



## Senate Bill 528

Climate Solutions Now Act of 2022

Date: February 15, 2022

Position: **Support with Amendments**

To: Education, Health and Environmental Affairs

From: Josh Kurtz, MD Executive Director

Chesapeake Bay Foundation (CBF) **SUPPORTS SB 528 WITH AMENDMENTS**. This legislation updates the state's goals for greenhouse gas emissions reductions and requires state agencies to incorporate climate impacts into their long-term planning. It strives to address environmental justice in communities most impacted by climate change and creates a working group to foster a just transition for Marylanders whose jobs are threatened by the transition to a climate-friendly economy. The bill seeks to reduce emissions from the building sector through requirements for new construction and building emission standards. It requires additional gains for energy efficiency through EmPOWER and fosters innovation through the Clean Energy Fund. It demands leadership from the state by reducing government building emissions and converting the state's vehicle fleet to electric.

Additional amendments from a partnership of environmental stakeholders advance strengthening and technical changes. With these amendments, SB 528 will reduce emissions from the largest sources across the state while balancing economic impacts to residents and businesses.

### **Tackling Climate Change is Critical for Chesapeake Bay Recovery**

Climate change has immediate and drastic impacts on the Chesapeake Bay, many of which are already being witnessed. Warmer climates translate into warmer waters, which decrease dissolved oxygen, exacerbating the Bay's fish-killing "dead zones" and contributing to algal blooms. Rising water temperatures stress fish and reduce the populations from the Bay's iconic striped bass to brook trout. Other temperature-sensitive species such as eel grass, a critical habitat plant, are at risk.

Atmospheric deposition of nitrogen is the highest nitrogen input load in the Chesapeake Bay. Nitrogen pollution feeds algal blooms that block sunlight to underwater grasses and suck up life supporting oxygen when they die and decompose. The principal source of oxidized nitrogen, also called NO<sub>x</sub>, is produced by machines or processes that are powered by gas, coal or oil, like the heating of a building<sup>1</sup>.

### **The legislation aligns long-term emissions reductions targets with international guidance and the Maryland Commission on Climate Change's recommendations.**

The long-term goal of reaching net zero by 2045 is widely regarded as critical for keeping global warming below 1.5 C and preventing the worst impacts of climate change.<sup>2</sup> The Intergovernmental Panel on Climate

<sup>1</sup> Chesapeake Bay Program, [Air Pollution: What airborne pollutants are affecting Bay health?](#)

<sup>2</sup> [IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C](#). Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.). *World Meteorological Organization, Geneva, Switzerland*, 32 pp.

Change including this goal in its report in response to the Decision of the 21st Conference of Parties of the United Nations Framework Convention on Climate Change to adopt the Paris Agreement.

The Maryland Commission on Climate Change recommended the same goal of net zero emissions by 2045 after evaluating the State's capacity to meet the goal, and in consideration of the economic impacts of action.<sup>3</sup> As described in the Commission's report, "The Commission's working groups heard from experts on topics, including decarbonizing the buildings sector, the power sector, and the transportation sector; the impact of climate change on coastal construction, labor and manufacturing, and the agricultural community; natural solutions to climate change, including carbon sequestration from forests and healthier soils; new targets for solar development and the offshore wind supply chain; emerging technologies; energy efficiency in homes and at businesses; and long and short-term climate resiliency and coastal hazard mitigation."<sup>4</sup>

**This legislation sets Maryland's government as a leader in action to mitigate climate change by targeting the largest sources of emissions.**

SB 528 not only provides a goal supported by science, but several actionable interventions that target the three largest sources of emissions – the buildings sector, the power sector, and the transportation sector. These three sectors account for over 85% of Maryland's emissions. This legislation directs each state agency to take into account the impacts of agency decisions relating to the 2045 net zero goal when conducting long-term planning, developing policy, and drafting regulations.

Climate change impacts are felt across our entire economy, costing the state \$10B-\$20B since 1981.<sup>5</sup> Requiring each state agency to evaluate their impacts will provide opportunities to implement the many fine-scale solutions that will be key to meeting the 2045 net zero goal. This approach also harnesses the subject-matter expertise of each department to reducing emissions in their sector. The State's path to emissions reductions will shed light on the most-effective ways to mitigate carbon pollution from all sectors. The State can leverage its purchase power to reduce overall costs to consumers through broad investments in new technologies, such as installation of infrastructure needed to support the adoption of electric vehicles.

**Requiring all newly constructed buildings to heating and water demands without fossil fuels will not only reduce fossil fuel use but also reduce costs to Maryland residents.**

Direct use of fossil fuels, primarily for space and water heating, account for 13% of statewide greenhouse gas emissions since 2017.<sup>6</sup> By requiring all newly constructed buildings to use electric heat pumps we will drastically reduce those greenhouse gas emissions. The costs associated with new construction of electrified homes is cheaper than homes constructed with gas or other fossil fuel heating systems<sup>7</sup>. The annual costs of maintaining electric heat pumps are also cheaper or comparable depending on the system. This transition will save Maryland homeowners and renters money each year.

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<sup>3</sup> Maryland Commission on Climate Change. [2021 Annual Report and Building Energy Transition Plan](#).

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

<sup>6</sup> Maryland Commission on Climate Change. [Building Energy Transition Plan: A Roadmap for Decarbonizing the Residential and Commercial Buildings Sectors in Maryland](#), November 2021.

<sup>7</sup> *Id.*

**SB 528 works to center those living in areas most at-risk for climate change impacts and those workers whose livelihood may be affected by the transition to a net-zero future.**

The bill establishes the Climate Catalytic Capital Fund that is administered by the well-respected Maryland Clean Energy Center. The fund will provide opportunities to access federal, state and private investment to support projects in overburdened communities. Projects that increase weatherization and implement electrification strategies will not only reduce GHGs but also costs for those communities for their energy bills. With a move to more electric buildings and transportation fleet the job market will evolve from traditional technologies. This bill establishes the Just Transition Employment and Retraining Work Group which would focus on assisting those displaced by the shift to find jobs in the new economy. The Work Group a diverse stakeholder group to determine a set of recommendations to reduce the impact to those workers.

**CBF urges the Committee's FAVORABLE report on SB 528.** For more information, please contact Robin Jessica Clark, Maryland Staff Attorney, at [rclark@cbf.org](mailto:rclark@cbf.org) and 443.995.8753