



## Environment Committee

**Committee:** Economic Matters Committee  
**Testimony on:** HB1007 - Renewable Energy Portfolio Standard and Geothermal Heating and Cooling Systems  
**Organization:** Takoma Park Mobilization Environment Committee  
**Person Submitting:** Laurie McGilvray, Co-Chair  
**Position:** Favorable  
**Hearing Date:** February 25, 2021

Dear Mr. Chairman and Committee Members:

Thank you for allowing our testimony today in support of HB1007. The Takoma Park Mobilization (TPM) is a grassroots organization based in Takoma Park, Montgomery County and the Environment Committee is focused on state and local climate change issues. We strongly urge you to vote favorably on this bill. The bill will alter the renewable energy portfolio standard to require a percentage of energy from Tier 1 renewable sources to come from geothermal heating and cooling systems each year; require the Public Service Commission (PSC) to adopt regulations; require electricity suppliers to pay compliance fees into the Maryland Strategic Energy Investment Fund; establish a Geothermal Energy Workgroup; require the Maryland Energy Administration (MEA) to conduct a study on geothermal heating and cooling systems; and require MEA, in consultation with the Workgroup, to develop recommendations for an incentive structure and report the results and recommendations to the General Assembly.

**City of Takoma Park Climate Resolution:** On March 4, 2020, the Takoma Park City Council passed the 2020 Climate Emergency Response Framework Resolution. The resolution adopts a climate action framework of priority strategies and potential policy changes for buildings, transportation, and renewable energy. The resolution outlines strategies to achieve net zero emissions city-wide by 2035 and be fossil fuel-free by 2045. Priority strategies include: provisions to improve the efficiency of all types of buildings; accelerate the transition to 100% renewable electricity; and phase-out fossil fuels. Currently, many buildings in the City use natural gas for heating and cooling. Electric heat pumps provide the greatest opportunity to move off fossil fuels for heating and cooling. Geothermal technology, must play a big part, both for new construction and for replacing heating and cooling systems at the end of their lifecycle.

**Climate Change, Greenhouse Gas Emissions, and Buildings:** Maryland is already experiencing the effects of climate change as seen in hotter summers, extreme precipitation, and rising sea levels. The state must be on a path to near net zero greenhouse gas (GHG) emissions or 80-95% reduction by 2050 pursuant to the 2019 Greenhouse Gas Reduction Act Draft Plan in order to avoid the worst impacts of a changing climate. Buildings (e.g., residential and commercial) are one of the largest sources of GHG emissions. Furthermore, heating and cooling

is the largest slice of the GHG pie for buildings. The solution is to electrify buildings as quickly and efficiently as possible.

**Why Geothermal and RPS Tier 1?** Heat pump technology transfers heat from a source to a sink; because the ground temperature doesn't change, geothermal is a much more efficient heat exchanger than air and much less expensive to run. Geothermal is healthier because there is no combustion of fossil fuels, which means better indoor air quality. Geothermal technology is relatively rare in Maryland, although it promises to be a future source of high-paying jobs. Adding geothermal heating and cooling to Tier 1 of the RPS, along with an effort to develop additional incentives for geothermal, will move Maryland forward toward greater deployment of geothermal systems, reduce GHG emissions in the State, and help Takoma Park meet its climate change goals.

For these reasons, we urge you to vote favorably for HB1007.