

marylandclimateaction

May 15th, 2023

To: Secretary Serena McIlwain
Maryland Department of the Environment
Montgomery Park Business Center
1800 Washington Blvd.
Baltimore, MD 21230

CC: Susan Casey, Research and Communications Manager, Maryland Department of the Environment
Director Paul Pinsky, Maryland Energy Administration
Chris Rice, Chief of Staff, Maryland Energy Administration
Suzanne Dorsey, Deputy Secretary, Maryland Department of the Environment
Mark Stewart, Manager, Climate Change Program, Maryland Department of the Environment
Chris Hoagland, Director, Air and Radiation Administration, Maryland Department of the Environment

Dear Secretary McIlwain,

Climate Partners is a coalition of over one hundred environmental, faith, consumer advocacy and social justice organizations focused on ensuring equitable implementation of the Climate Solutions Now Act (CSNA). The coalition formed in 2021 to support the passage of bold climate legislation, engaging thousands of Marylanders to contribute their voice to this critical conversation. Climate Partners believes that robust public participation is essential for the development and implementation of equitable climate policy.

The passage of the CSNA of 2022 made Maryland a national leader in greenhouse gas (GHG) emissions reduction goals. Full and equitable implementation of the CSNA will mean a healthier future for everyone in our state. Climate Partners is deeply invested in this future, and is proud to submit this preliminary priorities document to the Maryland Department of the Environment (MDE) as it drafts a plan for the state to reach 60% GHG emissions reductions by 2031 and net zero by 2045. We intend for the following ideas to inform and support the necessary actions from the Moore-Miller administration.

To achieve these GHG emissions reduction goals, MDE has an opportunity to take advantage of the unprecedented levels of clean energy and energy efficiency funding, investment tax credits, consumer rebates, environmental justice resources, and workforce development training funds made available by Congress in the November 2021 [Bipartisan Infrastructure Law \(BIL\)](#) and the

August 2022 [Inflation Reduction Act of 2022 \(IRA\)](#). Climate Partners will work with MDE to identify potential BIL and IRA funding streams to maximize Maryland's share of competitive federal grants to help implement policies that will enable achieving the CSNA's goals.

Climate Partners is offering these preliminary policy recommendations to inform the development of Maryland's CSNA Plan. To develop these recommendations, Climate Partners solicited input from within its membership as well as from other community partners. Over twenty organizations participated in technical working groups, and an additional one hundred people provided written or verbal input. We are also working with the Center for Climate Strategies (CCS) to model the emissions reduction impacts, as well as societal benefits, of our recommendations. We look forward to engaging in more robust exchanges with MDE and all participating agencies this summer and fall, once the draft plan has been released and our modeling is complete.

While Climate Partners is a relatively new entity, many of our member organizations have been engaged in Maryland climate advocacy since the passage of the first Greenhouse Gas Reduction Act in 2009. We have seen several state climate plans, some with recommendations promptly implemented and others with recommendations ignored or not revised when needed. Our recommendations focus on new policies that will help us achieve 60% GHG emissions reductions by 2031. We also call attention to critical implementation steps that are necessary not just for meeting the CSNA's goals, but in many cases, for achieving goals that were put in place prior to the CSNA.

Ultimately, we believe the success of this process should be measured not by the policies put on paper, but by the results achieved. We look forward to assisting MDE and the Moore-Miller administration to put plans into action to reach the state's important climate goals.

Equity

As Maryland works to reduce GHG emissions by 60% from the 2006 baseline over the next eight years, it must ensure that [underserved and overburdened communities](#), and communities disproportionately impacted by climate change ("frontline communities"), are not further harmed, but are at the forefront in receiving the benefits of this clean energy transition.

Underserved, overburdened, and frontline communities have contributed the least to the climate crisis but suffer its worst harms. And because these communities are often excluded from political processes, they are often not included in solutions to prevent these harms. In developing new policies, regulations, and programs in the energy, buildings, transportation, and natural resources sectors, equity must be prioritized to remedy the long history of injustices to our communities. More specifically, as MDE works to craft a climate action plan over the next couple of months, we recommend the state work toward the following:

- 1. Identify and engage underserved, overburdened, and frontline communities.**

- a. In consultation with the Maryland Commission on Environmental Justice and Sustainable Communities, MDE should host at least ten in-person and virtual listening sessions and public forums in key areas across the state to listen to the top concerns and needs of underserved and overburdened communities.
- b. MDE should adopt a data-driven and community-supported methodology for identifying frontline communities ('communities disproportionately affected by climate change').
- c. MDE must co-develop meaningful strategies with underserved, overburdened, and frontline communities to address environmental injustice, reduce GHG emissions (and co-pollutants), and build climate equity and resilience in those communities.

2. Direct climate-related funding and benefits to underserved, overburdened, and frontline communities.

- a. Governor Moore, through an Executive Order, should direct at least 40% of climate and environmental justice-related investments to Maryland's underserved, overburdened, and frontline communities.
- b. At a minimum, Maryland state agencies, including Maryland's Departments of the Environment, Health, Natural Resources, Transportation, Agriculture, Planning, Housing, Labor, and Education must coordinate to identify funds and programs with climate and environmental justice-related benefits.
- c. The Maryland Clean Energy Center's Board of Directors and Fund Oversight Committee should include more climate and environmental justice experts or representatives.
- d. The state should provide technical assistance and forgivable or low-interest loans for energy efficiency and weatherization improvements in underserved, overburdened, and frontline communities.
- e. The Maryland Clean Energy Center should work with other entities to leverage investments in the Climate Catalytic Capital Fund to provide building owners and residents capital to retrofit existing residential and commercial buildings.
- f. MDE, MEA, and DHCD must coordinate and aggressively apply for targeted funds under the Bipartisan Infrastructure Law and Inflation Reduction Act and directs those funds to (or near) underserved, overburdened, and frontline communities that will expedite climate-related benefits, such as:
 - i. **Energy-related benefits:** Grid resilience and improvements; community solar; reduced energy burden; improved air and water quality; and community microgrids
 - ii. **Buildings-related benefits:** Electrification of homes/multi-family housing; weatherization of homes/multi-family housing; whole-home energy-efficiency improvements; affordable and climate-friendly housing, especially in dense, walkable, and transit-accessible areas; and improved indoor air quality

- iii. **Transportation-related benefits:** Light rail and electric buses on mainline routes; walkability, bike-ability, and mixed-use neighborhoods; electric vehicle (EV) charging stations; and sustainable transit hubs
- iv. **Natural resources-related benefits:** Improved tree canopy and green spaces in urban heat islands; financial support to new farmer training and incubator programs that help new, entering farmers find affordable land; healthy soils practices and nature-based carbon dioxide sequestration; agricultural practices like regenerative farming, agroforestry, cover cropping and managed grazing; and preserving mature and old growth forests, protecting forests in conservation from logging, reforestation, and protecting and restoring blue carbon (salt marshes, seagrass, etc.)
- g. Training and workforce development associated with the clean energy transition should be targeted toward Marylanders from underserved, overburdened, and frontline communities.

3. Maryland's climate action plan should include mechanisms that ensure that underserved, overburdened, and frontline communities are not further harmed in the state's clean energy transition. These mechanisms must:

- a. Protect low-wealth tenants from unreasonable rent increases.
- b. Protect low-wealth consumers from rate increases and create rate structures that protect low-income ratepayers, such as a "Percentage of Income Payment Plan" program that caps energy burden (at no more than 6%).
- c. Protect underserved, overburdened, and frontline communities from any new infrastructure that causes (or could cause) further harm, such as highways, pipelines, battery storage facilities or any of the other projects identified as [non-beneficial](#) by the White House Environmental Justice Advisory Council.
- d. Ensure environmental and climate justice considerations are built into the MDE's decision-making processes for permits.
- e. Phase out the sale of fossil fuel furnaces, water heaters, and other appliances due to their negative impacts on health and the environment.

4. Require state agencies to continuously engage with underserved, overburdened, and frontline communities.

- a. Relevant state agencies must include and prioritize underserved, overburdened, and frontline communities in their outreach, engagement, and implementation of policies and programs that usher in climate benefits.
- b. Relevant state agencies must have regular meetings to gather feedback and policy suggestions from community organizers, labor organizations, and community leaders.
- c. Community feedback must be prioritized in the agency's decision-making process.

Transportation

Transportation is the largest source of climate pollution in Maryland. On-road passenger vehicles are the largest source of GHG emissions from the transportation sector, followed by medium- and heavy-duty vehicles. Maryland should invest in public transit, cycling, pedestrian infrastructure, transportation demand management, land use planning, housing policy, and other strategies that reduce vehicle miles traveled (VMT) through mode shift and reducing trip distances. These policies will increase access to jobs, education, healthcare, food, and recreation and improve public health. The state should also plan for the rapid transition toward zero-emission light-, medium- and heavy-duty vehicles and the charging infrastructure, utility programs, and funding mechanisms needed to support an equitable transition to these vehicles. In addition to the recommendations listed below, Maryland should explore additional policies to reduce pollution from the off-road transportation sector, including marine, rail, and aviation.

It is critical that Maryland prioritize the communities heavily impacted by transportation pollution and historically excluded from transportation decision-making and infrastructure resources, including communities of color, low-wealth communities, rural communities, and people with disabilities, in the development and implementation of these policies. The following list represents our Preliminary Priorities; this draft [appendix](#) includes some more detailed ideas and considerations.

- 1. Maryland should set a goal for reducing Vehicle Miles Traveled (VMT) per capita by 20% under 2019 levels by 2031.** The 2021 National Capital Region Transportation Planning Board's [Climate Change Mitigation Study](#) indicated that the Greater Washington region must reduce per capita driving (light-duty VMT) 20% below forecasted levels to reduce emissions 50% by 2030. An [RMI analysis](#) also found that the U.S. must reduce VMT 20% by 2030 to limit warming to 1.5 degrees, even under ambitious EV scenarios.

Some actions Maryland should take to achieve this goal include:

- a. Flex 50% of federal transportation funds from the Surface Transportation Block Grant and National Highway Performance Program towards eligible public transit, bike, pedestrian projects, and vehicle electrification projects.
- b. Incentivize transit-oriented development, especially transit-oriented affordable housing, and eliminate parking minimum requirements in new residential and commercial developments.
- c. Grow transit ridership by increasing the frequency and reliability of current public transit service and study fare-free service. Increase the on-time performance of public transit across the state (including paratransit service) to at least 95% by 2025.
- d. Expand transit service by securing funding and completing environmental approvals needed to implement the Red Line Light Rail, MARC Cornerstone Implementation Study and Investment Program, and other key transit proposals.

- e. Fund and invest in active transportation options, including county and municipal plans for connected active transportation networks and long-distance spine trails. The total cost of this infrastructure ranges in the billions of dollars, including the completion of the Capital Trails Network and the Baltimore Greenway Trails Network.
- f. Increase investment and utilization of Transportation Demand Management strategies, like the Maryland Commuter Choice Program, to reduce single vehicle occupancy usage by offering benefit programs for vanpooling, transit, cash in lieu of parking, and telework.
- g. Revoke proposals that would increase VMT (e.g., the I-495 and I-270 toll lanes proposal, a third Bridge across the Chesapeake Bay) and implement public transit, land use, and Transportation Demand Management alternatives.
- h. Expand and modernize heavy passenger and freight rail including ports, rail yards, tracks and trains powered by distributed overhead electric solar and wind power. As Virginia did, develop a plan and timeline to purchase the right of way from CSX and upgrade selected heavy rail tracks and infrastructure in Curtis Bay and in the Southern Maryland region.

2. Require that at least 35% of all sales of new medium- and heavy-duty vehicles across the state are zero-emission by 2031 and 100% by 2036. Medium- and heavy-duty vehicles account for 9% of vehicles on the road but contribute 21% of the carbon pollution emitted by the entire on-road transportation sector in Maryland.

- a. By December 2023, Maryland should adopt the Advanced Clean Trucks rule, which will require manufacturers to increase the sale of zero-emission trucks and school buses from Model Year 2027 through 2035.
- b. By 2023, Maryland should adopt the Heavy-Duty Omnibus (low NO_x) rule, which would limit toxic air pollution from diesel trucks and buses and require that new diesel trucks reduce their nitrogen oxide (NO_x) emissions 90% by 2027.
- c. Maryland should adopt the Advanced Clean Fleets rule, which would require that all medium- and heavy-duty vehicles sold are zero-emission in 2036 and sets requirements for high-priority state and local government fleets to purchase a certain percentage of zero-emission medium- and heavy-duty vehicles.
- d. The state should support and enforce the 2025 electric school bus mandate as codified in the CSNA and allocate funding over a multi-year period toward school bus electrification, including charging infrastructure, while prioritizing school districts in environmental justice communities.
- e. Starting in 2025, Maryland should require the procurement of zero-emission buses for locally operated transit systems (LOTS) across the state with the same labor standards included in the Electric Bus Transition Act.
- f. Maryland should adopt geographically targeted guaranteed emissions reduction policies for overburdened communities, such as a warehouse indirect source rule or low- and zero-emission zones.

- g. The Port of Baltimore should draft a port electrification plan and set a target for full port electrification by 2040.
- 3. Phase out the sales of light-duty internal combustion engines by 2035 and invest in charging systems and vehicle/e-bike incentives to support this transition.** As of April 2023, over 70,517 EVs were registered in Maryland. Maryland has a goal for 600,000 EVs to be registered in 2030, resulting in a potential annual CO2 reduction of 1.61M metric tons. To meet this goal, Maryland must build out a robust EV charging network and ensure that low- and moderate-income consumers have access to cleaner transportation options.
 - a. By 2023, Maryland should adopt California's Advanced Clean Cars II standards, which require an increasing percentage of new vehicles sold to be zero-emission from Model Year 2027 through 2035.
 - b. Require new Public Service Commission (PSC) utility program proposals for charging infrastructure, including funding public chargers.
 - c. The General Assembly and administration should provide rebates or vouchers for low- and moderate-income customers to purchase EVs and electric bicycles.
- 4. Require Metropolitan Planning Organization (MPO) plans and all state projects that require environmental review to use updated and improved transportation models, to assess operational and embedded GHG emissions, and to develop and implement mitigation measures sufficient to fully offset any anticipated GHG emissions growth.** Billions of dollars are wasted each year on ineffective freeway expansions justified by outdated and erroneous transportation modeling methods. Projects also fail to account for and plan to mitigate their GHG impacts.

Electricity Generation

Electrifying Maryland's homes and vehicles is important for reducing GHG emissions, but at its core, the state's CSNA implementation strategy must involve generating electricity from clean, renewable sources. The PSC, MDE, and Maryland Energy Administration (MEA) should all be taking steps to replace fossil fuels, including gas-fired generation, gas distribution pipes, and gas appliances, while also transitioning toward increased renewable energy and storage. This will require new policies and regulations, such as innovative 100% clean energy and future-of-gas planning dockets, as well as new implementation plans for existing policies, such as recently enacted legislation covering offshore wind, storage, and community solar. In transitioning the energy sector to renewables, Maryland must focus on reducing disproportionate impacts and undue financial burdens in environmental justice and low-income communities; the Equity Section contains a blueprint for doing so.

- 1. Phase out fossil fuel use for electricity generation in Maryland.** Electricity currently accounts for 31% of the state's GHG emissions, most of which come from the combustion of coal and gas. Burning these fossil fuels also causes air pollution, which

contributes to asthma, cancer, and other public health issues, especially in communities of color and low-income communities. Maryland should make an explicit commitment to phasing out fossil fuel-powered electricity generation.

- a. Governor Moore should issue an executive order establishing as Maryland policy the goal of phasing out all coal-fired generation by 2025 and all gas-fired generation by 2035, and develop a plan for a just transition.
- b. The PSC should open a separate proceeding addressing the generation system as a whole. This proceeding would consider, among other topics, the retirement of coal, waste incineration, woody biomass, and other forms of combustion power generation in the state, prioritizing those generation sites located in or near environmental justice communities and large population centers; not approving the construction of new gas plants; and replacing existing gas generation in Maryland with non-emitting clean renewable energy, energy storage, energy efficiency, demand response, and transmission solutions.
- c. MEA should support decontamination and cleanup at sites of retired fossil-powered plants, transportation hubs, and waste sites and create conservation and park spaces. In communities near retired fossil fuel plants, MEA should provide funding, and federal incentives from the IRA, to help those communities recover financially, and to help their workforces transition and retrain for new jobs, including those in the renewable energy industry.
- d. Maryland should decarbonize cement and steel production, fully implementing the Buy Clean Maryland Act, which was enacted in 2023.

2. Incentivize the adoption of renewables and storage at a faster pace to reach 100% clean electricity generation by 2035. Maryland currently has a Renewable Portfolio Standard (RPS) of 50% by 2030, but the majority of the clean energy "credits" we purchase come from out of state. The actual impact of these credits is unclear, and some ratepayer dollars are going toward polluting facilities like trash, woody biomass, and farm waste incineration. Further, we are behind on reaching in-state solar targets and the state's first offshore wind projects are behind schedule. Maryland needs a new 100% clean energy strategy that maximizes new in-state generation and focuses on concrete short-term actions to ensure timely implementation.

- a. The General Assembly should reform the RPS into a 100% clean energy policy that limits qualifying resources to those that are truly renewable and non-emitting, non-combustible resources (which excludes woody biomass, waste, and biogas) and prioritizes in-state generation. The RPS should increase the carve-out for solar production and maximize "additionality" (the subsidization of recent and new, rather than long-existing, clean renewable energy sources). It should also remove limits on the amount of qualifying offshore wind renewable energy credits (ORECs) and incentivize long-term power purchase agreements to purchase wind energy so that Maryland can reach the POWER Act's 8.5 GW offshore wind target.

- b. The Administration should encourage the other Regional Greenhouse Gas Initiative (RGGI) states to reduce the regional CO₂ emission cap to zero by 2040, with interim targets for 2030 and 2035.
- c. The PSC should create new dockets to implement the 2023 legislation that set targets and requirements for offshore wind, community solar, and storage adoption in Maryland. The PSC should also provide opportunities for jurisdictions across the state to adopt community choice aggregation programs.
- d. The PSC and MEA should facilitate achievement of the POWER Act's target of bringing 8.5 GW of offshore wind online by 2031, and collaborate with the Department of General Services (DGS) to procure ~1 GW of offshore wind through Power Purchase Agreements with offshore wind developers, which protects ratepayers.
- e. The PSC, MEA, and MDE should ensure Maryland meets or exceeds its RPS carve-out for solar by obtaining 14.5% of total generation from solar by 2030. Some strategies for improving solar adoption include increasing the value of solar renewable energy credits (SRECs), especially those that are in environmental justice and low-income communities, and providing local jurisdictions with technical assistance and incentives for siting more solar projects.

3. Ensure sufficient transmission and distribution infrastructure to achieve the state's GHG reduction and clean energy targets. It will not be possible for Maryland to shutter dirty fossil-powered generation plants and bring clean renewables onto a grid that is not functioning effectively and efficiently. Around the country, electricity grids are facing challenges with long interconnection queues, insufficient transmission lines, and aging infrastructure, and Maryland is no exception. Maryland should focus on resolving any bottlenecks in its electric grid that would stall its transition to renewable energy.

- a. The PSC should adopt integrated grid planning regulations before the CSNA's July 2025 deadline. In the grid planning process, transmission and interconnection improvements should be coordinated as much as possible. The PSC should also promote technical measures to increase capacity on existing transmission lines.
- b. In order to accelerate the onboarding of community solar projects, the PSC should establish streamlined standard interconnection procedures for small distributed generation and storage (under 5 MW), and should require utilities to raise (to at least 10 MW) the limit on solar capacity on a given distribution feeder circuit. The PSC should also remove unnecessary and costly equipment requirements for interconnection and introduce transparency in the interconnection process.
- c. As required under the POWER Act, the PSC should work with the PJM grid to determine how to best construct a shared transmission line connecting to offshore wind projects. The PSC should work within the PJM process, including with other states' public utility commissions, to accelerate PJM's approval of the large backlog of clean energy projects that is under review. The PSC and other

Maryland agencies should ensure that Maryland-based regulatory reviews are undertaken simultaneously to PJM's review. Relatedly, the PSC and MEA should assist renewable energy developers in obtaining federal permits as early in the construction process as possible.

- d. The PSC should coordinate a process, possibly a Request for Proposals, to build renewables and storage at sites of retired power plants that are already connected to transmission lines.
- e. The PSC should require utilities to apply for sources of federal funding, including IRA grants, from the U.S. Department of Energy's Grid Deployment Office. Utilities should also be required to provide regular reports on their applications for federal funding, and members of the public should be permitted to provide input into those applications as they are being developed.

4. Ensure utilities adopt more strategic demand response policies. In addition to strengthening Maryland's grid and transitioning toward sources of renewable energy, state agencies should encourage Marylanders to reduce their overall demand for energy.

- a. The PSC should require utilities to make demand response measures the default for customers, with an option to "opt out" of them, rather than requiring utility customers to individually opt in to them.
- b. The PSC should encourage utilities to establish and maintain time-of-use pricing to incentivize EVs and other electrification measures. The price differentials should be seasonal and should be sufficient to shift load.
- c. The PSC should require utilities to change the electricity rate structure to promote the adoption of storage at the residential level, which would allow shifting of load away from peak periods.

Buildings

Emissions from the direct combustion of fossil fuels in buildings contributed 17% of Maryland's GHG emissions in 2017, primarily from space- and water-heating systems. To reach the climate goals laid out in CSNA, Maryland will need to begin transitioning its building sector away from these technologies. As it begins this shift, the state has an opportunity to equitably incentivize and promote the use of efficient electrified technologies, including heat pumps and induction stoves, that would lower building-sector emissions and could improve health and safety in frontline communities.

Transitioning buildings away from fossil fuel appliances will require broader planning processes, which can be found under Recommendation 1 of the Electricity Generation section. This section focuses on policies to transition individual residential and commercial buildings.

Relevant state agencies should coordinate to ensure equitable access to the newest generations of electrified appliance technologies in existing buildings and should ensure new construction does not rely on fossil fuels. To do so, we recommend the following:

1. **Develop a cross-agency, community-based, whole-home retrofit program to improve health, safety, and economic outcomes for households in Maryland’s low-income households.** Between January 2018 and March 2020, 30% of EmPOWER’s low-income weatherization inbound customers were deferred from the program due to health and safety issues and their homes’ need for structural repairs. In order to ensure equitable access to efficiency and weatherization services and improve quality of life in households in need of assistance, Maryland should develop a whole-home retrofit program that simultaneously addresses health, safety, and energy service needs in low-income homes.
 - a. First, Maryland needs to set a “North Star” total goal for the number of households in the state to be electrified or made electric-ready by 2031, including **a specific goal to electrify or prepare 100% of low-income homes for efficient electrification by 2031.** The state can build on goals laid out in the [recently-passed statute](#) on low-income energy efficiency (HB0169).¹ The state should also set interim targets and calculate the number of households that need to be served to reach those targets. Given that there are approximately [450,000 homes](#) at or below 200% of the Federal Poverty Level in Maryland, the state would need to retrofit 40,000 on average annually over the next eleven years.
 - b. MDE, MEA, and DHCD should collaborate to develop a one-stop-shop whole-home retrofit program pilot to service low-income households with health and safety repairs, weatherization, appliance electrification, and energy efficiency at no cost to residents. The program should utilize services from community outreach specialists.
 - c. Potential funding sources include a reallocation of 40% of EmPOWER funds toward households in low-income communities, in line with the Biden administration’s Justice40 initiative, and using relevant IRA and BIL funds to kickstart a whole-home retrofit program, including \$136 million in the IRA’s Home-Owner Managing Energy Savings (HOMES) and High-Efficiency Electric Home Rebate Act (HEEHRA) funds.
2. **Reform EmPOWER, through PSC action and/or legislation, to bring it in line with state climate goals and require equitable access to electrification appliances and measures.** Due to the existing reach and extent of the infrastructure of this program, EmPOWER could help shift Maryland toward a highly-electrified building sector equitably, if appropriate reforms are made.
 - a. Financial subsidies for fossil fuel appliances within EmPOWER should be phased out starting in 2024, including for gas-, oil-, coal-, wood-, pellet-, and kerosene-powered furnaces, boilers, water heaters, dryers, stove tops and

¹ HB0169 sets a goal of providing annual incremental gross energy savings of at least 1% for LMI households beginning in 2026 and sets a goal of providing energy efficiency retrofits for all low-income households by 2031.

ovens. These appliances are replaced on cycles of as long as 20 years and need to be electrified prior to 2045 to meet Maryland's climate goals. As fossil fuel appliance subsidies are phased out, more incentives should be introduced to reduce overall energy demands, including incentives for weatherization, efficiency, and electrification.

- b. The EmPOWER program should allow and encourage fuel-switching starting in 2024 by requiring substantial electrification incentives.
- c. All EmPOWER audits should include a proposal to make the building electric-ready (i.e. by installing updated electric service panels and wiring), whether or not fossil fuel appliances in the home are at end of life, along with a subsidy for electric-ready implementation.
- d. EmPOWER goals should be shifted from a kWh-based metric to a GHG emissions-based metric of at least a 1.9% annual GHG emission reduction (for fuel consumed in buildings).

3. Maryland should enact building codes consistent with its decarbonization goals, including a path toward fully zero-emission new construction by 2031. Avoiding new fossil fuel infrastructure prevents Maryland from continuing to be locked into decades of fossil fuel use. Zero-emission new construction is a simple strategy to advance Maryland's climate goals, and analysis indicates residents can save on capital and operating costs as well.

- a. To the extent of their authority, the Maryland Building Code Administration (BCA) should require that all new buildings meet all of their water and space heating demand without the use of fossil fuels as soon as possible, but no later than 2027. If building all-electric is infeasible, new buildings constructed in Maryland should be required to have electrical supply panels and electric capacity capable of accommodating all-electric appliances and space and water heating.
- b. In 2023, Maryland should adopt the 2021 International Energy Conservation Code (IECC) as well as corresponding sections of the International Building Code (IBC) and International Residential Code (IRC) with no weakening amendments. To require all-electric new construction in residential buildings, consistent with the BCA's interim all-electric energy code report findings, Maryland should use the NBI Building Decarbonization Code overlay with the 2021 IECC and apply it to single-family residential new construction.
- c. The General Assembly should pass a bill setting requirements for newly constructed buildings to be wired for EV charging, requiring current multi-family buildings to install EV charging equipment, and providing funding to help existing buildings meet the requirements.

4. The General Assembly should mandate an expansion of Building Energy Performance Standards (BEPS) to incrementally smaller buildings, down to 10,000 square feet, reduce emissions in existing buildings, and provide funding to support affordable housing in complying with BEPS. Strong BEPS regulations would

be designed to push for maximized energy performance in existing buildings, in line with Maryland's climate goals.

- a. Like [Washington, DC](#), Maryland should introduce BEPS with square footage thresholds that decrease with each compliance period for existing state- and privately-owned buildings.
 - b. To be most effective, BEPS should use dual metrics of GHG emissions and site energy use intensity (EUI). Rulemaking should set alternative compliance payments and/or penalties for failing to meet either GHG or EUI targets that will exceed the cost of compliance to ensure the policy compels actual energy and emissions reductions. MDE already has statutory authority to charge an amount greater than the EPA-set social cost of carbon per unit of carbon emitted in excess of BEPS targets, and it should utilize in-state retrofit data and energy modeling to determine penalties that will equal or surpass likely costs.
- 5. Maryland must create a gas transition strategy to ensure equity and affordability in the transition away from gas. As a first step, the PSC should grant the Office of People's Counsel's [petition](#) for a future-of-gas docket(s), with the goal of preventing utilities from charging lower-income and disadvantaged communities the full costs of maintaining a dwindling gas distribution system.** Existing gas infrastructure and pipelines will require maintenance as the system ages. Given inevitable declines in gas sales as Maryland reduces its fossil fuel use in line with its climate goals, and a falling customer base as higher-income Marylanders electrify, the state and its gas utilities need to plan ahead in order to prevent a dwindling number of customers from shouldering the financial burden of maintaining the gas system.

The gas transition docket should:

- a. Assess near-term actions to align Maryland's gas systems with the state's climate goals, given that gas sales will decrease over time;
 - b. Assess and plan for the future of the state's gas utilities, stranded asset costs, and maintenance and reliability needs as utility revenues decline; and
 - c. Assess the role of non-pipe and non-wire alternatives, including electrification, efficiency for non-pipe alternatives, energy efficiency, and demand flexibility, in meeting energy needs.
- 6. MDE should adopt appliance pollution regulations for new and existing buildings to phase out sales of fossil fuel-powered space- and water-heating appliances by 2031 and invest in zero-emission appliance incentives to support the transition.** In order to reach its climate and air quality goals, Maryland should phase out the sale of gas- and fossil fuel-powered appliances to avoid locking consumers into fossil fuel consumption for the 10-20 year lifetime of the appliances and exposing residents to criteria pollutants. Maryland is failing to achieve federal ozone standards, and this regulation could also serve as a control measure to help Maryland achieve ozone

attainment by reducing NO_x pollution, a precursor to ozone.

- a. MDE should enact zero-NO_x-emission appliance standards for new residential and commercial space and water heater sales to take effect in 2031. Beginning in 2030, 100% of sales of new space heaters and water heaters would need to be pollution-free to comply with the emission standards. The standards would reduce emissions of criteria pollutants, such as NO_x and fine particulate matter (PM 2.5), along with GHGs. MDE has authority to adopt standards requiring zero-NO_x appliances under the federal Clean Air Act, which requires states to adopt “reasonably available control measures” to reduce pollution and achieve federal air quality standards. These standards would help Maryland attain the federal National Ambient Air Quality Standards (NAAQS) for ozone while providing GHG reduction co-benefits.
- b. MDE should engage in robust public outreach and comment processes with residents, industry, and other stakeholders, and invest in market transformation measures as soon as possible to support the transition to zero-emission appliances.

Revenue Generation

Several of the strategies outlined above will require significant public investment. For example, achieving electrification of 100% of low-income homes will cost billions of dollars. Initial funding will come from federal programs, updates to EmPOWER, and re-allocation of existing incentives, such as state grants for gas pipeline development and RPS credits for woody biomass, waste incineration, and other dirty sources of fuel. To fully achieve these goals, additional funding sources will need to be identified. This will likely require the creation of new revenue streams. Members of Climate Partners have a range of views on optimal revenue streams. We recommend the state explore a wide range of revenue options that advance the pillars of environmental and climate justice and engage in a robust conversation about the options. We believe that any new revenue system should be protective of low-income residents and frontline communities. Further, we believe that equity, economic, and health benefits of policies should be evaluated properly and considered alongside direct program cost.

Endorsing Members of Climate Partners

Advance Maryland
CASA
Center for Progressive Reform
Chesapeake Climate Action Network
Chesapeake Physicians for Social Responsibility
Climate Communications Coalition
Climate Parents of Prince George’s County

Climate Reality Greater Maryland
Climate XChange Maryland
Earthjustice
Environmental Justice Ministry Cedar Lane Unitarian Universalist Church
Fix Maryland Rail
Green & Healthy Homes Initiative
Greenbelt Climate Action Network
HoCo (Howard County) Climate Action
Indivisible Howard County
Institute for Market Transformation
Interfaith Power & Light (DC.MD.NoVA)
League of Women Voters of Maryland
Maryland Chapter Elders Climate Action
Maryland League of Conservation Voters
Maryland Legislative Coalition
Maryland Legislative Coalition Climate Justice Wing
NAACP Maryland State Conference
Neighborhood Sun
Policy Foundation of Maryland
Progressive Maryland
Rebuild Maryland Coalition
Safe Healthy Playing Fields Inc
Sierra Club, Maryland Chapter
Stoney Beach Community
Transform Maryland Transportation Coalition
Transit Choices
Washington Area Bicyclist Association

Climate Partners thanks Center for Climate Strategies, National Housing Trust, and RMI for their helpful review of the technical recommendations.