
THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE RESOLUTION

No. 236 Session of
2022

INTRODUCED BY RABB, HOHENSTEIN, SANCHEZ, HERRIN, WEBSTER AND
CIRESI, OCTOBER 17, 2022

REFERRED TO COMMITTEE ON ENVIRONMENTAL RESOURCES AND ENERGY,
OCTOBER 17, 2022

A RESOLUTION

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

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

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

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

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

19 WHEREAS, Geothermal systems are among the cleanest and most

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

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

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

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

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

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

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

1 be it further

2 RESOLVED, That the study:

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

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

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

17 and be it further

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

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

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

1 water quality issues and urban affairs; and

2 (3) have knowledge of relevant issues;

3 and be it further

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