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Committee: Education, Energy, and the Environment

Testimony on: HB 864, “Energy Efficiency and Conservation Plans” (EmPOWER)

Position: Support

Hearing Date: March 21, 2024

The Maryland Chapter of the Sierra Club urges a favorable report for HB 864, one of the Chapter’s three priority bills for this session, as amended in the House.

This bill updates and reforms Maryland’s EmPOWER energy efficiency program to more directly mitigate climate change by reducing carbon emissions from Maryland buildings. To do this, the bill provides incentives for households and businesses to electrify their buildings and facilitates the coordination of both federal and state programs to deliver energy efficiency and electrification for low- and moderate-income households. It also sets out a plan by which the Maryland Public Service Commission (PSC) can reduce the cost of and manage down the costs of utilities fees for investing in EmPOWER. The amendments, as passed in the House, provide technical clarity on the bill and the goal setting, and were developed with the PSC, the Office of the People’s Counsel, and the Moore Administration.

The Sierra Club would support an additional amendment to end existing incentives for gas heating and water heating appliances. The carbon dioxide emissions associated with gas combustion and the essentially inevitable system leaks of methane prior to combustion release damaging greenhouse gasses that would slow Maryland’s progress toward its 2031 and 2045 goals.

Opponents of this legislation have propagated a number of myths about it. Neither this legislation nor the amendment that we recommend would ban new gas appliances. They likewise will not require anyone to install an efficient electric appliance, nor require all new buildings to be all electric. With our recommended amendment, however, utilities would limit current subsidies for gas equipment to reduce installation incentives and encourage users to purchase appliances that will be more sustainable both economically and environmentally.

Historical and Legislative Background

The EmPOWER program has significantly improved the energy efficiency of Maryland homes and commercial buildings over the last 15 years. It has resulted in about \$12.7 billion in energy savings for utility customers at a cost of \$3.5 billion.¹

To address the climate crisis and meet Maryland’s climate goals, it is essential that EmPOWER and its annual budget (now close to \$379 million) work to reduce Maryland’s greenhouse gas (GHG) emissions.² The Climate Solutions Now Act, passed in 2022, set a goal of reducing

¹ The EmPOWER Maryland Energy Efficiency Act REPORT OF 2022, page 2, Maryland Public Service Commission

² The EmPOWER Maryland Energy Efficiency Act REPORT OF 2022, pages 18-19

carbon emissions by 60% from 2006 levels by 2031³ and called for EmPOWER to take on “mutually reinforcing goals,” including “greenhouse gas emissions reduction, energy savings, net customer benefits and reaching underserved customers.”⁴ In a July 2022 report to the legislature, the PSC asked the legislature to adopt greenhouse gas emissions goals for the EmPOWER program, measured on a gross lifecycle basis for the 2024 to 2026 cycle.⁵ HB 864 needs to be passed in the 2024 legislative session to be effective for the remainder of this EmPOWER cycle.

Using Gas in Buildings Contributes to Climate Change and Adverse Health Impacts

Fuels burned in buildings in Maryland generate 13% of GHG emissions in Maryland. Including electricity consumed, the building sector accounts for 40% of the state’s GHG emissions.⁶ To meet our climate goals and keep energy affordable for all Maryland residents, we need to reduce greenhouse gas emissions from burning fossil fuels in our buildings.

Efficient electric cold climate heat pumps can be up to three times as efficient as gas fired or electric resistance heat,⁷ lowering operating costs for Maryland residents and lowering greenhouse gas emissions. As we install more solar and wind energy, emissions for heat pumps will fall even further.

Gas and other fossil fuels deliver almost half of Maryland’s home heating as of 2020.⁸ Gas, made mostly of methane, leaks both in our streets and in our homes and businesses. It is a powerful greenhouse gas, 84-87 times as powerful as carbon dioxide over a 20-year period.⁹ Inside our homes it also increases the likelihood that children will develop asthma. One study showed that 12.7% of childhood asthma is attributed to gas in our homes.¹⁰

Reforming EmPOWER to Support Building Electrification

The EmPOWER rebates provided by this bill – along with rebates, credits and deductions available through the federal Inflation Reduction Act and the federal Infrastructure Investment and Jobs Act – will make the transition to clean, all-electric heating, electric cooking, hot water heating, and clothes drying affordable for a large number of Maryland residents. This financial support is particularly important for heat pumps, which typically have a higher upfront cost than gas furnaces or electric resistance heat, but lower operating costs.

³ Climate Solutions Now Act, Page 29

⁴ Ibid, Page 72

⁵ PUBLIC SERVICE COMMISSION OF MARYLAND
Recommendations on the Future of EmPOWER Maryland, July 1, 2022

⁶ Maryland Building Decarbonization Study, E3, October 2021, page 5. As Maryland’s electricity production becomes increasingly renewable based, the GHG contributions of electricity generation will be greatly reduced. A significant portion of the current electric load comes from inefficient electric resistance heat.

⁷ Renewable Energy Consumption Survey, 2020, Energy Information Administration, [Residential Energy Consumption Survey \(RECS\)](#)

⁸ RECS Survey, US Energy Information Administration, 2020

⁹ International Energy Agency, [Methane and climate change – Methane Tracker 2021 – Analysis - IEA](#) over a period of 20 years.

¹⁰ Population Attributable Fraction of Gas Stoves and Childhood Asthma in the United States
<https://www.mdpi.com/1660-4601/20/1/75>

Replacing electric resistance heat with efficient electric heat pumps will also be important to managing the load on the electric grid and lowering bills for Maryland households, especially low-income households. By replacing electric resistance heat with heat pumps, these homes will have much smaller electric bills. Heat pumps will also lower electric load at peak times. As with those replacing a gas furnace with a heat pump, the incentives from EmPOWER and the Inflation Reduction Act will support this transition.

To support utilities in this transition from GHG-intensive appliances and furnaces to efficient electric ones, the bill proposes to have the EmPOWER program offer utilities incentives for achieving the greenhouse gas and other EmPOWER goals. It also includes penalties for failure to achieve those goals. The proposed changes to EmPOWER in this bill continue to require investments made by EmPOWER to be cost effective for EmPOWER programs delivered by the utilities.

HB 864 would also make needed reforms to help ensure that low-income customers are able to take advantage of the EmPOWER program. As customers electrify their homes and migrate off of the gas system, low-income customers are likely to bear the cost of paying for gas infrastructure. The Office of the People's Counsel (OPC) estimated that gas bills could rise by more than 100% by 2035 as gas utilities continue to invest in gas infrastructure and fewer customers pay the bills for it.¹¹ To avoid disproportionately burdening low-income families, we need to offer the ability to electrify their homes. Funding from the federal Inflation Reduction Act (2022) along with EmPOWER incentives for fuel switching and other incentives will enable a significant portion of low-income families to have efficient, safe homes heated by heat pumps.

In recent years, some 30% of EmPOWER low income customers were deferred because they needed other work on their homes.¹² There are incentives available to pay for some of this work; however, braiding together these incentives can be a confusing and challenging process. This bill would provide community outreach specialists to help with this daunting job. Along with the modifications to Chapter 572 that resulted from the passage of HB 169 in the last legislative session, which set increased energy efficiency goals for low-income families under the EmPOWER program, HB 864 will help assure that low-income families benefit from electrification and get a fair shake from EmPOWER.

The bill also calls for 80% of savings to take place in the buildings, behind the meter. This is important because EmPOWER, from its inception, has been financed by a small surcharge on ratepayers' bills, and thus ratepayers should be the beneficiaries of the savings paid for by these charges. Other climate friendly actions from the utility can be included in regular rate filings by the utilities.

During the debates on the Climate Solutions Now Act in 2022, a number of utility representatives questioned whether electrification would stress our electric grid. The recently

¹¹ Comate Policy for Maryland's Gas Utilities, Financial Implications, Page 19, Office of the People's Counsel.

¹² Maryland Department of Housing and Community Development, [2021-2023 DCHD Limited Income Program Plan filing to the Public Service Commission](#)

completed Electrification Study commissioned by the PSC and performed by the Brattle Group concluded that winter peak load would grow only slightly through 2031, with annual growth of 2% or less, much less than peak load has grown in some decades in the past.

Lastly, HB 864 will bring down costs to utility customers by lowering the rate of return to utilities on existing EmPOWER debt. The electric utilities have invested approximately \$900 million in the EmPOWER program and earn over \$55 million annually on this investment. HB 864 proposes that ratepayers pay off this debt and achieve significant savings. In addition, the return on this safe investment would be reduced to the utilities' cost of debt, roughly half of what they are currently earning.

Additional Opportunities to Strengthen EmPOWER

As noted above, the Maryland Chapter of the Sierra Club encourages the inclusion of an amendment to end incentives for fossil fuel heating and other appliances. EmPOWER currently offers rebates for high-efficiency gas appliances.¹³ Continuing to invest in gas-fired building heating, hot water heating, and dryers commits us to higher greenhouse gas emissions for the life of these appliances, typically 15-18 years. It also impairs the health of our children and runs counter to the federal incentives available.

We propose ending incentives for fossil fuel heating and other appliances, which would encourage homeowners and small businesses owners to make this transition as their current fossil fuel appliances reach the end of their life. This amendment will help us transition to clean, efficient heat, hot water heating and clothes drying, while saving on our utility bills. It will contribute to meeting our climate goals, help more low-income families electrify their homes, and not further perpetuate the health harms of fossil fuel appliances. And, it will reduce the numbers of low-income households that face increasing gas bills as the gas user-base contracts over time.

Conclusion

The Maryland Chapter of the Sierra Club strongly supports HB 864. We urge a favorable report and support amendments to eliminate incentives for purchasing gas appliances.

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¹³ Washington Gas website, [Washington Gas Rebates](#)