Climate Law & Policy Project

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Committee: **Finance**
Testimony on: **HB561 Renewable Energy Portfolio Standard – Wastewater, Heating or Cooling System**
Submitted by: **Donald M. Goldberg, Executive Director**
Position: **Favorable**
Hearing Date: **March 30, 2021**

Dear Chairwoman Kelley and Members of the Committee:

On behalf of the eleven undersigned organizations, Climate Law & Policy Project submits this testimony in support of HB561. We believe it would provide significant climate, clean energy and economic benefits with no discernible negative environmental impacts. It would give Tier 1 status in the Maryland Renewable Portfolio Standard to technologies that use wastewater from sewage treatment plants, residential and commercial buildings and other sources of wastewater as an energy source or sink for heating and cooling systems. A wastewater thermal energy system is very similar to a geothermal system. It makes use of heat pumps and, unlike several other Tier one technologies, such as waste incineration, black liquor and biomass, is non- polluting (it releases no GHGs or other pollutants into the environment).

Wastewater no longer should be treated as something merely to be disposed of. Heat energy can be recovered from wastewater with a range of technologies for a variety of purposes, including heating and cooling of buildings. One study of wastewater heat recovery potential in buildings showed a 59% decrease in energy consumption compared to conventional heating and cooling.

The key to wastewater heat's energy saving potential is that sewer water is consistently around 60 degrees in the winter—much warmer than the outside temperature—making it a potential heat source, and about 78 degrees in the summer—much cooler than the outside temperature—making it a potential heat sink.

Wastewater heat recovery has been utilized in Europe and elsewhere for many years but has only recently been introduced in the United States. It is now in use in the District of Columbia, in DC Water's new state-of-the-art (LEED Platinum) 170,000 square foot headquarters, on the bank of the Anacostia River.

Another Washington landmark, the American Geophysical Union, integrated a wastewater energy recovery system into a complete retrofit of its 25 year old building. The AGU building's designers concluded that wastewater heat recovery could reduce heating energy consumption by about 85% and cooling consumption by about 35%. Utilizing an array of clean energy technologies, the completed building exceeds planners' original goals of net zero energy consumption, achieving net positive energy, which would have been impossible without the wastewater thermal energy system. The result is a building that creates more energy than it consumes!

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We believe wastewater used as a heat source or sink for heating and cooling systems would be a desirable addition to Maryland's Renewable Portfolio Standard and urge a favorable vote on HB561.

Respectfully Submitted,

Climate Law & Policy Project
Maryland Legislative Coalition
Do the Most Good
WISE
Maryland League of Conservation Voters
Indivisible Howard County
Sierra Club Lower Eastern Shore
Cedar Lane Environmental Justice Ministry
Environmental Justice Ministry of the
Unitarian Universalist Church
MLC Climate Justice Wing

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