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THE MARYLAND HOUSE OF DELEGATES
ANNAPOLIS, MARYLAND 21401

**HB 729 – Facilitating University Transformations by Unifying Reductions in Emissions
(FUTURE) Act**

House Appropriations Committee – March 1, 2022

Chairwoman McIntosh, Vice Chair Chang, and my esteemed Committee Members,

Thank you for the opportunity to present today on my legislation HB 729 – the Facilitating University Transformations by Unifying Reductions in Emissions (FUTURE) Act. The bill is unique in that it was initially developed by a committed coalition of students in our state – the MaryPIRG Student Climate Action Coalition (MSCAC). As we have come to expect, student initiative is often the driving force behind climate change action and we are lucky to have these Maryland students leading the charge.

The bill ensures that all Maryland public universities achieve complete carbon neutrality by 2035, with an intermediate step requiring carbon neutrality for direct emissions and purchased electricity in 2025. Universities may utilize offsets in order to reach carbon neutrality. The legislation also contains a new provision creating an environmental justice scholarship fund – to be used to help students from communities impacted by climate change better afford attendance at a Maryland public institution.

Combating Climate Change

- From more extreme heat waves to shrinking sea ice and glaciers to an incredible loss of biodiversity, a warming planet’s effects are far-reaching and catastrophic.
- Maryland is among the states most vulnerable to climate change. The effects of climate change in Maryland are already apparent in air quality, rising seas, summer heat waves, and more frequent and violent thunderstorms.
- All of these changes affect the health and safety of our citizens and the state’s economy:
 - The American Lung Association 2020 State of the Air report rates Maryland extremely poorly for smog or ozone pollution;ⁱ
 - Between 1957 and 1963, Baltimore flooded 1.3 times per year, and Annapolis flooded 3.8 times per year;ⁱⁱ
 - Between 2007 and 2013 Baltimore flooded an average of 13.1 days annually, and Annapolis 39 days annually;ⁱⁱⁱ
 - Sea levels around Baltimore increased by nearly 12 inches in the last century;^{iv}
 - Extreme heat and cold swings – it is now common for weather to fluctuate by 20-30 degrees in a week;^v

- Long-term temperature data show that average temperatures in Maryland have risen in the last century and will continue to rise in the future;^{vi} and
- Maryland’s more frequent extreme rain and storm events directly damage infrastructure such as water treatment and supply, transportation, and electricity systems.^{vii}

Climate Change and the Impact on Environmental Justice

- Communities in Maryland that are already struggling are most likely to be impacted by climate change first:
 - Children in Baltimore suffer from asthma at more than twice the national rate;^{viii}
 - In Baltimore, the hottest neighborhoods are those with the greatest level of poverty;^{ix}
 - Underprivileged communities are on the frontline for air pollution and the health impacts of burning fuels as they are more likely to live in proximity of coal-fired power plants and waste-to-energy facilities in cities like Baltimore; and
 - Marylanders of color and residents of low-income communities experience higher rates of cancer from toxins in the air from incinerators^x.

What the Bill Does

Under the FUTURE Act, by 2035 all Maryland public universities must achieve complete carbon neutrality. By 2025, universities must achieve carbon neutrality for direct emissions and purchased electricity – this can be achieved through the purchase of carbon offsets, which many universities already utilize.

- **Direct emissions** (Scope 1) includes emissions physically produced on campus, including boilers, central heating plants, on campus power plants, university owned vehicles, refrigerants and chemicals, and agricultural sources.
- **Purchased electricity** (Scope 2) includes electricity produced by the burning of fossil fuels purchased by the university, but not produced on campus.
- **Induced emissions** (Scope 3) includes air travel financed by the university for faculty and staff, travel for study abroad programs, travel of students, faculty, and staff commuting to and from the campus, and the university’s solid waste and waste water. Scope 3 emissions must be carbon neutral by 2035.
- **By 2055**, carbon offsets may no longer be used for Scopes 1 and 2.

If an institution utilizes offsets to achieve carbon neutrality it must:

- For each ton of CO₂ accounted for by carbon offsets, universities must subtract the cost of that offset from the social cost of carbon, with the difference going towards the environmental justice investment fund.
 - This fund will be used as scholarship funds for students who are from designated “environmental justice communities” or who have been displaced by climate change.
- If carbon offsets are used to achieve carbon neutrality, they must undergo an industry wide standard verification process to ensure they are effective.

To ensure sustainability goals are met by 2035, universities must also establish or designate a dedicated position to ensure climate and sustainability goals are met. The Maryland Higher Education Commission, in conjunction with the USM, Morgan State, and St. Mary's College of Maryland, is required to produce a feasibility report on establishing a Sustainability General Education Requirement for public colleges and universities in Maryland.

Poll after poll shows that Marylanders of all backgrounds are especially concerned about climate change and want to see state government take this kind of action. This legislation also dovetails with the priority placed by the Speaker on passing a significant package of climate change legislation and is a perfect companion to the policies being considered in the *Climate Solutions Now* package. By positioning our universities as centers of environmental leadership, we will also be providing them with a unique tool for recruiting the best and brightest young people from around the world. This legislation will make our Maryland system the first major university system with this significant goal and will help attract the next generation of students that cares deeply about this issue.

We have worked closely with the University System in crafting this legislation and are also working on creative solutions to address any additional funding that might be needed to accomplish the goals in this bill. **I urge a favorable report and thank you for your consideration.**

ⁱ “State of the Air Report Card: Maryland,” American Lung Association. <https://www.stateoftheair.org/city-rankings/states/maryland/>

ⁱⁱ <https://extension.umd.edu/hgic/topics/climate-change-impacts>

ⁱⁱⁱ Ibid.

^{iv} Ibid.

^v Ibid.

^{vi} “Climate Change Program,” Maryland Department of the Environment. <https://climatechange.maryland.gov/science/#:~:text=The%20effects%20of%20climate%20change,livelihoods%2C%20and%20the%20state's%20economy>

^{vii} Ibid.

^{viii} “How Maryland can become a leader on climate change,” Washington Post Opinion. https://www.washingtonpost.com/opinions/local-opinions/maryland-climate-change-air-quality-emissions/2021/02/18/1391172a-708a-11eb-85fa-e0ccb3660358_story.html

^{ix} Ibid.

^x Ibid.