



Testimony for HB0831 Reducing Greenhouse Gas Emissions - Commercial and Residential Buildings

Bill Sponsor: Delegate Stein

Committee: Environment and Transportation

Position: FAVORABLE WITH AMENDMENTS

The undersigned organizations express their strong support for **HB0831 Reducing Greenhouse Gas Emissions – Commercial and Residential Buildings** and thank the sponsor, Delegate Stein, for introducing such an important and transformative piece of legislation. We support this bill and offer several amendments that strengthen the legislation (listed below).

This bill takes aim at the greenhouse gas emissions from residences and businesses across Maryland. This is an important piece of legislation because eliminating emissions from buildings is critical to our success in reducing overall greenhouse gas emissions. Buildings contribute 40% of the greenhouse gasses that are produced in Maryland (18% from onsite fossil fuel combustion and the remainder from the power they use from the grid, which contains fossil fuels) because they rely heavily on fossil fuel infrastructure. Over the next couple of decades, we have to reduce that 40% number to zero. This is not an easy problem to solve. It will take a great deal of effort and resolve and will involve making real change in the way we build our buildings and in the way we live our lives.

We support the all-electric building code specified in the bill. Starting in 2023, it would require new residential and commercial construction to have water and space heating provided without the use of fossil fuels. Additionally, it would require new buildings to be solar ready and have electric vehicle charging infrastructure. We understand that in order to solve the problem of building carbonization, you have to contain the problem first, and requiring new buildings to be all-electric is the perfect way to do this.

We also agree with the need to develop Building Emissions Standards to understand and measure the emissions that each residence or business is producing. Not only do we need standards developed, but there should be requirements for building owners to report the emissions, as well as requirements to decrease the emissions in a decisive manner. Building Emissions Standards should be designed to achieve reductions in direct emissions (those produced in heating and cooling the building) starting at a 20% reduction by 2030 and net zero by 2040. Additionally, reporting by building owners would start in 2025.

One of the most critical aspects of the bill is the creation of a Building Energy Transition Implementation Task Force. This Task Force will be charged with recommending complementary policies, programs, and incentives to support this transition, including the creation of tax credits and direct subsidies; new financial incentives that will help low- and moderate- income residents through the EmPOWER program; and on-bill, low-interest financing to spread out the upfront costs. Additionally, the Task Force will recommend a plan to fund the retrofit of existing buildings.

Because we have spent decades building fossil fuel infrastructure into every building that we have developed, it will take a great deal of effort to undo all of that. In this great undertaking, we need leadership and guidance, and we believe that this bill provides a very positive roadmap.

As stated previously, we have attached amendments that we believe will strengthen the bill and we look forward to working with the sponsor and leaders throughout the legislature on these proposed amendments.

Thank you for your consideration of HB0831 Reducing Greenhouse Gas Emissions – Commercial and Residential Buildings. We support this bill and we urge a **FAVORABLE** vote from the Committee with the inclusion of these amendments.

Endorsing Organizations

350 Baltimore	HoCo Climate Action	Potomac Conservancy
350 Montgomery County	Howard County Indivisible	Sustainability Advisory
Adat Shalom Climate Action	Howard County Sierra Club	Committee
Assateague Coastal Trust	Interfaith Power and Light, DC,	Sierra Club, Maryland
Audubon Naturalist Society	MD, NoVa	Chapter
Casa de Maryland	Labor Network for	Strong Future Maryland
Cedar Lane Unitarian	Sustainability	Sunrise Baltimore
Universalist Church	Laurel Resist	Takoma Park Mobilization
CHEER	Maryland Environmental	Environment Committee
Chesapeake Bay Foundation	Health Network	Talbot Rising
Chesapeake Climate	Maryland League of	The Climate Mobilization
Action Network Action Fund	Conservation Voters	Montgomery County
Chesapeake Physicians for	Maryland Legislative	The Nature Conservancy
Social Responsibility	Coalition	Unitarian Universalist
Chispa MD	Maryland NAACP	Legislative Ministry
Clean Air Prince Georges	State Conference,	Wicomico NAACP
Clean Air Prince Georges	Environmental Justice	WISE
Clean Water Action	Committee	
Climate Law & Policy Project	Maryland Poor People's	
Climate Parents of Prince	Campaign	
Georges	MCPS Clean Energy	
Climate Reality Montgomery	Campaign	
County	MD Campaign for	
Climate Solutions	Environmental Human	
Climate Stewards of	Rights	
Greater Annapolis	Mid-Atlantic	
Climate XChange - Maryland	Ministry of Maryland	
Coalition For Smarter Growth	MoCo DCC	
Columbia Association Climate	Montgomery Countryside	
Change	Alliance	
Concerned Citizens Against	Montgomery County Faith	
Industrial CAFOs	Alliance	
Do The Most Good	Mountain Maryland	
Montgomery County	Movement	
Echotopia	National Parks Conservation	
Elders Climate Action	Association	
Environmental Justice Ministry	Nuclear Information &	
Frack Free Frostburg	Resource Service	
Glen Echo Heights Mobilization		
Greenbelt Climate		
Action Network		

Amendments for HB831 - Coordinated by the Maryland Climate Partners

1. Strengthen provisions related to Building Energy Performance Standard

HB831 directs MDE to create a Building Energy Performance Standard (BEPS) which will require reduced emissions from commercial and residential buildings over 25,000 sq ft. This is a critical policy Maryland must enact to reduce pollution from existing buildings and move towards net zero. Colorado, Washington State, Washington DC already have similar programs, and Montgomery County is currently prepared to vote to implement a BEPS program. There are some critical amendments that should be added to ensure the policy achieves its intended goal.

- **Clarify that the policy should establish targets to “energy use intensity” which includes reductions on both electricity usage AND onsite fossil fuel use for heating, water & cooking.**
 - As written, the bill appears to target just onsite emissions, which means the burning of fossil fuels for heating and cooking, also known as “scope 1”. It should also include reductions in electricity usage.
 - Improved building energy efficiency will reduce overall electricity demand (helping grid transition) and can result in smaller sized heating and cooling systems.
 - Energy efficiency (e.g., site electricity use) includes: maintaining and retro-commissioning building energy systems; implementing HVAC scheduling and other smart control systems; and making building shell and other energy efficiency improvements.
 - This aligns with the recommendations of the MD Commission on Climate Change’s Building Energy Transition Plan (see p. 23).

- **Add an interim target of at least 40% by 2035.** We want to ensure that annual reductions are spread out (SB 528 on page 47, lines 5-14) This will also align the numerical goals of HB831 with SB528. Interim goals provide helpful guidance to MDE.

2. The new fossil-free construction code to new buildings should apply to all new buildings, and end of life system retrofits.

HB831 takes an important step of requiring that Maryland Dept of Labor, which establishes MD building codes, specify that new commercial and residential buildings must be built to use electricity (not fossil fuels) for heating. Additionally, require that the majority of space heating and service water heating use heat pumps. The current language limits the new code to “commercial and residential”.

The new construction code should apply to ALL new buildings - Commercial, residential, and government buildings. (page 8, starting line 8)

- Our public buildings, including our schools, should be models for the rest of society, and should be stronger, or at a minimum comparable, to other building standards.

- It is our understanding that HB806 addresses construction standards for new public buildings, potentially based on levels for state funding. We support stronger goals for state buildings, but the new construction codes laid out in HB 806 should apply to all buildings, regardless of level of state funding.
- If we don't apply the all-electric standard to all buildings, every time we build a building that is not all-electric, it is one more building we will have to retrofit. Retrofitting is far more expensive than building the all-electric in the first place.
- With a state surplus and plans to spend significant money on schools through the Built to Learn funding, this is the ideal time to pay-it-forward. Building schools with fossil fuel infrastructure will require far more funds in the future to operate and eventually retrofit.

3. Add “Energy Efficiency” to new construction Commercial code requirements

An increasingly popular approach to this is for a city or state to adopt a “stretch code” which adds provisions on top of the standard code to achieve additional energy efficiency improvements. Washington State, City of Seattle, California, New York City, as well as Montgomery County and Baltimore City, are just a few of the jurisdictions taking this approach. The Maryland General Assembly notes that “energy efficiency is among the least expensive ways to meet the growing electricity demands of the State” and the American Council for an Energy Efficiency Economy reports that “Energy Efficiency Can Cut Energy Use and Greenhouse Gas Emissions in Half by 2050”

We recommend the following targets for all New Construction Commercial buildings, public and private. State Funded Buildings will lead the way by 2 years. Note that this is a percent target for modeled energy use reductions. These targets have been developed from the AIA 2030 challenge and the originally stated International Code Council energy reduction targets. The International Code Council publishes the International Energy Conservation Code, which is already behind targets, two code cycles after targets were set.

- ***For public buildings, funded at least 25% by State funds***
 - 20% reduction in modeled energy use consumption over the 2018 International Energy Conservation Code for permit applications received between Jan 1 2023 and Dec 31 2024
 - 40% reduction in modeled energy use consumption over the 2018 International Energy Conservation Code for permit applications received between Jan 1 2025 and Dec 31 2026
 - 60% reduction in modeled energy use consumption over the 2018 International Energy Conservation Code for permit applications received between Jan 1 2027 and Dec 31 2028
- ***For all other new covered buildings***
 - 20% reduction in modeled energy use consumption over the 2018 International Energy Conservation Code for permit applications received between Jan 1 2025 and Dec 31 2026

- o 40% reduction in modeled energy use consumption over the 2018 International Energy Conservation Code for permit applications received between Jan 1 2027 and Dec 31 2028
- o 60% reduction in modeled energy use consumption over the 2018 International Energy Conservation Code for permit applications received between Jan 1 2029 and Dec 31 2030

Additionally, there should be energy efficiency performance targets for new “major renovations”.

- Targets
 - A 40% reduction in the building’s average annual energy use; or
 - A 20% reduction in modeled energy use consumption over the current Energy Code

Additions to the Buildings Energy Transition Implementation Task Force

- HB0832 sets a goal of holistic retrofits for low-income households by 2030 with little or no cost. Additionally, it creates a Buildings Energy Transition Implementation Task Force to develop a plan for the retrofits and create the appropriate programs, policies and incentives to effect the transition to meet that goal.
 - o We recommend that the Task Force include representation by EJ communities, as well as relevant non-profits. We also recommend that the Task Force coordinate with the Environmental Justice and Sustainability Commission, and Clean Energy Hub.

Additions to Ensure that HB831 is Equivalent to SB528

- On page 9, line 12 and page 7, line 27, SB528 creates a MCEC Climate Catalytic Capital Fund (C3). Add that language in a new section in HB831. *A Climate Catalytic Capital Fund is an innovative funding strategy envisioned in SB528 which will be important to support many of the changes in this bill. We recommend these concepts by incorporating into this bill or other appropriate legislation.*