Committee: Environment and Transportation Testimony on: SB 528 - "Climate Solutions Now Act of 2022" Organization: Climate Parents of Prince George's Person Submitting: Joseph Jakuta, Lead Volunteer Position: Favorable, with Amendments Hearing Date: March 24, 2022

CLIMATE PARENTS

Dear Mr. Chairman and Committee Members:

Thank you for considering our testimony in support of SB 528 - "Climate Solutions Now Act of 2022." 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, elected officials, and other advocates to develop a Climate Change Action Plan for PGCPS as part of a focus work group created by the Board of Education.

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 (CO₂) 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.

SB 528 does just that and provides many tools to make progress in Maryland. We are particularly supportive of the establishment of Building Energy Performance Standards and the requirement to end purchases of diesel powered school buses by FY 2025, though wanted to focus on the area of net-zero schools.

In a 2019 Report from the US Green Building Council, a variety of different buildings were examined, but most germaine, schools.¹ This study assumed an upfront cost of \$365/GSF based on an existing net-zero school, which is slightly higher than \$320/GSF, which is what the net-zero Wilde Lake was constructed for. Despite the upfront costs, the energy use decreased by 45%, and they projected that net-zero schools would break-even after 13-16 years with a 3-9% decrease in the total cost of ownership over 30 years. This is proof that wise upfront costs pay dividends to the taxpayer.

But is this transferable to Maryland? PGCPS has shown that nearly fossil fuel free schools are not just possible, but are often the best decision financially. PGCPS is relying on a new financing model for six new schools. Of these six schools five will be heated and cooled using geothermal systems rather than fossil fuel, and geothermal was chosen because it was the option that made the most economic sense in light of the 30 year total cost of ownership calculations required by the IAC. It is not just alternatively financed schools where this is possible, PGCPS constructed six elementary schools, one middle school, and one high school with geothermal heating using conventional financing. PGCPS has even retrofitted two existing schools with geothermal because it was the economically reasonable decision.

Additionally, recent recommendations transmitted from the aforementioned Climate Change Action Plan Focus Work Group, recommend that "All New Construction Will Move Towards Ultra Efficient Fossil-Fuel Free/Net

¹ US Green Building Council. "Zero Emissions Buildings in Massachusetts: Saving Money from the Start" https://builtenvironmentplus.org/wp-content/uploads/2019/09/ZeroEnergyBldgMA2019.pdf

Zero Ready", "Phase Out Fossil-fuel Powered Steam and Water Heating Systems", among others.² This shows that the second largest school district in Maryland is already showing that net-zero is the direction that Maryland needs to move. It should be noted that these recommendations also support the zero emission school bus provisions in SB 528.

Of course there is an upfront cost to realize the long-term savings from net-zero. That is why the Net-Zero School Grant Fund (NZSGF) is crucial to the success of the program. Through our conversations with technical staff it was the extra funds to install solar to get a building to net-zero where the cost becomes challenging, even if schools built to be all electric were already economical. The NZSGF can provide the additional upfront capital to ensure that the net-zero schools are constructed that will save the taxpayers money and our children's planet.

Concerning amendments, we support the Climate Partners' Priority Amendments for SB 528 that are attached.

We must get to net-zero. We are at an inflection point when it comes to our children's future. We implore you to enact this legislation 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.

² PGCPS Board of Education Climate Change Action Plan Focus Work Group. "Climate Change Action Plan (CCAP) Priority Recommendations." https://go.boarddocs.com/mabe/pgcps/Board.nsf/c4cf1644198dfd9986257503000d636f/1487cbd08950f0ad85258809007b70c5/\$FILE/PGCPS%20Climate%20Change%20Ac tion%20Plan%20Recommendations%20-%20FINAL%20March%2015%202022r.pdf

Attachment - Climate Partners' Priority Amendments

Building electrification and efficiency:

- Climate Catalytic Capital Fund
 - Explicitly state that 40% of funds from the Climate Catalytic Capital Fund be spent in low and moderate-income neighborhoods and that funds can be spent on whole-structure retrofits (including multi-family buildings) including health, safety, weatherization, and electrification measures.
 - o The purpose of the funds should explicitly include "Facilitate the electrification of the building sector".
 - o Explicitly state that funds cannot be used for installation of new equipment that uses fossil fuels
 - o Funds from alternative compliance payments should go to the Climate Catalytic fund to be spent on low-income whole-structure retrofits, including low-income multi-family buildings.
- On page 35, lines 2-3, strike "water and space heating" and substitute "on-site energy" and add on line 3, "except for kitchen appliances".
- On page 35, following line 9, add energy efficiency provisions for buildings. Add:
 - D. For new covered buildings funded at least 25% by State funds
 - A 40% reduction in modeled energy use consumption over the 2018 International Energy Conservation Code for permit applications received between Jan 1 2023 and Dec 31 2025
 - A 60% reduction in modeled energy use consumption over the 2018 International Energy Conservation Code for permit applications received between Jan 1 2025 and Dec 31 2027
 - E. For all other new covered buildings
 - A 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 2027
 - A 60% reduction in modeled energy use consumption over the 2018 International Energy Conservation Code for permit applications received F. MAJOR RENOVATIONS – Energy Conservation
 - F. "Major Renovation" means a renovation project:
 - For which the total projected cost exceeds 50% of the assessed value of the existing building; or
 - Involving a change of use, if the change involves the application of different requirements of the standards.
 - G. Except as provided in subsection (_) of this section, if a covered building is undergoing a major renovation, the building shall be renovated to achieve:
 - 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.

H. A local jurisdiction may waive the requirements under subsection (_) of this section if the building owner demonstrates that the cost of the improvements necessary to achieve the required energy reductions would exceed projected operational and energy savings from the improvements over a certain payback period:

- o A 25-year period for all buildings funded at least 25% by the State.
- o A 15-year period for all other buildings.
- Provisions regarding "alternative compliance pathway" on page 47, lines 20 -23, and lines 27-29, should be sunsetted. We suggest a sunset of 12/1/2030
- Pages 47, delete lines 18-19 ("PROVIDE MAXIMUM FLEXIBILITY TO THE OWNERS OF COVERED BUILDINGS TO COMPLY WITH BUILDING EMISSIONS STANDARDS")
- The Building Emission Performance Standards regulations directive under 2-1602 (C) should
 - o require that the adopted regulations prioritize direct emission reductions from qualified buildings via electrification plans and pathways,
 - o provide protection against financial cost pass-through and evictions for tenants in covered multi-family buildings, 3) require covered public buildings' retrofits to be completed with a high-quality workforce (i.e. prevailing wage, insurance coverage, paid leave, etc.) (pg. 48)

Equity and Environmental Justice Provisions

• Strengthen the provisions on pages 9-12 by including language that requires 40% of investments go to overburdened communities and Rosenberg Justice 40 bill and/or the Boyce/Watson all agency climate, equity, and labor test language.

- o The language in the Boyce/Watson all agency climate, equity and labor test should be incorporated on page 22, lines 12-15 as well
- o The Interagency Commission on School Construction should be included as an agency required to consider climate in long-term planning

Net Zero Schools

- Explicitly state that the IAC state school construction funding process may cover planning, design, and engineering for net-zero schools.
- School buildings that are not net-zero should be net-zero ready Insert on Page 35, following line 6 (12-501(3)(I)(2)(A (under the provision requiring solar ready):
 - A. The Installation of Solar Energy Systems
 - To include a 40% roof set aside and necessary electrical panel and conduit requirements. if the building:
 - Will have 20,000 square feet or more of continuous roof space, excluding the parking area; and
 - Will be 20 stories or less in height, above grade plane.
 - B. Regulations adopted under this subsection may authorize a local jurisdiction to waive the solar-ready requirement for a building on a specific finding that:
 - incident solar radiation at the building site is less than 75% of incident solar radiation at an open site; or
 - shadow studies indicate that 25% of a building's roof area will be in shadow.
 - Clarify the definition of "Solar Ready" to include the 40% roof set aside and the necessary electrical panel and conduit requirements.
- Delete "subject to the availability of funding" on Page 8 Line 14 and replace that language with one of the options below -
- P. 8, line 9-13, (5-312(c)(2)(I), Delete para. "Except as Provided in . . Delete 5-312 (c) (2) (I) of the Education Article that was inserted: except as provided in subparagraph (iii) of this paragraph, the net-zero energy requirements that apply for a building to meet the definition of a 'high performance building" under § 3-602.1 12 of the state finance and procurement article

OR

- Amend to read: Except as provided in Subparagraph III of this Paragraph, Public Schools shall be required to achieve a 40% reduction in modeled energy use consumption over the 2018 International Energy Conservation Code by 2023 and a 60% reduction in modeled energy use consumption over the 2018 International Energy Conservation Code by 2025.
- Pg 40 line 15-17. Remove having the Council develop guidelines and instead require them to provide an annual report on the status of meeting the high performance building requirements.
- Pg 8, line 25 pg 9, line 2. If a school qualifies for a waiver because the Interagency Commission determines that either (I) or (II) is true, the school must be net-zero READY.

Buy Clean Maryland Act

- Consider adding To SB528 the **Buy Clean Maryland Act** provisions from HB806 Del. Stein Public Buildings bill with one change related to the waiver provisions.
 - o Section 4-904 (E) **Strike** (4) RESULT IN ONLY ONE SOURCE OR MANUFACTURER BEING ABLE TO PROVIDE THE NECESSARY MATERIALS.
 - Add (F) IF ONLY ONE SOURCE OR MANUFACTURER IS ABLE TO PROVIDE THE NECESSARY MATERIALS, A SOLE SOURCE PROCUREMENT MAY BE ALLOWED, PROVIDED NONE OF THE OTHER WAIVER DETERMINATIONS ARE MADE.