Written Testimony in support of HB 0803, the FUTURE Act.

February 23, 2021

My name is Dr. Maggie Holland, and I am an Associate Professor in the Department of Geography & Environmental Systems at UMBC. While I'm not an official spokesperson for UMBC, I am here to speak as a university educator, a researcher, and a mentor to students. I was also born in Baltimore, and part of my family heritage reaches back multiple generations within Maryland. I am a mother to two young future Maryland voters, students within the Montgomery County public school system.

I'm here today to speak in support of the proposed bill, HB 803, known as The FUTURE Act.

In light of others providing testimony here today, I'll keep mine to three main points.

1. This bill pushes the button to accelerate and reach net zero emissions by 2035, in line with global goals for keeping global warming to below 2 degrees Celsius. This also matches with the approach the Biden administration now seeks: to decarbonize the electricity sector by 2035 and reach net zero emissions for the entire nation by 2050. The state of Maryland is already a proud leader among US states in reducing emissions across sectors, and this bill helps incentivize action so that we can continue to demonstrate innovation and leadership with solutions for addressing the climate crisis. And what better places to stimulate that innovation than our universities and centers of higher education around the State. With the accelerated goals for net zero emissions that this bill lays out, our universities play the role of incubator of ideas, testing sites for new strategies, and can then lead the State in meeting the new federal targets.
2. This bill offers specific guidance related to carbon offsets, which often represent one key strategy for how universities plan to meet emissions reductions targets. Indeed for my own university's Climate Action Plan from 2020, carbon offsets are one of four strategies for reaching our overall emissions reductions targets. In my own experience with research on conservation strategies for slowing deforestation in tropical countries, I am well aware that carbon offset projects are not a panacea but can be useful tools in our climate solutions toolbox. And we are at a point in time where we need to be calling up all the tools available to us. I am especially supportive of how this bill outlines specific targets for carbon offset projects, pushing us to prioritize efforts within our own backyards. I see this as also offering a stimulus for our universities to explore new opportunities for carbon offsets. Imagine a scenario where one day the same oyster restoration efforts that our IMET researchers support and that aim to make Baltimore Harbor fishable and swimmable could be eligible to receive carbon offset payments, as those powerhouse oysters not only filter water, but mineralize carbon from the air and store it as calcium carbonate in their shells. This is the exciting frontier that carbon offsets present, where we can explore ways to mitigate climate change while also yielding benefits for our valuable but degraded ecosystems within the Chesapeake Bay watershed. Tied to this is the special carve out in this bill for environmental justice projects as eligible for carbon offset equivalents. As UMBC has made important steps forward as a community engaged campus, here yet is another mechanism through which we can work to engage and empower the actions of communities that have already been experiencing the layered injustices of systemic racism, and support efforts that prioritize social and climate justice. Here our universities can be centers of innovation around community engagement and empowerment tied to climate justice. In this example, I think of the work of organizations such as Baltimore Composting Collective, which works to implement neighborhood-scale composting in South Baltimore, diverting food waste away

from incineration, directing it instead to soil compost for urban gardening, representing work opportunities and healthy food alternatives for a community hard hit by air pollution and other environmental degradation. With these targets for local and environmental justice-related projects, this bill opens the door for universities to demonstrate the multiple ways that climate action can result in multiple benefits for communities and the environment in Maryland.

3. In the end, the reason why I am here today is to support this next generation, including the students who have led the effort to bring this bill to the floor today. At UMBC, I have co-designed and co-taught a course that we call Climate Change & Society – global change in the Maryland context. It has everything to do with preparing students for the kind of work that I see these students engaging in today – communicating on climate science, analyzing the policy levers that exist to shift institutions and communities into action, and advocating for that action to take place swiftly. But honestly, climate change enters into every course that I teach, and concern about the climate crisis extends across our campus community, regardless of field, discipline, belief system, or even political affiliation. The students who have led the charge from UMBC aren't majors in my department, but this crisis is foremost in their minds. The generation of students we have across our universities today are committed to moving beyond political paralysis on climate change issues and getting to a position of committed action. I am here for that action, and I am here for them.

Thank you for your time.

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