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## OPC

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BILL NO.: House Bill 1134

Maryland Building Performance Standards – Fossil Fuel Use and Electric–Ready Standards

COMMITTEE: Environment & Transportation

HEARING DATE: March 8, 2023

SPONSOR: Delegates Acevero, Bridges, and Ivey

POSITION: Favorable with an amendment

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The Office of People's Counsel supports House Bill 1134 with the addition of a clarifying amendment. The bill will require most new buildings in Maryland to meet all energy demands without fossil fuels—i.e., to be fully electrified—while requiring new construction that cannot feasibly be built without fossil systems and appliances to meet a separate "electric-ready standard." OPC supports this requirement because fully electrifying new buildings is both in the economic interest of Maryland residential utility customers and a critical step for Maryland's achievement of its greenhouse gas (GHG) reduction goals.

Direct fossil fuel use in buildings for space heating, water heating, and cooking accounts for approximately 14 percent of Maryland's GHG emissions. For Maryland to achieve net zero emissions by 2045, in accordance with the Climate Solutions Now Act (CSNA) of 2022, both new and existing buildings must generally electrify these energy loads with heat pumps for space and water heating and electric induction stoves.

For the small percentage of building energy loads that cannot feasibly be electrified, decarbonized gaseous fuels like "renewable" natural gas (RNG) and hydrogen produced from renewables could be substituted for methane. But as shown in OPC's

2022 report, *Climate Policy for Maryland Gas Utilities: Financial Implications*,<sup>1</sup> full electrification is not only much less expensive than using decarbonized gaseous fuels for new residential construction; it is already much less expensive than constructing non-decarbonized buildings with both gas furnaces and central air conditioning.

Similarly, RMI's 2022 report, *The Economics of Electrifying Buildings*, found that in nine U.S. cities representing a range of climate zones, all-electric single-family new construction is more economical to build and operate than a home with gas appliances and has lower lifetime emissions.<sup>2</sup> A building decarbonization analysis prepared by Energy + Environmental Economics (E3) for the Maryland Climate Commission in 2021 found that for small commercial buildings, too, all-electric new construction is cheaper than mixed-fuel new construction due to lower capital and operating costs.<sup>3</sup>

In light of the favorable economics of all-electric construction, electric heating stock (mostly heat pumps) has been increasing for years, while gas heating stock has stagnated, as this figure from OPC's report shows:

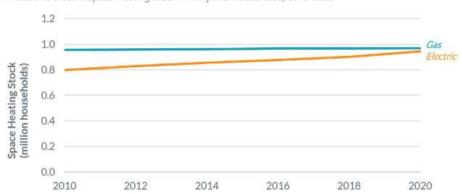


Figure 1. Gas and Electric Space Heating Stock in Maryland Households, 2010-2020

Source: US Census Bureau: American Community Survey. Table DP04: Selected Housing Characteristics for Maryland, 5-year Estimates. June 2, 2022. Available at: https://data.census.gov/cedsci/table?q=DP04&g=0400000US24&tid=ACSDP5Y2020.DP04

And with federal incentives for heat pumps under the Inflation Reduction Act, this trend is expected to accelerate.

OPC's report explains that increasing electrification will lead to fewer gas utility customers and sales. If sales decline faster than gas utilities' asset bases depreciate and faster than utilities can lower their operating and maintenance costs, the utilities will seek

<sup>&</sup>lt;sup>1</sup> Available at https://opc.maryland.gov/Gas-Rates-Climate-Report

<sup>&</sup>lt;sup>2</sup> The nine cities RMI studied are Austin, Texas; Boston; Columbus, Ohio; Denver, Eugene, Oregon; Las Vegas; Minneapolis; New York; and Seattle. Available at <a href="https://rmi.org/economics-of-electrifying-buildings/">https://rmi.org/economics-of-electrifying-buildings/</a>

<sup>&</sup>lt;sup>3</sup> See Energy + Environmental Economics, "Maryland Building Decarbonization Study: Final Report," October 20, 2021.

approval for higher gas rates to recover their costs over fewer unit sales. Higher rates will in turn spur more customers to electrify, and those left on the gas system will be required to pay even higher rates. This vicious cycle will have the greatest impact on low- and moderate-income households who lack access to the upfront capital needed to electrify or rent from building owners that lack incentive to electrify.

This trend, which has already begun, was the impetus for a petition that OPC filed with the Public Service Commission in February to require long-term gas utility planning and certain immediate actions by the utilities.<sup>4</sup> It is also the basis of OPC's support for HB 1134, along with the recognition that, as noted above, the electrification of buildings is necessary for Maryland to meet its GHG reduction goals. To the extent that new buildings are built with gas systems and appliances, the owners and inhabitants of those buildings will be faced with higher and higher costs for gas utility service. By directing the Department of Labor to adopt an all-electric building performance standard, HB 1134 will ensure that the owners and inhabitants of new buildings are not unnecessarily saddled with these costs and the costs of future all-electric retrofitting.

Building standards create important benefits for residential utility customers without any direct impact on utility rates. New building electrification requirements will minimize customer long-term costs, making such standards one of the most cost-effective ways of bringing benefits to customers. In contrast, retrofitting an already constructed building is costly for residential customers and delays the benefits for customers of lower bills from efficient electric technologies. For these reasons, requiring that new buildings be all-electric represents low-hanging fruit for the State's efforts to reach its greenhouse reduction goals.

To the extent that certain types of new commercial buildings cannot be feasibly electrified, HB 1134 allows developers to obtain a waiver from the full electrification standard, provided they meet an "electric-ready standard" to be developed by the Department of Labor. Since OPC represents the interests of residential utility customers, we take no position on this part of the bill. We are aware that the CSNA directs the Department of Labor's Building Codes Administration to "develop recommendations for an all–electric building code and building energy performance standards ... including appropriate exemptions for particular industries ... local conditions, and sectors deemed critical infrastructure vital to the interest of national security as identified by the U.S. Department of Homeland Security's Cybersecurity and Infrastructure Security Agency." The CSNA provides for the delivery of an interim report to Legislative Policy Committee by January 1, 2023, and delivery of a final report by December 1, 2023.

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<sup>&</sup>lt;sup>4</sup> The petition is available on OPC's website at <a href="https://opc.maryland.gov/Gas-Planning-Petition">https://opc.maryland.gov/Gas-Planning-Petition</a>

OPC recommends one amendment to HB 1134. At page 2, lines 27-29, the bill requires standards to require new buildings to meet all energy demands "without the use of fossil fuels." Although the percentage of Maryland's electricity that comes from fossil fuels will decline in the years ahead due to Maryland's Renewable Portfolio Standard and other federal and state policies, the State's electricity will not be fossil-free for some time. We therefore recommend modification of this language to read, "without the *direct* use of fossil fuels."

**Recommendation:** OPC requests a favorable report from the Committee on HB 1134 with the recommended amendment.