

Public School Construction and State Buildings- Use of Geothermal Energy Act (HB520)

Testimony of Diana Sanchez - Favorable

As a former student at Washington College, which is located in Maryland's eastern shore, geothermal installations have been an integral part of our George Goes Green Initiative. This initiative has transformed us into a pioneer of clean and renewable energy.

Our college has a total of **four geothermal fields**. All of **which power a total of 12 buildings** that service academic, residential, and recreational facilities. These installations account for approximately 30% of the college's total building square footage.

The installation of these systems consisted of drilling a series of wells that vary from around 250 to 400 feet. These wells were then connected to supply the heating and cooling of these buildings. Reid Raudenbush, the former director of the Physical Plant at Washington College, spearheaded this project in order to reduce the college's energy purchases. **It saves about a third of the cost of electrical energy compared to the cost incurred with conventional systems. It also provides free energy with no mechanical equipment involved.**

The former Director of Sustainability at Washington College, Greg Farley, stated that **the energy necessary to run water-to-water heat pumps that are present in geothermal systems, are less than the energy needed for an air-source heat pump**. This is due to the fact that **there's more energy storage capacity in water than in air, making geothermal energy more cost-efficient.**

The mechanical engineering company in charge of the installation process, GIPE Associates, estimated **the project's cost to be no more than the cost of installing a conventional system**. The college was able **to save between 50 to 70 percent in operating cost by installing a geothermal system** over a traditional heating and cooling system.

I HAVE ATTACHED A COPY OF A PRESENTATION ON THE WASHINGTON COLLEGE INSTALLATION WITH PHOTOGRAPHS OF WHAT IS DESCRIBED IN THIS TESTIMONY.

Based on the experience at Washington College, I urge a favorable report. Thank you.

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