

Donald De Alwis  
Testimony for HB0729  
Appropriations Committee, Feb. 25, 2022  
FUTURE Act  
Position: Favorable

Good afternoon Chairwoman McIntosh and delegates of the Appropriations Committee, my name is Donald De Alwis, and I am a medical student at the University of Maryland, Baltimore. I am a national board member of Medical Students for a Sustainable Future, and previously, a research analyst for the Medical Society Consortium on Climate and Health.

I am here in support of the FUTURE Act, and I'll confer two points today:  
First, that the FUTURE Act can reduce the health burden of fossil fuel combustion in Maryland.  
And second, that the costs of inaction are significant.

Point 1: The FUTURE Act will help USM continue to reduce reliance on fossil-fuel-derived energy. These energy sources harm human health - emissions damage the heart and lungs, contributing to illnesses like heart attacks and COPD<sup>1</sup>.

For some perspective: I spent my first seminal weeks as a medical student in a human anatomy lab, and on the lungs of almost every donor body in our lab I found several sickly, black spots. Our donors were not all smokers - many developed these black lung spots as a byproduct of breathing in years of toxic air pollution. This is the human cost of dirty energy. It is hypocritical for my university to pollute the lungs of community members it strives to protect.

Asthma rates in Baltimore's children are over 30% higher than the national average<sup>2</sup>, and air pollution is a known contributor, particularly for children of color. Healthcare professionals need an upstream solution. That is why the FUTURE Act is so important.

My second point is that the cost of sitting on our hands is immense. Nationally, the annual health-related costs, in dollars, of air pollution are approximated in the tens to hundreds of billions of dollars<sup>3</sup>. The FUTURE Act will help USM accelerate emissions reductions, and the scale of USM operations (it supports over 200,000 students and faculty<sup>4</sup>) means considerable health benefits and potential health-related cost savings to Marylanders breathing cleaner air.

In conclusion, this bill saves lives, reduces air pollution-related healthcare costs, and inspires a generation of students to become climate action changemakers. My institution recently completed the first successful pig-to-human heart transplant in the world, and I am genuinely excited for the sustainability innovation that will blossom at USM through the FUTURE Act. Thank you for your time and I urge a favorable report.

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<sup>1</sup> U.S. EPA. Integrated science assessment (ISA) for particulate matter. Published Dec 2019.

<https://www.epa.gov/isa/integrated-science-assessment-isa-particulate-matter>

<sup>2</sup> Baltimore City Health Department. Asthma in Baltimore. <https://health.baltimorecity.gov/node/454>

<sup>3</sup> Goodkind AL, Tessum CW, Coggins JS, Hill JD, Marshall JD. Fine-scale damage estimates of particulate matter air pollution reveal opportunities for location-specific mitigation of emissions. Proc Natl Acad Sci USA. 2019;116(18):8775-8780. <http://doi.org/10.1073/pnas.1816102116>.

<sup>4</sup> University System of Maryland. 2021 Annual Report.

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