



CHESAPEAKE BAY FOUNDATION

Environmental Protection and Restoration
Environmental Education

Senate Bill 471

Facilitating University Transformations by Unifying Reductions in Emissions (FUTURE) Act

Date: February 15, 2022

Position: **Support**

To: Education, Health, and Environmental Affairs

From: Josh Kurtz, Maryland Executive Director

Chesapeake Bay Foundation (CBF) **SUPPORTS** SB 471. This legislation commits the University System of Maryland to certain deadlines toward achieving lower carbon emissions and carbon neutrality, which supports the efforts to clean-up the Chesapeake Bay Watershed. The legislation strengthens climate leadership within the Universities by requiring the creation of sustainability. It also provides scholarships for students impacted by climate change.

Reducing greenhouse gases from Maryland's large buildings supports the Bay clean-up

SB 471 is a comprehensive approach to improving Maryland's public higher education institutions existing carbon reduction plans by setting deadlines for achieving certain carbon reduction goals. According to the U.N. climate science panel, man-made carbon dioxide emissions need to fall by 45% by 2030 and reach net zero by 2050 to prevent catastrophic environmental consequences.¹ By tackling Scope 1, Scope 2 and Scope 3 emissions the Universities will demonstrate how to holistically reduce the emissions from their operations.

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 reducing 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 NOx, is produced by machines or processes that are powered by gas, coal or oil, like the heating of a building.²

¹ Rowling Megan, [Net-Zero emissions: What it is and why does it matter so much?](#), World Economic Forum, Sept. 23, 2020.

² Chesapeake Bay Program, [Air Pollution: What airborne pollutants are affecting Bay health?](#), last visited 2.22.2021.
Maryland Office • Philip Merrill Environmental Center • 6 Herndon Avenue • Annapolis • Maryland • 21403
Phone (410) 268-8816 • Fax (410) 280-3513

The Chesapeake Bay Foundation may be a source of carbon offsets for Maryland institutions

Methods for achieving carbon neutrality under this legislation include purchasing carbon offsets for emissions that may not be fully reduced, which drives purchasing local carbon offsets. With a phased-in approach, the legislation will require 75% of carbon offsets purchased by institutions to be achieved in Maryland, the Chesapeake Watershed and environmental justice projects by 2055. This aim supports the environmental work that benefits the Chesapeake Bay and places rightful emphasis on environmental projects that improve social equity.

The WGL CleanSteps Offset Program partners with the Chesapeake Bay Foundation to complete unverified offset projects, such as tree plantings that benefit the Chesapeake Bay.³ The Chesapeake Bay Foundation is currently coordinating Pennsylvania's Keystone 10 Million Tree Partnership⁴ and conducts tree plantings in Maryland, too. This is an example of work that Maryland institutions might use to offset their carbon emissions.

CBF urges the Committee's FAVORABLE report on SB 471. For more information, contact Robin Jessica Clark, Maryland Staff Attorney at 443.995.8753 and rclark@cbf.org.

³ University of Maryland, [University Sustainability Council Carbon Offset Workgroup Report](#), December 2015.

⁴ Keystone 10 Million Trees Partnership, [For a clean Pennsylvania](#), last visited 2.22.2021