

Policy Recommendations for the MCCC's Consideration for the 2024 Annual Report

The following recommendations were approved by the Maryland Commission on Climate Change's (MCCC's) working groups or submitted by individual Commission members. Proposed recommendations that have yet to be voted on by the Commission are at the beginning of this document, followed by the recommendations already approved by the MCCC for inclusion in the annual report, due December 15, 2024.

Items in this document should not be construed as final recommendations by the MCCC.

Proposed Recommendations for Consent Calendar

The following recommendations were identified by the MCCC Steering Committee for inclusion in a consent calendar for potential approval by Commissioners with a single vote; JTWG 1, EIRWG 1 and 4, MWG 2 and 3.

Just Transition Working Group (JTWG)

1. Recommendation 1:

The MCCC should support Just Transition Principles in its ongoing work of supporting climate change action:

- · Quality clean job creation
- Occupational training and education, including accessible transportation
- Promoting investment in clean jobs and impacted communities
- · Identifying and eliminating structural barriers to employment
- Hiring and retaining underrepresented workers
- Collaborating with stakeholders, especially emphasizing workers
- Ensuring fossil fuel workers are supported in transitioning into green energy sectors

Energy Industry Revitalization Working Group (EIRWG)

1. The State should establish a dedicated liaison/clearinghouse to help small businesses navigate available resources, funding and financing opportunities for the clean energy transition.

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JTWG 2 JTWG 3 JTWG 4

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STWG 5

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Commented [4]: Chair: Andrew Place; andrew.place@maryland.gov Staff Facilitator: Jared Williams; @jared.williams@maryland.gov An example approach is in the form of a Large Language Model (LLM) that serves as a help desk to make access and navigation as easy as possible for small business owners.

4. The General Assembly with the state should develop and implement comprehensive workforce transition plan and associated programs.

The EIRWG submits this recommendation to emphasize the importance of this topic and as direction to the Maryland Commission on Climate Change (MCCC) and the General Assembly. The EIRWG will also continue to expand on the recommendation in a white paper to be presented to the MCCC in January 2025.

The General Assembly should support the State, including the Maryland Department of Labor, in the creation and implementation of a workforce transition plan to address the growing and changing labor needs of the energy sector. Implement programs to train, retrain and re-skill workers, prioritizing workers affected by facility closures in nonrenewable energy sectors. This should include partnerships with community colleges and vocational schools to offer relevant courses and certifications in renewable energy technologies, as well as state and local government partnerships to offer job placement services and financial support during the transition. Workers in nonrenewable energy industries are likely to face job losses. Retraining and job placement services will facilitate their transition, revitalize local economies, and build Maryland's clean energy economy.

Mitigation Working Group (MWG)

2. Transition from One-Way Air Conditioners to Two-Way Heat Pumps

2A. Require HVAC Contractors to Provide Heat Pump Estimates for AC Replacement

The federal Inflation Reduction Act provides incentives for Marylanders to replace on-way air conditioners with heat pumps. Other state policies under consideration – such as an economy-wide cap-and-invest program – would expand funding for such incentives. The General Assembly should accelerate the transition from one-way air conditioners (ACs) to two-way heat pumps (HPs) by ensuring that heating and cooling contractors have adequate education and training concerning HPs – and that they provide accurate information about HPs to their customers. This is an important emissions reduction and consumer production measure.

Emissions Reductions - HPs are more efficient at cooling than ACs and more efficient at heating than fuel-burning systems, resulting in emissions reductions throughout the year. Getting more HPs installed at the point of AC replacement would help the state accelerate emissions reductions.

Consumer Protection - HPs replace ACs, so when consumers install new ACs and then install HPs when their boilers or furnaces fail, the new ACs are replaced and the residual value is lost. MDE's forthcoming Zero-Emission Heating Equipment Standards (ZEHES) will require the

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Commented [6]: Co-Chairs: Kim Koble; kcoble@mdlcv.org and Michael Powell; mpowell@gfrlaw.com Staff Facilitator: Mark Stewart; mark.stewart1@maryland.gov installation of zero-emission equipment like HPs when fuel-burning heating equipment like boilers and furnaces need to be replaced. In the absence of measures to promote or require HPs as replacements for AC, consumers who have recently paid to install new ACs could find themselves needing to pay to replace their new ACs with HPs as soon as their heating systems fail. Legislation could prevent many consumers from double paying for systems that provide cooling.

The General Assembly should require heating and cooling contractors to provide their customers with cost estimates for heat pump installation and information about State and federal heat pump incentives when customers request cost estimates for air conditioner installation. The cost estimate should include information comparing the installation and projected lifetime operating cost of a heat pump with the same installation and projected lifetime operating costs of an air conditioner and replacement heating equipment. The General Assembly should require the Department of Labor, in consultation with the Maryland Energy Administration, to evaluate the efficacy of this requirement. The evaluation can then be used to determine whether the State should adjust its incentive programs or take other steps to accelerate heat pump adoption.

2B. Focus Incentives on Heat Pumps rather than AC and Fuel-Burning Heating Systems

The General Assembly should direct the Public Service Commission to focus publicly funded incentives on driving customer adoption of efficient heat pump equipment rather than and as a replacement to traditional air conditioning and space heating equipment. Heat pumps can offer cost savings in situations involving the replacement of both air conditioning and furnace equipment. More significant incentives may be necessary to catalyze heat pump adoption at a time when customers are only considering replacement of one traditional piece of equipment. Incentives for traditional air conditioning and furnace equipment should be phased out of the EmPOWER Maryland program and other publicly funded incentive programs. This will allow heat pump incentives to expand without necessarily increasing overall program costs or ratepayer impact. Incrementally higher incentives should be offered for heat pumps meeting certain efficiency criteria that will better support peak electrical demand reduction.

3. Shift Funding to Limited-Income Electrification Programs

Maryland's RGGI proceeds have increased in recent years, rising from \$140 million in FY23 to \$214 million in FY24, a \$74 million increase in one year. Meanwhile, the funding provided to the Department of Housing and Community Development (DHCD) is not sufficient to satisfy the demand for new heating and cooling systems from limited-income families. As a result, many families struggle to maintain safe living conditions in the cold of the winter and heat of the summer. Maryland has the opportunity to help more limited-income families replace old AC and heating systems with new heat pumps, which would reduce emissions, lower energy costs, and improve the quality of life for some of the most vulnerable members of our community.

The General Assembly should add electrification as an explicitly allowed use of RGGI

proceeds and direct MEA to collaborate with DHCD to replace old heating and cooling systems with heat pumps and replace old water heaters with heat pump water heaters as soon as possible.

Proposed Recommendations

The MCCC recommendations should be guided by Maryland's Sustainable Growth Policy to ensure achievement of climate change mitigation, sustainable growth, resilience, and other land-based community goals in Maryland for the 1 million more Marylanders arriving between 2020 and 20501

Mitigation Working Group (MWG)

1. Maryland Must Adopt a Climate Investment Strategy

Maryland is not on track to meet its legal requirement to reduce greenhouse gas emissions by 60% by 2031 and has little chance of meeting this goal without a permanent source of revenue targeted to this goal. Therefore, the state must immediately implement an equitable strategy to raise revenue for climate programs and investments that decrease emissions, reduce energy costs for businesses and families, and promote equity.

Recommendation: The General Assembly should pass legislation in 2025 to authorize the development of at least three climate investment mechanisms.

1A. Authorize a Cap-and-Invest Program

Maryland should follow the lead of California, New York, and Washington in developing an economy-wide cap-and-invest program to build on Maryland's successful cap-and-invest program for fossil fuel power plants. As described in Maryland's Climate Pathway Report and Maryland's Climate Pollution Reduction Plan, a cap-and-invest or a similar policy that puts a regulatory cap on emissions from major polluters and invests approximately \$1 billion annually in priority decarbonization projects can put the state on a pathway to achieve its climate goals. Maryland's Climate Pollution Reduction Plan shows that without additional policies, the state will fall short of its emissions reduction requirements by approximately 3.5 million tons of carbon dioxide equivalent (MMTCO2e) in 2031 and 15.6 MMTCO2e in 2045. The Plan further shows that Maryland can eliminate this shortfall and keep pace with other climate-leading states by adopting a cap-and-invest policy.

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¹ Under Section 9-1401 of the State Government Article, the "Sustainable Growth Policy" means the State Economic Growth, Resource Protection, and Planning Policy set forth in Section 5–7A–01 of the State Finance and Procurement Article. As Chair of the Maryland Sustainable Growth Subcabinet, MDP will continue to work with other state agency Secretaries in the near-term to update Maryland's Sustainable Growth Policy, which focuses on guiding land use-related and growth-related policies, all of which are critical to our success with climate change mitigation and adaptation.

The General Assembly should authorize MDE to implement an economy-wide cap-and-invest program modeled after and working alongside Maryland's successful cap-and-invest program for fossil fuel power plants. For over a decade, fossil fuel power plants in Maryland and other states participating in the Regional Greenhouse Gas Initiative (RGGI) have performed under a declining emissions cap and sold emissions allowances at auctions. To date, Maryland has received approximately \$1.3 billion in proceeds from the sale of allowances, including \$214 million in FY24 alone, while power plant emissions plummeted due to the program's success. Legislation should require MDE to expand this successful model to cover additional major sources of greenhouse gas emissions.

The General Assembly should direct a sufficient portion of the revenues toward rebates or carbon dividends for low- and moderate-income households, sufficient to eliminate net cost increases to those households, with the remaining revenues from the program going toward the following strategic investments while applying a Justice40 approach across these investments:

- Home Energy Efficiency and Electrification (20%) Providing up to \$14,000 per household to help low-, moderate-, and middle-income families replace fuel-burning equipment with zero-emission electric alternatives such as heat pumps, heat pump water heaters, and induction cooktops.
- Electric Vehicles and Transit (20%) Providing up to \$7,500 per household to help low-, moderate-, and middle-income families replace fuel-burning vehicles with zeroemission electric vehicles (EVs); and increasing access to mass transit.
- Commercial, Multifamily, and Institutional Buildings (20%) Providing grants and subsidized loans to reduce the cost of energy efficiency and electrification projects in commercial, multifamily, institutional, and other types of buildings including those covered by the Building Energy Performance Standards.
- Infrastructure (20%) Providing grants and subsidized loans for projects that reduce GHG emissions from industrial facilities, landfills, and wastewater treatment plants, and constructing new infrastructure including EV charging stations, transit lines, bike lanes, etc.
- Natural and Working Lands (10%) Supporting tree plantings, forest management, wetland management, soil management, and other projects that store carbon and help the state achieve its net-zero emissions goals.
- Program Administration (9%) Funding for MDE, MEA, MDOT, and other relevant agencies to cover the costs of administering the program.
- Public Awareness Campaign (1%) Funding outreach, education, and advertising to promote the availability of clean energy incentives to consumers.

MDE should use its existing authority to adopt a reporting rule in 2025 to require major polluters to begin reporting data in 2026. Data would be used to establish the baseline performance of major polluters, as described in Regulatory Options for an Enforceable Emissions Cap-and-Invest Program in Maryland and Cap-and-Invest for Maryland: A Primer. Legislation in 2025 should require MDE to adopt regulations in 2026 to begin enforcing a regulatory cap on emissions in 2027. Proceeds from the program would be available for strategic climate investments beginning no later than 2028.

1B. Authorize a Fossil Fuel Transport Fee and Mitigation Fund

The General Assembly should pass a revised version of the Fossil Fuel Transport Fee and Mitigation Fund, introduced as HB 1008 in 2024. As revised, this legislation The bill would allow the state to collect a small fee from major companies that transport coal and natural gas through Maryland, similar to a small fee currently paid by carriers of petroleum products. The fee would be 60 cents per million British thermal units. The main benefit of the bill is that most of the revenue would be paid by the companies around the world that import the coal and natural gas that passes through and isare exported from fuel terminals in Maryland. Marylanders get all of the benefits of the fee and pay little of the financial cost.

An average Maryland household that still uses natural gas for heating would see an average monthly bill impact of around \$2, assuming all costs are passed on to consumers. In exchange for a \$2 bill impact, Marylanders would benefit from approximately \$300 million annually for investments that improve health outcomes and help Marylanders transition from fossil fuels to clean energy. The legislation will also enable the Maryland Clean Energy Center to leverage a portion of these funds to issue low-interest bonds for additional near-term climate investments.

The bill wehould make the fee effective starting July 1, 2025, and require revenue collected in FY26 to be programmed starting in FY27. Revenue would go to the Fossil Fuel Mitigation Fund and be directed to the following investments with a Justice40 application to these investments:

- Home Energy Efficiency and Electrification (23%)
- Commercial, Multifamily, and Institutional Buildings (23%)
- Electric Vehicles, Charging Equipment, and Electric School Buses (22%)
- Mass Transit (20%)
- Asthma Treatment for Communities Affected by Coal Dust (2%)
- Program Administration (9%)
- Public Awareness Campaign (1%)

1C. Pass the RENEW Act

The General Assembly should pass the Responding to Emergency Needs From Extreme Weather (RENEW) Act, introduced as HB 1438/SB 958 in 2024. The RENEW Act would require

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the 40 largest international fossil fuel companies who have emitted over 1 billion tons of greenhouse gasses between the years March 21, 1994- December 31, 2023 2000 and 2020, to pay a one-time assessment fee proportional to their emissions during this time period. for their historical emissions. The legislation also establishes the Climate Change Mitigation and Adaptation Fund which will be used to distribute collected payments for projects throughout Maryland. Qualified expenditures fund various adaptation projects throughout the state including reducing health disparities, recovering from extreme weather events, relocating wastewater treatment plants that are vulnerable to flooding, and installing heat pumps in public schools. The full list of qualified expenditures is listed in the bill and expenditures must follow Justice 40 principles. to pay a one time fee for their historical emissions.

Because the law would likely be challenged in court by the fossil fuel industry, the state should not expect to receive revenue from this action in time to implement emissions reduction programs before 2031. The state should instead plan to use future revenues from this action to pay for the unknown but surely enormous cost of adapting and becoming more resilient to the impacts of climate change.

4. The State Should Take Action to Increase the Pace of Solar Power Development

- A. The General Assembly should help to accelerate the development of large solar projects through reducing barriers, standardizing conditions, and improving permitting processes to aid the solar market. Standardizing conditions for setbacks, decommissioning, visual buffers, and streamlining permitting processes will provide more market certainty for solar project developers. Projects near existing transmission infrastructure should benefit from consistent and efficient approval processes.
- B. Maryland DNR in consultation with MDE, MDP, MEA and MDA, and counties, should develop plans, maps and a statewide online mapping platform displaying areas preferential for utility-scale solar development, considering existing natural resources, conserved lands, agriculturally important areas and prime agricultural soils, historic resources, brown/gray fields, military assets, and transmission lines location. These plans may be useful in the design of future incentive programs and issuance of development approvals through the CPCN process.
- C. The legislature should act to support the added cost of developing low- and moderate-income community solar projects, especially those in preferred locations (brownfields, rooftops, parking lots, etc.) through improved financing incentives.
- D. The General Assembly should provide additional incentives for solar development on "preferred sites" including residential and commercial rooftops, parking lots, abandoned sites, grayfields, and brownfields.
 - i) Substantial (e.g., 25% of project cost) refundable state tax credit for new solar arrays on these sites.

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- ii) Increasing the cost of Solar Alternate Capacity Payments beyond the low and declining levels set by 2021 SB65, to increase SREC value. There are many examples of "upfront" incentives from other states that could be drawn on.
- E. MEA should work toward developing a program/policy in coordination with the PSC and PJM to link interconnection service agreement timelines and incentives to ensure that developers can access funding in a timely manner.
- F. The State should incorporate project "readiness" or maturity into solar project siting, and permitting (similar to what PJM is doing with "first-ready, first-serve").
- G. The Building Codes Administration should adopt solar-related provisions in the 2024 International Energy Conservation Code.
- H. The General Assembly should consider revisions to the RPS to encourage more solar through SRECs and more ambitious carveouts. These measures should seek to stabilize SREC prices relative to other PJM states. SRECs should incentivize projects on developed and brownfield sites and limit use for projects on sensitive lands.
- New construction both residential and commercial codes should be updated to require electrical wiring and panels that are both solar- and EV-ready.
- J. Any changes to the process for developing solar energy projects should result in faster and more efficient issuance of permits.

Science and Technical Working Group (STWG)

Note from STWG: 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 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:

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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.

Energy Industry Revitalization Working Group (EIRWG)

2. The State should expand existing electric vehicle (EV) infrastructure programs within the Maryland energy administration (MEA) with a designated focus on small businesses. The program would draw in existing funding and incentives for small businesses to install EV charging infrastructure.

With the influx of investment from the Bipartisan Infrastructure Law, Maryland's National Electric Vehicle Infrastructure (NEVI) Program is changing the State's landscape of EV charging infrastructure. The new investments present an opportunity for small businesses to share in the benefits of EV charging infrastructure. Studies have shown that charging stations can boost annual spending at nearby businesses, bringing in more revenue to those businesses.

The EV infrastructure programs run by MEA are currently oversubscribed, meaning there is more demand than funding available. Expansion would allow more small business to access these resources, supporting both the environment and the economy of Maryland.

3. Identify permanent dedicated funding to the Maryland Clean Energy Center Maryland Energy Innovation Accelerator program to enable increased growth of small businesses bringing advanced energy, climate mitigation, and adaptation solutions for market adoption more expeditiously.

The Climate Pollution Reduction Plan calls for expansion of clean energy infrastructure to support Maryland residents, small businesses, and large commercial businesses. This transition will help the state in achieving its ambitious emission reduction goals as set forth in the Climate Solutions Now Act of 2022, which include a 60% reduction in emissions by 2031 from 2006 levels and net-zero emissions by 2045. The target of this proposal is to facilitate small

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Commented [14]: Chair: Andrew Place; andrew.place@maryland.gov Staff Facilitator: Jared Williams; @jared.williams@maryland.gov businesses from an economic standpoint in the transition from fossil fuel emitting energy production to clean energy production.

The MCEC's Maryland Energy Innovation Accelerator (MEIA) program, which started in 2019, facilitates growth for small businesses to be drivers of the energy industry. The program helps expedite the transfer of clean energy and climate technologies from lab to market and create new and investible advanced energy businesses. It was created to unify the intersection of energy innovation, energy entrepreneurs and researchers and business executives to create new and investment-ready clean energy businesses. MEIA also supports early-stage technology commercialization in a myriad of clean energy technologies including solar, wind, and battery technologies. Currently, the MEIA program has baseline funding through 2027 (fiscal year 2028) with funds from the Climate Tech Founders Fund.

With increased funding, the MCEC's MEIA program can be expanded to support more small businesses in the energy transition. The MEIA program currently serves small businesses across industries, and this expansion seeks to capitalize from the potential Maryland has to generate wealth and facilitate rapid decarbonization efforts to achieve climate goals. Because it is estimated that small businesses will bear a level of financial impact through the energy transition, it is important that there are funding, grants, loans, and incentive opportunities in order to mitigate those impacts. Further, the provision of business and industry experts will help numerous small businesses make the best financial decisions for each of their individual and unique businesses.

Maryland will foster sustainability and benefit from outcomes of these investments, in terms of the economic, environmental and community impacts. The proposal seeks to overall facilitate small businesses in the transition from fossil fuel emitting energy consumption to adoption of clean energy, electrification, energy storage and efficient management solutions to reduce demand.

Energy Resilience and Efficiency Working Group (EREWG)

- 1. Maryland must take short term actions to address energy capacity constraints, specifically the state should:
 - a. The Public Service Commission should issue a policy statement for the prioritization of battery storage and other demand response systems on the distribution grid, provided that they are cost effective in adding reliability to the grid and avoiding or delaying other capacity cost increases and/or transmission upgrades.
 - b. The state should consider shifting Shift the utility-scale solar program from a REC based subsidy model to a competitive bid similar to NJ, NY, and IL. Under the model, the PSC would consider and award bids at fixed prices, subject to a cap. Rate- payers would pay the difference between the energy revenue and the fixed guaranteed price (as the variable priced "REC"). Under this approach, This would also allow the PSC could be

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incorporate locational value of generation as well as incorporate storage in some bids as appropriate.

2. In the longer term, the state needs an ongoing, regular process for more holistic energy system assessments.

This could be something akin to an integrated resource plan and would provide some direction on achieving clean, affordable, and reliable energy in the future. The plan must include reasonable projections for energy demand and strategies for meeting those demands in a regional context with associated impacts on greenhouse gas emissions, ratepayer impacts and affordability, equity considerations, and reliability and resiliency. The structure must ensure actionable outcomes and include annual or biennial updating of solution sets. The Energy Resilience and Efficiency Working Group shall propose a framework for such a planning mechanism by January 2025.

3. In support of the state energy planning framework, Maryland must invest in a userfriendly, transparent model for state-wide planning to inform policy and administrative decisions.

The model should enable cost benefit analysis of power prices by resources, be detailed enough to enable location value planning and support the transition to a clean energy workforce. The model should also consider time horizons for commercialization of energy technologies and when those technologies may appear in the market.

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Approved Recommendations

Adaptation and Resilience Working Group (ARWG)

The following actions should be guided by a <u>Justice40</u> approach so that environmental justice and climate change adaptation goals are achieved simultaneously within Maryland's dynamic Environment:

Recommendation 1. The state of Maryland should seek to increase the level of community-led participatory engagement in adaptation and resilience projects by:

- a. Working with Department of Budget Management (DBM) to provide guidance on existing state mechanisms of compensatory (e.g. transportation stipend, child care, direct payment) community engagement and community liaison recruitment options.
- Removing barriers to community participation in projects (e.g. technology requirements, childcare, paperwork).

Recommendation 2. State agencies should increase the utilization of the adaptation and resilience resources they offer to support local governments by:

- a. Making progress on the priorities identified in the local government and state service delivery focus group of the Next Generation Adaptation Plan.
- Allowing for more flexible state processes in low-resourced communities (e.g. technical assistance, longer grant terms, lowered match amounts).
- Making tools and information more accessible (e.g. using plain language, translation services, offering trainings, providing guidance documents).

Recommendation 3. State agencies involved in land use decisions should prioritize the conservation of natural and working lands in accordance with the Next Generation Adaptation Plan.

Funding in these areas should focus on best development and management practices as well as equity.

Recommendation 4. 2023 Recommendation that will be re-introduced:

State agencies should incorporate Next Generation Adaptation Plan Justice, Equity, Diversity, Accessibility, and Inclusion priorities and milestones into their 2025 annual state status reports on GHG reduction and impacts of climate change. This will assist the state in identifying gaps in service to vulnerable communities to ensure no Marylander is left behind.

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Education Communication and Outreach Working Group (ECOWG)

Recommendation 1. Outreach to Mobilize All Marylanders to Proactively Address Climate Change

Recognizing the critical importance of informing, engaging, and encouraging Marylanders to take action to achieve the state's ambitious climate goals, the Maryland Commission on Climate Change—upon the recommendation from the Education, Communication and Outreach Working Group (ECO)-- proposes that the Governor and State Legislature approve legislation to allocate funding for the purchase, development, or placement of multimedia advertising to support and expand the reach of the campaign. The goal is to develop the resources and outreach branding for use by state agencies and to create a fund for the media buys needed to reach and capture the attention of Marylanders and garner their active participation in climate solutions. The initial funding would also be used as a seed fund to attract other private funds.

2. Develop Maryland's Future Generation of Environmental and Climate Change Leaders

Recognizing the power of education to create a fundamental understanding of the challenges our state faces with respect to climate change, ECO strongly recommends that the Governor and State Legislature commit to fostering our next generation of environmental leaders, advocates, and responsible citizens.

ECO recommends a three-pronged approach by engaging administrators, educators, and students to facilitate the link between climate preparedness, climate literacy, and job potential. Student involvement, voice, and passion are critical to the fundamental culture change needed to meet the goals outlined in the Climate Solutions Now Act. Adequate resources should be allocated to:

- Advancing Climate Literacy—Direct Maryland's State Department of Education and new
 Outdoor Learning Partnership to review the state's new environmental literacy standards
 framework for opportunities to incorporate climate change. Designate funding for
 awareness activities and training for Maryland educators on these standards and the
 resources available for incorporation into classroom activities. This initiative can be
 integrated into the existing Maryland State Department of Education's 'Blueprint for
 Success,' especially as it pertains to opportunities for high school graduates.
- Developing Climate Action Plans—Request each school system to create a specific, measurable, and actionable climate action plan to promote environmental awareness and guide individual schools in sustainability efforts. Plans should be prepared to support and follow the framework set in the State Department of Education's Climate Implementation Plan, as required by Executive Order dated January 19, 2024. Helpful resources should be provided with ECO's assistance.

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Expanding Maryland Green Schools Program—Allocate funding to expand the statewide Maryland Green Schools Program, which encourages participation from preschool through high school in urban and rural Maryland, demonstrating integration of local environmental issues into each grade's lesson plans. Funds should be used to support communications outreach, offer professional development opportunities, and expand the existing grant program for individual schools seeking to become a Maryland Green School. These schools implement sustainable practices and fosters cultural change through student immersion and experiential learning.

Our future generation of environmentally literate graduates will vote, advocate, and make both civic and personal decisions that advance climate action.

3. The Legislature Should Pass "Climate Education Week" Bill

Building on the success of the Climate Change Teach-In, including the Governor's proclamation of Climate Education Week in 2024, ECO recommends that the Maryland General Assembly reintroduce and pass former FY 2024 House Bill 993 with bi-partisan support. This bill would proclaim one week in April, coinciding with Earth Month, as "Climate Education Week". This declaration would provide a unique opportunity for state agencies, county and municipal governments, and private organizations to come together to celebrate climate and expand education on ways to mitigate climate change and improve resilience in our regional and global environment.

Energy Resilience and Efficiency Working Group (EREWG)

- 4. The State should conduct the following immediate studies, in parallel to the extent possible, and building upon prior studies and existing information, in order to support a long-term integrated approach to energy system assessments and energy planning and to meet the State's climate change goals:
 - a. The Public Service Commission should, in consultation with the Maryland Energy Administration, study on transmission line reconductoring opportunities in the State;
 - b. The Maryland Energy Administration should study the expansion and extension of our nuclear energy capabilities particularly including, but not limited to, small modular reactors. A report on options should be made available to the state and public within the next 18 months. The report should include feasibility evaluations for the economic viability and deployment of new nuclear generation in the state, considering scenarios that include and exclude both ratepayer and taxpayer subsidies and guarantees. Specifically, in assessing feasibility, the study should analyze the experience over the past 25 years of conventional nuclear and SMRs, as well as any new progress, including timing, costs, and affordability. These studies should include and evaluate site adequacy (including at former fossil fuel plants and current nuclear plants), availability of transmission assets, and environmental justice impacts. Furthermore, the evaluation of impacts should include the overall

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employment and other benefits of new plant construction and operations. The study should incorporate public input and coordination with the Public Service Commission

- c. The Public Service Commission should perform an analysis to determine if Maryland's Offshore Wind (OSW) projects that do not have a current interconnection agreement could be interconnected with Salisbury substations and the feasibility of building in-state transmission from the OSW interconnects to Maryland load centers;
- d. The Public Service Commission should study the viability of energy storage-as-a-transmission-asset within its 3,000MW storage procurement program;
- e. The Power Plant Research Program should perform an analysis of land in the State to identify land suitable for solar energy and storage development.

Just Transition Working Group (JTWG)

2. Recommendation 2:

To successfully support Just Transition Principles in Maryland's new clean energy economy, new infrastructure projects should consider following best practices regarding labor, including but not limited to prevailing wages. This can be done through project labor agreements like the provisions under HB 397 of 2024, which supports Title 17, Subtitle 2 of the Maryland Finance and Procurement Article. This would provide job security and support for new and existing decarbonization construction projects of varying sizes.

3. Recommendation 3:

The JTWG proposes a Green Jobs outreach campaign in 2025 to encourage applications and participation in clean energy-related apprenticeships (including energy audits, LEED certifications, and other relevant training programs) alongside the adoption of clean energy technologies. This two-pronged approach will support job growth in the clean energy sector as well as public adoption of clean energy technologies that job growth is contingent upon. This could include expanded Electrification Pilots across Maryland jurisdictions and other programs that educate consumers about greenhouse gas reduction strategies, which may include residential electrification and decarbonization, as well as provide financial and technical resources to implement decarbonization upgrades. The campaign would partner with preapprenticeship, apprenticeship, institutions of education, and other programs that specialize in clean energy workforce development and training to recruit segments of the population who may be underrepresented, including but not limited to person from economically marginalized communities and previously incarcerated persons, in the clean energy workforce.

4. Recommendation 4:

Commented [37]: Staff Facilitator: Cindy Osorto; cindy.osorto1@maryland.gov

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The JTWG proposes additional strategic investments into expanding current registered apprenticeship programs that support transferrable skills, such as proven workforce models programs like the Maryland Department of Labor's Employment Advancement Right Now (EARN) Maryland, Registered Apprenticeship, and Maryland Works for Wind (MWW) to address existing and emerging workforce needs in solar, wind, geothermal, electrification, and other clean energy sectors.

Investments in Registered Apprenticeship will be needed to create a robust clean energy workforce, but additional support for programs and certifications based around specific clean and sustainable occupations will also be needed. An infusion of additional funds in the EARN model will allow the Maryland Department of Labor to support new sector-based efforts to address occupational specific needs. Additionally, investments in workforce ecosystems, like the MWW framework, will allow partners, like unions, to develop curriculum, purchase new equipment, and provide specific training to ensure workers have the right skills to safely work on new clean energy projects, ensuring programming is responsive to emerging clean energy technologies and bolstering the availability of a highly skilled workforce to support these critical projects.

Recommendations from Individual Commission Members

2. Pass G.R.E.E.N.:

The General Assembly should pass Green and Renewable Energy Efficiency for Nonprofits (G.R.E.E.N.), introduced for the third time in 2024 as SB169. G.R.E.E.N. would allow Maryland's nonprofit sector to participate in addressing our Climate Crisis by providing nointerest loans to nonprofits for the purchase and installation of qualifying energy systems in the State. This past session, the bill once again passed the Senate unanimously.

Science and Technical Working Group (STWG)

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.

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Commented [43]: _Re-opened_

Commented [44]: Chair: Fernando Miralles-

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