

STATE OF NEW YORK

6604

2023-2024 Regular Sessions

IN SENATE

April 28, 2023

Introduced by Sen. HARCKHAM -- read twice and ordered printed, and when printed to be committed to the Committee on Environmental Conservation

AN ACT to amend the environmental conservation law, in relation to exempting certain geothermal boreholes at depths beyond five hundred feet from certain requirements

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

- 1 Section 1. Legislative findings and declaration. The legislature here-
2 by finds and declares that:
- 3 1. The climate leadership and community protection act establishes the
4 goal of reducing statewide greenhouse gas emission levels by 40% from
5 1990 levels by 2030 and 85% by the year 2050 and achieving net-zero
6 emissions statewide by 2050. The climate leadership and community
7 protection act further created and tasked the climate action council
8 with developing a final scoping plan outlining recommendations for
9 attaining New York's statewide greenhouse gas emissions reduction goals.
- 10 2. The climate action council's final scoping plan recognized the
11 electrification of buildings - particularly through the installation of
12 closed-loop geothermal heating and cooling systems - as a key strategy
13 to achieve the widespread decarbonization of buildings that is necessary
14 to achieve the climate leadership and community protection act goals.
- 15 3. The final scoping plan identifies that appropriate regulations and
16 permit fees are not in place for geothermal boreholes deeper than five
17 hundred feet and should be developed by the department of environmental
18 conservation. Specifically, the department applies its regulations
19 developed for oil and gas wells to geothermal wells greater than five
20 hundred feet deep, even though closed-loop geothermal boreholes do not
21 involve injection into or extraction from the ground and thus do not
22 pose an impact adverse to the environment comparable to oil and gas
23 wells. The department's existing regulations also apply on a per-well
24 basis, thereby adding significant cost and permitting barriers to

EXPLANATION--Matter in italics (underscored) is new; matter in brackets [-] is old law to be omitted.

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1 ground-source heat pump installations and thermal energy network
2 projects that benefit from installing multiple boreholes to distribute
3 heat.

4 4. Extension of the permitting rules currently applied to closed-loop
5 geothermal systems less than five hundred feet deep to closed-loop
6 geothermal boreholes deeper than five hundred feet will reduce the cost
7 of meeting New York state's building decarbonization requirements by
8 nearly \$9.9 billion by 2050; reduce the cost of meeting the state's goal
9 of electrifying one million homes by 2030 by approximately \$900 million;
10 and reduce the cost of electrifying 85% of the state's building stock by
11 approximately \$9 billion between 2030 and 2050, in 2023 dollars. In
12 nominal dollars, the total cost savings increase to \$16.3 billion by
13 2050.

14 5. Extension of the permitting rules currently applied to closed-loop
15 geothermal systems less than five hundred feet deep to such boreholes
16 deeper than five hundred feet will obviate unnecessary technical and
17 permitting barriers, open new markets to clean heating and cooling tech-
18 nologies in densely populated regions, and enable drastically increased
19 leverage of federal funding to meet New York state's emissions
20 reductions targets.

21 § 2. The opening paragraph of subdivision 14 of section 23-0305 of the
22 environmental conservation law, as added by chapter 410 of the laws of
23 1987, is amended to read as follows:

24 With respect to wells drilled deeper than five hundred feet below the
25 earth's surface for the purpose of conducting stratigraphic tests, for
26 finding or producing hot water or steam, for injecting fluids to recover
27 heat from the surrounding geologic materials, which shall not include
28 closed-loop boreholes installed for the purpose of facilitating a geoth-
29 ermal heating or cooling system, or for the disposal of brines, the
30 department shall have the power to:

31 § 3. This act shall take effect immediately.