

CHESAPEAKE BAY FOUNDATION

Environmental Protection and Restoration Environmental Education

House Bill 831

Reducing Greenhouse Gas Emissions - Commercial and Residential Buildings

Date: February 25, 2022 Position: Support with Amendments

Josh Kurtz, MD Executive Director To: **Environment and Transportation** From:

Chesapeake Bay Foundation (CBF) SUPPORTS House Bill 831 WITH AMENDMENTS. This bill reduces direct greenhouse gas emissions from commercial and residential buildings by requiring the adoption of an allelectric code for water and space heaters for new construction, requiring the development of building emission standards for covered buildings resulting in net zero emissions from buildings by 2040, and creating a building energy transition implementation task force to plan for reaching the legislated goals.

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.1

Requiring all newly constructed buildings to heating and water demands without fossil fuels will not only reduces fossil fuel use but also reduces costs to Maryland residents.

Direct use of fossil fuels, primarily for space and water heating, account for 13% of statewide emissions since 2017². By requiring all newly constructed buildings to use electric heat pumps we will drastically reduce those greenhouse gas emissions. The costs associated with new construction of electrified homes is cheaper than homes constructed with gas or other fossil fuel heating systems3. The annual costs of maintaining electric heat pumps is also cheaper or comparable depending on the system - which will save Maryland home owners and renters money each year.

CBF urges the Committee's FAVORABLE report on HB 831 WITH AMENDMENTS. Please see the Maryland Climate Partners memo for proposed amendments. For more information, please contact Robin Jessica Clark, Maryland Staff Attorney, at rclark@cbf.org and 443.995.8753

³ Ibid.

Maryland Office • Philip Merrill Environmental Center • 6 Herndon Avenue • Annapolis • Maryland • 21403 Phone (410) 268-8816 • Fax (410) 280-3513

¹ Chesapeake Bay Program, Air Pollution: What airborne pollutants are affecting Bay health?, last visited 2.22.2021.

² Maryland Commission on Climate Change, Building Energy Transition Plan, November 2021.