

# 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 hereby finds and declares that:

2 1. The climate leadership and community protection act establishes the  
3 goal of reducing statewide greenhouse gas emission levels by 40% from  
4 1990 levels by 2030 and 85% by the year 2050 and achieving net-zero  
5 emissions statewide by 2050. The climate leadership and community  
6 protection act further created and tasked the climate action council  
7 with developing a final scoping plan outlining recommendations for  
8 attaining New York's statewide greenhouse gas emissions reduction goals.

9 2. The climate action council's final scoping plan recognized the  
10 electrification of buildings - particularly through the installation of  
11 closed-loop geothermal heating and cooling systems - as a key strategy  
12 to achieve the widespread decarbonization of buildings that is necessary  
13 to achieve the climate leadership and community protection act goals.

14 3. The final scoping plan identifies that appropriate regulations and  
15 permit fees are not in place for geothermal boreholes deeper than five  
16 hundred feet and should be developed by the department of environmental  
17 conservation. Specifically, the department applies its regulations  
18 developed for oil and gas wells to geothermal wells greater than five  
19 hundred feet deep, even though closed-loop geothermal boreholes do not  
20 involve injection into or extraction from the ground and thus do not  
21 pose an impact adverse to the environment comparable to oil and gas  
22 wells. The department's existing regulations also apply on a per-well  
23 basis, thereby adding significant cost and permitting barriers to  
24

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

LBD10951-02-3

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.