Committee: Environment and Transportation
Testimony on: HB 831 - "Reducing Greenhouse Gas Emissions - Commercial and Residential Buildings"
Organization: Climate Parents of Prince George's
Person Submitting: Joseph Jakuta, Lead Volunteer
Position: Favorable, with Amendments
Hearing Date: February 25, 2022

Dear Mr. Chairman and Committee Members:

Thank you for considering our testimony in support of HB 831 - "Reducing Greenhouse Gas Emissions - Commercial and Residential Buildings." Climate Parents is a campaign to reduce climate change causing pollution in our schools and our group is active in Prince George's County. In particular, we are currently working directly with Prince George's County Public Schools (PGCPS) technical staff and other advocates to develop a Climate Action Plan for PGCPS

The 2018 Intergovernmental Panel on Climate Change (IPCC) Special Report found that limiting global warming to 1.5°C above pre-industrial levels by 2100 would require human-caused emissions of carbon dioxide (CO_2) to fall by about 45 percent from 2010 levels by 2030 and reach 'net zero' by 2050 as a planet. Science gives us the end date for burning fossil fuels and as blessed as we are in Mayland we must lead, we must get there sooner.

We are generally supportive of the efforts to implement Building Emissions Standards. This type of program is being shown to be effective in the District of Columbia and a program has been adopted in Montgomery County. However, we are greatly concerned over an exemption of governmental buildings, and specifically schools, from being required to meet building performance standards. There are 1428 schools in the state of Maryland and nearly every one of these is both powered using fossil fuels and less than efficient. This costs the taxpayers money in terms of operating costs, produces harmful oxides of nitrogen emissions that impact student's learning environment and health, and most germain to this legislation, emits greenhouse gasses.

Of course you are hearing about how schools cannot be retrofitted, but the evidence when it is tried shows the opposite. Recently PGCPS completed deep retrofits of Glenarden Woods Elementary School and Greenbelt Middle School. The heating and cooling systems in these buildings were replaced with geothermal heat pumps, solar panels were installed on these buildings, and they were made more efficient and healthy. Why was this path taken – because it made the most economic sense.

Besides the specific amendment of including governmental buildings, including schools, as "covered buildings", we support the Climate Partners' Priority Amendments for HB 831 that are attached.

We must get to net zero. We are at an inflection point when it comes to our children's future. We know that time is coming to an end on our test and we need to stop passing the problems of burning fossil fuels on to future generations. We implore you to enact this legislation, with amendments to include governmental buildings, that will require holistic changes in the way we consume energy in Maryland and to make our schools resilient for years to come, for our children's sake.

We encourage a **FAVORABLE** report, with **AMENDMENT**, for this important legislation.

Attachment - Climate Partners' Priority Amendments

1. **Strengthen provisions related to Building Emissions Standard**

HB 831 directs MDE to create a Building Emissions Standard 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 implementing a Building Energy Performance Standard (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 & 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. 223).

- **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 HB 831 with SB 528. 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 HB 806 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
  - 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
  - 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 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 HB 831. *A Climate Catalytic Capital Fund is an innovative funding strategy envisioned in SB 528 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.*