EARTHJUSTICE

February 4, 2022

Chair Maggie McIntosh
Members of the House Appropriations Committee

Re: Support for HB 365: Public School Construction - Fossil Fuel-Based Energy System Costs – Prohibition (Green School Construction Act of 2022)

Earthjustice, Chesapeake Climate Action Network Action Fund, Howard County Climate Action, and the Maryland League of Conservation Voters strongly support the passage of HB 365. To achieve Maryland's Greenhouse Gas ("GHG") emissions reduction goals, set forth in the Greenhouse Gas Emissions Reduction Act of 2016, and to support Maryland's clean energy future, Maryland must stop investing in fossil-fuel based heating systems. HB 365 is an important step toward eliminating the use fossil-fuel energy systems in Maryland.

Fossil fuels come with grave consequences for Marylanders' health and Maryland's climate future. Burning fossil fuels, particularly gas, causes climate change through the release of greenhouse gases. Greenhouse gases warm the Earth by absorbing energy and slowing the rate at which the energy escapes to space; they act like a blanket insulating the Earth.[1] Methane is a component of gas and a powerful contributor to climate change. methane impacts are significant and yet often ignored. For example, a recent study demonstrates that emissions from the gas supply chain were sixty percent higher than previous estimates.[2] Similarly, a subsequent study found much higher rates of methane leakage than previously estimated in six East Coast Cities, including Baltimore.[3]

In order to address this crisis, the Maryland General Assembly passed the Greenhouse Gas Emissions Reduction Act of 2016. This law renewed the 2009 Maryland law that set a goal to reduce climate-polluting GHG emissions statewide by 25 percent by 2020. The 2016 reauthorization bill also further extended the goal to a 40 percent reduction by 2030, requiring long-term cuts in pollution.

The Maryland Department of the Environment ("MDE") recognized the need to move away from GHG emitting fuels in its 2030 Greenhouse Gas Reduction Act Plan. The 2030 GGRA Plan proposes to begin incentivizing increased deployment of efficient electric heat pumps to heat homes and businesses, including in buildings that currently use a different fuel for heat to transition the energy source for building heating to increasingly clean electricity.[4]

[1] U.S. Environmental Protection Agency, Understanding Global Warming Potentials, https://www.epa.gov/ghgemissions/understanding-global-warming-potentials, last visited Feb 2, 2022).
[2] Ramon A. Alverez et al., Assessment of methane emissions from the U.S. oil and gas supply chain, 361 SCIENCE 6398, at 186–188 (July 13, 2018).
[3] Genevieve Plant et al., Large Fugitive Methane Emissions From Urban Centers Along the U.S. East Coast, Geophysical Research Letter, (July 15, 2019).
[4] MDE, GGRA: 2030 GGRA Plan (Feb. 19, 2021), https://perma.cc/9JJ5-ZTUG ("2030 GGRA Plan").

Similarly, the Maryland Commission on Climate Change ("MCCC") recently found that electrifying fossil fuel end-uses is a critical part of decarbonizing buildings.[5] According to the MCCC, the most efficient air source heat pumps installed in 2021 can eliminate direct emissions and reduce total emissions (including emissions from the electric grid) 63% compared with the most efficient gas furnaces and 76% compared with the most efficient oil boilers over 15 years of operation.

With regard to costs, MDE recently studied this issue for the MCCC. MDE worked with Energy + Environmental Economics ("E3") to conduct a Maryland Building Decarbonization Study ("E3 Maryland Study").[6] Among other things, the E3 Maryland Study found that all-electric new buildings typically have the lowest construction and operating costs. All-electric new buildings of all types were found to have the lowest total annual costs (including equipment, maintenance, and energy costs). E3 estimated annualized lifecycle consumer costs—including costs for equipment, operations and maintenance, and utility bills—for several types of buildings and found that, given continued improvement in the cost and performance of electric space and water heating equipment and projected increases in natural gas rates by 2035, most all-electric buildings will have lower lifecycle costs than mixed-fuel alternatives.

The Committee also must be conscience of the fact that once a school becomes a gas customer, the school will remain a gas customer for decades, thus increasing and continuing the burning of fossil fuels rather than producing a reduction in GHG emissions as required by Maryland law. Moreover, the E3 Maryland Study also found that gas consumption is projected to decrease between sixty-two and ninety-six percent by 2045. Thus, according to the Study, gas delivery rates could increase more than twenty-times the current rate for consumers left on the gas system. The practical result of this abandonment of fossil fuel gas is that the newer customers, who cannot leave because of their recent investment in a gas heating system, will bear more and more of the fixed costs. Therefore, schools will pay an ever-increasing cost for their gas service as the costs of the gas infrastructure are divided over fewer and fewer customers.

The Committee should be aware of the other options available for school heating. At least 7,300 schools across the United States are using solar to save on utilities, introduce students to renewable energy and reduce their GHG emissions. Nearly 80% of solar capacity installed at U.S. public schools resulted from the arrangements that shift the financial and logistical burdens of using solar onto professional energy companies. This means that for those schools that use solar energy systems, the solar on schools is not coming out of school budgets — it is getting paid for by a developer who owns, installs and maintains the solar energy system. So the schools see no upfront costs and achieve immediate cost savings.

Maryland cannot expect to achieve its GHG reduction goals while continuing to invest in fossil-fuel energy systems. In order to achieve Maryland's GHG emissions reduction target,

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[5] MCCC, Decarbonizing Building in Maryland (Sept 21, 2020).

[6] Maryland Commission on Climate Change, *Appendix A: Building Energy Transition Plan*, at 7–8 (Nov. 2021), https://mde.maryland.gov/programs/Air/ClimateChange/MCCC/Documents/2021%20Annual%20Report%20Appendices%20FINAL.pdf

Maryland must shift away from reliance on all fossil fuels, including gas. Minimizing and eventually eliminating any additional investment in fossil fuel infrastructure is essential to achieving Maryland's GHG reduction goals, as well as being the economically sensible choice.

Finally, Earthjustice, Chesapeake Climate Action Network Action Fund, Howard County Climate Action, and the Maryland League of Conservation Voters thanks Delegate Korman for his leadership on this important issue.

Earthjustice, Chesapeake Climate Action Network Action Fund, Howard County Climate Action, and the Maryland League of Conservation Voters strongly urge a favorable report for HB 365.

Thank you in advance for your support. Should you have any questions, please contact me at smiller@earthjustice.org.

Respectfully submitted,

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Earthjustice