Testimony in SUPPORT of SB0471– Facilitating University Transformations by Unifying Reductions in Emissions (FUTURE) Act

Dear Chairman Pinsky and members of the Education, Health, and Environmental Affairs Committee,

My name is Emma Green, and I'm a second year Masters student at the University of Maryland Center for Environmental Science. I lived in Bowie for the first 23 years of my life and was taught from an early age that all politics is local and that our government has the power to make significant change. I moved to southern Maryland in 2020 and still believe in government, but when I'm unable to drive to my lab on Solomons Island because of sunny day flooding, it is clear that our government is failing us.

You're not only failing us, you're failing your children, your grandchildren, and generations to come.

The average age of a member of the Maryland General Assembly is 54.[1] I want to talk about how different our worlds are and why our generation dedicates so much time and energy to this cause.

When the average MGA delegate or senator was 21, it was 1989. In Annapolis, the temperature was around 38°F, there were 21 days above 90°F, and two days of high tide flooding.[2]

The median age of a University System of Maryland undergraduate is 21[3] , and our world looks a lot different.The temperature is about 2°F warmer than 1900, and we've seen sea levels rise by a foot in Baltimore[4].

What will the world look like when we are 54? It will be 2056, and using an average of the middle of the road projection scenarios (RCP4.5 and RCP6.0) from the IPCC, it will be 2.7°F warmer than when we were born, sea level will be around a half a meter higher, and

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[1] "The Maryland State Legislature." Center for Youth Political Participation, 13 July 2020, https://cypp.rutgers.edu/maryland/#:~:text=The%20average%20age%20of%20a,of%20the%20Maryland%20State%20Senate.

[2]U.S. Federal Government, 2021: U.S. Climate Resilience Toolkit Climate Explorer. [Online] https://crt-climate-explorer.nemac.org/ Accessed {13 February 2022}.

[3] USM data journals - median age* by student level and attendance status report for university system of maryland- USM Iris. (n.d.). Retrieved February 14, 2022, from https://www.usmd.edu/IRIS/DataJournal/Enrollment/?report=Median-Age-by-Level-Attendance

[4] Bradley, R., Karmalkar, A., and Woods, K. Climate Change State Profiles Maryland. Climate System Research Center, University of Massachusetts Amherst. https://www.geo.umass.edu/climate/stateClimateReports/MD_ClimateReport_CSRC.pdf.

6% of bugs, 8% of plants, and 4% of vertebrates will lose over half their range.There will be ice-free summers in the Arctic which will have large ramifications across the planet [5] We can also expect 21 more days over 90°F and around 180 more days of high tide flooding than this year, when you all are 54.[2]

How about when our children are 54? This will be around 2084, and the temperature could be 5.4°F warmer than 2054. The Arctic would be 8.4°F warmer, there would be 12 fewer frost days than when we were born. [5] High tide flooding in Annapolis would occur for about 80% of the year.[2] If my children decided to live in southern Maryland like I do now, their climate would be more like Farmers Branch, Texas than the southern Maryland I know -- 8.8 °F warmer and 35.5 % drier.[6]

If you feel like we can't afford the FUTURE Act because there are so many other priorities and provisions, please think about us and our children. Please think about how different our world will be from yours, and how as students, this is where we want our tuition money to be spent.

The bill is not prescriptive. We understand that each university has different infrastructure, different amounts of funding, and unique concerns. The testimony from USM and other institutions last year claimed that our bill requires that universities replace boilers, vehicle fleets that aren't being used, rebuild their buildings, or spend an exorbitant amount of money. That is not what our bill says. MSCAC students just ask that universities acknowledge and account for the damage that they are causing to the futures of the students they say they support.

The University System of Maryland emits more carbon than all other state agencies combined.

Youth are utilizing their agency to remind public research institutions of their guiding principles. This legislation will ensure that universities will lead the way in carbon neutrality,

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[5] IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [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.)]. In Press.

[6] Fitzpatrick, M.C., Dunn, R.R. Contemporary climatic analogs for 540 North American urban areas in the late 21st century. *Nat Commun* 10, 614 (2019). https://doi.org/10.1038/s41467-019-08540-3

address climate change while addressing climate justice, and empower students and institutions.

This bill makes Maryland Public Universities leaders in carbon reductions and climate justice by:

- Requiring carbon neutrality by 2035 (scopes 1 and 2 by 2025)
- Establishing an Environmental and Economic Justice Scholarship Fund for in-state students displaced by climate change or from environmental justice communities
- Facilitating the sharing of best practices and resources through establishing offices of sustainability at each institution
- Conducting a feasibility and implementation study for a sustainability education requirement for each institution

Respectfully,

Emma Green
MaryPIRG Student Climate Action Coalition
UMCES Campus Delegate and Assistant Campaign Coordinator