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THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE RESOLUTION

No. 266 Session of 2023

INTRODUCED BY RABB, MADSEN, N. NELSON, MADDEN, SANCHEZ, HILL-EVANS, STEELE, CIRESI, FIEDLER AND OTTEN, NOVEMBER 15, 2023

REFERRED TO COMMITTEE ON CONSUMER PROTECTION, TECHNOLOGY AND UTILITIES, NOVEMBER 15, 2023

A RESOLUTION

Directing the Joint State Government Commission to conduct a study on the feasibility of constructing geothermal systems in densely populated locations of this Commonwealth and to issue a report of its findings and recommendations to the General Assembly.

WHEREAS, Geothermal technology, commonly referred to as ground-source heat pump technology, consists of running pipes filled with antifreeze liquid as far as 500 feet into the ground, to a depth at which the temperature is relatively stable, usually lingering in the low 50° Fahrenheit range; and

WHEREAS, Heat is then extracted from the earth and carried through the liquid-filled pipes to warm buildings; and

WHEREAS, The same principle also allows for geothermal cooling; and

WHEREAS, On hot days, a heat pump extracts heat from the air in the building and transfers that heat energy into the liquid in the pipes, which then travels downward where the heat is dispersed into the ground; and

WHEREAS, Geothermal systems are among the cleanest and most

efficient heating options since the heating and cooling process uses ground temperatures, often only utilizing fossil-fuel-based energy to generate the electricity that is needed to operate heat pumps; and

WHEREAS, Utilizing geothermal ground-source heat pump technology on individual properties can be expensive, which poses a significant barrier to widespread adoption; and

WHEREAS, The concept of establishing geothermal microdistricts is a means of overcoming these financial barriers, since this concept involves connecting multiple customers on a shared loop system; and

WHEREAS, This would not only allow the overall cost to be spread out and evenly shared, but would provide utility companies with the ability to gradually transition away from the use of fossil fuels while offering new services; and

WHEREAS, Natural gas utility providers already have extensive experience with drilling, trenching and laying pipe as well as managing capital-intensive projects and investments in long-term assets, which would make the natural gas utility providers well suited to developing large-scale multi-property geothermal systems; and

WHEREAS, As such, if geothermal microdistricts proved feasible, this could be transformative for advancement of zero carbon energy, while also lessening this Commonwealth's reliance on foreign fossil fuels; therefore be it

RESOLVED, That the House of Representatives direct the Joint State Government Commission to conduct a study on the feasibility of constructing geothermal systems in densely populated locations of this Commonwealth and to issue a report of its findings and recommendations to the General Assembly; and

be it further

RESOLVED, That the study:

(1) identify and examine efforts, procedures, measures, statutes and management responsibilities of State agencies, nongovernmental organizations and academic institutions to assist in determining the feasibility of utilizing geothermal energy for the purpose of establishing geothermal microdistricts;

(2) conduct an economic impact analysis regarding the widespread utilization of geothermal energy for the purposes of establishing geothermal microdistricts in this Commonwealth; and

(3) identify best practices regarding the development of the necessary infrastructure to support the widespread use of geothermal microdistricts for the production of geothermal energy;

and be it further

RESOLVED, That the Joint State Government Commission consult with stakeholders that:

(1) have organizational missions and expertise regarding consumer affairs, the economy, electricity generation and distribution, the environment, the reduction of carbon emissions, the health and safety of Commonwealth residents, natural gas utility providers, air and water quality issues, consumer affairs and urban affairs;

(2) collect data on any benefits of the utilization of geothermal energy regarding consumer affairs, the economy, electricity generation and distribution, the environment, the reduction of carbon emissions, the health and safety of Commonwealth residents, consumer utility prices, air and

water quality issues and urban affairs; and

(3) have knowledge of relevant issues;

and be it further

RESOLVED, That the Joint State Government Commission prepare a report of its findings and recommendations and submit the report to the General Assembly no later than 18 months after the adoption of this resolution.