***Updated Draft for Consideration***

***Science and Technical Workgroup 2024 Recommendations***

***NOTE: The STWG recognizes that these recommendations should be assigned to an appropriate State agency, general assembly, or other governmental entity. However, the MCCC Staff are best equipped to make those additions to these recommendations as we are not well versed in current government authority(ies).***

1. 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. Burning biomass can generate substantial amounts of pollutants that have adverse health effects. Harvesting live forests for woody biomass burning is NOT recommended as a tier one energy source under Maryland’s Renewable Portfolio Standard.
2. Hydrogen: Pilot large-scale carbon-negative (fully inclusive of the supply chain) technology that involves natural gas/methane decomposition to hydrogen and carbon-based commodity chemicals or sequestered carbon. Consider creating tax, labor and/or financial incentives.
3. Methane: Reduce nutrient inputs to Chesapeake Bay to avoid methane production and investigate wetland restoration methods that do not lead to increased methane production. Develop mechanisms to incentivize composting and anaerobic digestors targeted at dairy farms and industrial scale wood waste sites.
4. Education: Create public education programs including outreach to the Maryland state delegation, energy producers and environmental groups to support decarbonization technologies. *(This recommendation can be removed from STWG’s list if the essense of it is found within other Work Group, such as ECO, recommendations.)*
5. Health: Update the climate and health profile report to identify specific Maryland communities that are bearing disproportionate health burden tied to climate change. Develop location specific public health early warnings to help communities adapt to the health threats of climate change.