

**Committee: Economic Matters Committee** 

Testimony on: HB040 - "Maryland Energy Administration Study on

**Geothermal Heating and Cooling Systems and Geothermal** 

**Energy Workgroup**"

**Organization:** Climate Justice Wing of the Maryland Legislative Coalition

Person Submitting: Laurie McGilvray, Co-Chair

**Position:** Favorable

**Hearing Date:** January 26, 2021

Dear Mr. Chairman and Committee Members:

Thank you for allowing our testimony today in support of HB040. The Maryland Legislative Coalition's Climate Justice Wing, a statewide coalition of over 50 grassroots and professional organizations, strongly urges you to vote favorably on this bill. The bill will require the Maryland Energy Administration (MEA) to conduct a technical study of geothermal heating and cooling systems, establish a Geothermal Energy Workgroup, and direct the MEA, in consultation with the Workgroup, to develop recommendations for geothermal incentives in the state.

Climate Change, Greenhouse Gas Emissions, and Buildings: Maryland is already experiencing the effects of climate change as seen in hotter summers, extreme precipitation events, 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 (GGRA) 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, and geothermal heating and cooling can play a big part.

Why Geothermal and Why a Technical Study? Heat pump technology transfers heat from a source to a sink. An air heat pump uses air temperature and a geothermal heat pump uses the constant temperature of the ground. Because the ground temperature doesn't change, it is a much more efficient heat exchanger than the air and therefore much less expensive to run. Geothermal is healthier because there is no combustion of fossil fuels, which means better indoor air quality. Unlike other states where geothermal technology has been deployed more widely, it is relatively rare in Maryland, and promises to be a future source of high-paying jobs. A great first step is to conduct a study to determine the status and potential of geothermal heating and cooling systems in Maryland and to develop recommendations for incentivizing greater deployment of geothermal systems.

For these reasons, we urge you to vote favorably for HB040.