Committee: Economic Matters Testimony on: HB1007 - "Renewable Energy Portfolio Standard and Geothermal Heating and Cooling Systems"

Organization: Climate Parents of Prince George's Person Submitting: Joseph Jakuta, Lead Volunteer Position: Favorable Hearing Date: February 25, 2021

Climate Parents of Prince George's supports HB 1007, "Renewable Energy Portfolio Standard and Geothermal Heating and Cooling Systems"

Geothermal energy is an essential technology for reducing greenhouse gas (GHG) emissions and ensuring access to clean, efficient and inexpensive energy. Air sourced and ground-sourced (geothermal) heat pumps have been identified in a September 2020 report by the Maryland Commission on Climate Change as a key technology for decarbonizing buildings in Maryland. While ground-source heat pumps are more expensive to install than air-sourced ones, they are much cheaper to operate and save money over their lifetimes.

Ground source heat pumps have a particular role in decarbonizing our schools. Schools have very consistent space heating, space cooling, and water heating energy loads, which ground source heat pumps are well adjusted to. Schools also are often constructed in greenfields with a wide area of undeveloped land surrounding the buildings, which allows for easier installation and maintenance than in many other situations. Geothermal can provide a heating and cooling solution that does not involve the onsite burning of fossil fuels, which will lead to less air pollution our children are exposed to in their learning environment.

It is appropriate that a specific percentage of Maryland renewable energy credits be derived from geothermal, which is one of the cleanest energy sources in the Renewable Portfolio Standard (RPS). Compared to the power sector, building decarbonization can be more difficult and costly, hence, more in need of incentives, such as Renewable Energy Credits (RECs). RECs can help overcome the higher upfront cost of installing geothermal, which often prevents it from being utilized despite its lower lifetime cost.

Geothermal is also ready for primetime and can be a positive way to transition oil and gas workers in nearby areas to a more sustainable path. Recently, Vik Rao, former chief technology officer at the oil services company Halliburton said "geothermal is no longer a niche play. It's scalable, potentially in a highly material way. Scalability gets the attention of the [oil services] industry." Geothermal installation also provides opportunities for pipe work, electrical work and other work that needs to continue.

Geothermal installations a path forward towards decarbonization, Maryland just needs to set up the proper economic incentives to make that happen. We can do that by requiring a certain percentage of Tier 1 renewable energy resources to be geothermal.

We encourage a FAVORABLE report for this important legislation.