organic matter and micronutrient applications for crop fields.

Buildings

- Buildings subgroup report (not consensus items):
 - 1: Enable fuel-switching to let Marylanders choose lowest cost energy systems
 - 2: Let EmPOWER facilitate beneficial electrification
 - 3 [A]: Set a Target for 50% of space heater sales to be Heat Pumps by 2025
 - 3 [B]: Establish Residential heat pump retrofit goals
 - 4 [A]: Require All-Electric new buildings by 2025 with cost controls
 - 4 [B]: Require All-Electric new homes by 2025
 - 5: Incentivize Net-Zero energy all-electric new buildings
 - 6: Produce an Energy Transition Plan by the end of 2021
 - 7: Prioritize an equitable level of benefits for all Marylanders
 - 8: Improve interagency coordination for wholistic building retrofits
- NAIOP: 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.
- NAIOP: Consult with PSC on a methodology or series of alternative methods to evaluate source emissions and electric loads associated with building electrification.



- Labor Network for Sustainability: Require state agencies to take into account carbon intensity when purchasing structural materials for public infrastructure projects

NWL/Carbon sequestration

- LCV/TNC/NRDC: Develop a sequestration mandate, based on the technical study completed by the Harry R Hughes Center for Agro-Ecology, with approved techniques to increase sequestration. Focus on why our sequestration has remained consistent over the course of the Greenhouse Gas Reduction Plan. Potentially to be discussed in conjunction with the Adaptation Working Group.
- MDA/DNR: Provide incentives to Maryland's farmers and forest landowners to realize the full potential of climate friendly soil and forest management practices.
- MDA/DNR: Identify permanent, dedicated sources of funding for land-based sequestration to recognize Maryland's farmers for their leadership role in advancing climate solutions, provide supplemental income to the agricultural community, and promote rural economic development.
- MDA/DNR: Develop and implement programs to protect soils and build carbon stocks and attract private investment through payments for carbon credits and other ecosystem services as public awareness grows and markets evolve.

Short-lived Climate Pollutants (SLCP)

- LCV/TNC/NRDC: Include the 100- and 20-year global warming potential (GWP) in accounting and reporting for each section
- LCV/TNC/NRDC & SC: The Commission should recommend the MDE update its reporting and benchmarking emissions inventories and the General Assembly update climate action laws to evaluate the warming potential of methane pollution based on modern science, including an infrastructure leakage rate of at least 3 percent and the 20-year warming potential associated with methane emissions.

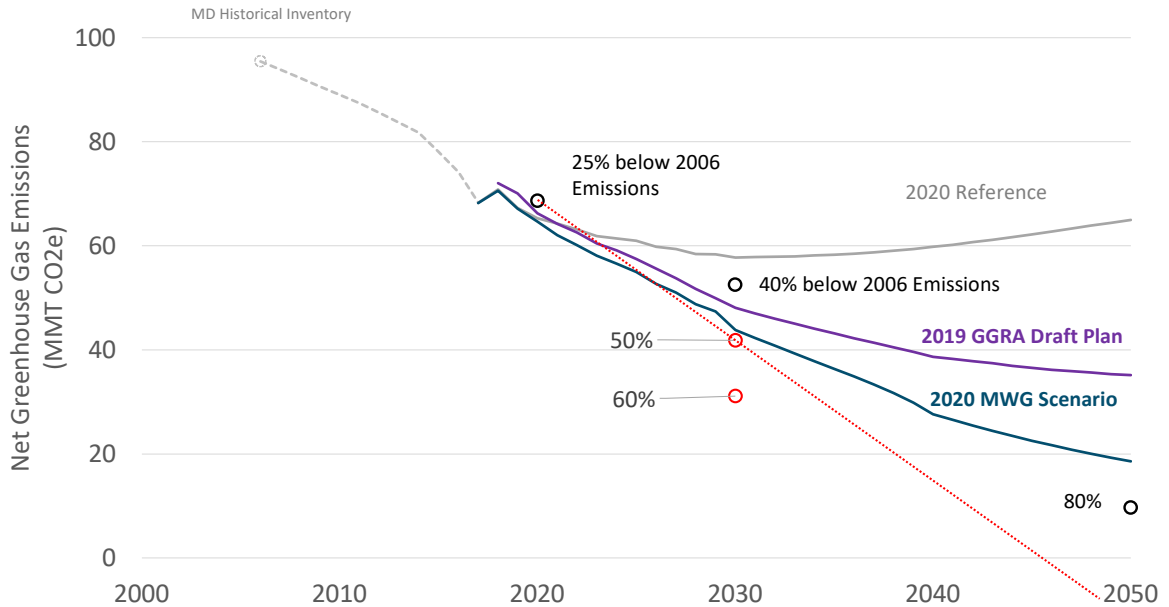
Process

Commercial Real Estate Development Association (NAIOP)

- Create a sequencing plan that prioritizes the order of policy implementation.
- Create a cloud-based literature library related to issues on the MWG workplan.
- Establish MWG policy discouraging assigning issues to subgroups and utilizing third party facilitators when subgroups are formed.



GHG Goals



This graph shows net emissions (gross emissions minus sequestration).

GGRA reductions goals are percentages of gross emissions so they won't visually correspond to percentages of the y-axis on this graph.

Goals in current law:

2020 and 2030 Goals

- 2-1204. The State shall reduce statewide greenhouse gas emissions by 25% from 2006 levels by 2020.
- 2-1204.1. The State shall reduce statewide greenhouse gas emissions by 40% from 2006 levels by 2030.

2050 Goal

- 2-1205 (c)(3) The plans shall be developed in recognition of the finding by the Intergovernmental Panel on Climate Change that developed countries will need to reduce greenhouse gas emissions by between 80% and 95% from 1990 levels by 2050.

