



October 6, 2025

NYSERDA
17 Columbia Circle
Albany, NY 12203-6399

RE: NY-GEO State Energy Plan Comments

Meeting New York's Energy Needs Through 2040

Thank you for the hard work the Planning Board has put into the Draft New York State Energy Plan and for the opportunity to comment on the Plan. The discussion about the pathway to building decarbonization is particularly relevant today as the industry navigates pulled back support from the federal government and as states across the country balance housing and energy affordability challenges. We write to voice overall support for New York's goals and to share critical policy pathways to achieve them.

As noted in Section 3.1 of Volume I, electrification of the transportation and building sectors projects significant growth in annual electric loads and peak loads. New York's new All-Electric Building Code will continue that growth. The New York State Scoping Plan estimated that higher adoption of geothermal heat pumps could reduce New York system peak by 4-12 GW compared to a scenario relying more heavily on air-source heat pumps (NYS Climate Action Council, 2022). NYSERDA predicts \$90 billion of savings in generation and transmission expenditure in New York through greater deployment of geothermal heating and cooling, saving \$15,000 in avoided cost per single-family home (NYSERDA, 2022). Coincidentally \$15,000 would cover the cost of the ground loop in a typical geothermal installation.

Geothermal Heating and Cooling Systems must play a central role in ensuring that building electrification does not lead to affordability concerns and peak load challenges.

Geothermal Heating and Cooling Systems provide a broad range of benefits to New York residents:

- Yield energy savings of 10-20% and more compared with a highly efficient cold-climate air source heat pump. (Natural Resources Canada, 2025)

- Annual energy savings of about 5,200 kWh and GHG reductions of 3,500 lbs of CO₂e - per housing unit.
- Ground loops that last for the life of the home and heat pumps that have an expected useful life of 25 years. (NYS Technical Resource Manual)
- Efficiency across multiple climate zones.

New York can expect winter load demands to rise by as much as 1,000 MW annually through 2040 and become a winter-peaking system in the mid-2030s (New York Independent System Operator, 2024). Statewide energy supply deficiencies “could arise as soon as winter 2029-2030 under normal weather conditions.” (New York Independent System Operator, 2024). As New York’s electric grid switches to this new normal, Geothermal offers a solution to ease that load increase that no other building decarbonization technology can, performing more than 75% more efficiently during winter peak than air-source heat pumps (Dandelion Energy modeling).

For New York to reach its climate and building decarbonization goals, while keeping energy prices in check and increasing the stability of the grid, Geothermal Heating and Cooling must be a central focus of its strategic planning. The following are policy recommendations that will help to expand the growth and accessibility of geothermal heat and cooling technologies for all New Yorkers:

- Support the installation of Geothermal Heating and Cooling in New Construction
 - As discussed in Chapter 8 of Volume II, it is much more costly to retrofit an existing building with heat pumps than it is to install in a new one.
 - By increasing program and financial support across the board to support geothermal in new construction, the sector will be able to scale much more significantly and introduce savings to the retrofit market through product innovation and better material purchasing power.
- Pave the Way for Utility-Owned Ground Loops
 - Utilities are a critical partner in decarbonizing the building sector. They (and ratepayers) can avoid \$90 billion in generation and transmission costs with widespread deployment of geothermal heat pumps (NYSERDA, 2022). Unfortunately, current State Law and PSC regulations do not incentivize or allow utilities to invest directly in ground loops the way they would invest in gas pipes or transmission lines.
 - Both the 100-Foot rule and the Obligation to Serve Gas put geothermal on an uneven playing field and hurt the bottom line for New Yorkers. Allowing utilities to partner with the geothermal heating and cooling industry to assume ownership of ground loops and amortize the cost over utility bills will incentivize greater investment in the technology, greater

energy savings for New Yorkers, and a rapid increase in GHG reductions critical to the health and wellbeing of our climate.

- NY-GEO supports exploring 3rd party ownership of ground loops by utilities and municipalities, and other forms of ownership.
- Support for continued Geothermal Heat Pump rebates under the NYS Clean Heat Program
 - By providing upfront customer incentives in new and existing buildings for geothermal heating and cooling, homeowners, renters, builders, and low-to moderate-income New Yorkers will be able to access the benefits and savings of geothermal.
- Establish a Geothermal Renewable Energy Credit (GREC) Market
 - By adding geothermal energy systems to the Tier 1 REC program, and carving out a percentage of the Renewable Portfolio, owners of geothermal energy systems will earn Renewable Energy Credits (RECs), further reducing their electricity bills.
 - When factoring GRECs into the return on investment, geothermal systems become more competitive with traditional HVAC systems.
- Sales Tax Exemption
 - In 2015, the Legislature passed a Sales Tax Exemption bill (S4279/A5508) with bipartisan sponsorship and support for geothermal equipment modeled on the existing exemption for solar equipment. Governor Cuomo vetoed this bill because it was passed outside of the budget. This policy will further bring down costs of geothermal installations while providing community-wide benefits: grid stability, no noise pollution, and no waste heat blowing out into the air contributing to a heating environment.
- Facilitate Third Party Ownership
 - Recent federal legislation makes third party ownership of geothermal systems possible. This will make geothermal heating and cooling accessible to a broader range of people. New York's rules for bonus depreciation are different from the federal rule. Bringing them into sync would be an important step to introducing third party ownership in New York.
- Invest in Workforce Development
 - Fund training programs to transition gas utility workers into geothermal installation and maintenance similar to what the New York Power Authority is doing under its Clean Energy Workforce Training program.
- Expansion of the New York Green Bank under NYSERDA
 - Despite robust support for geothermal heating and cooling in New York, installation of systems remains nascent. The New York Green Bank can de-risk these projects by offering geothermal specific financing options.

- We would encourage NYSERDA to engage with industry stakeholders to explore Green Bank models that will work for industry, but more importantly that would make geothermal heating and cooling accessible to all. Review should consider mortgage rate buy-downs, preferred interest rate construction loans for inclusion of geothermal, on-bill repayment structures, Property-Assessed Clean Energy, credit enhancements, and other strategies to ease costs for builders and consumers.

Integrating Scoping Plan Provisions with the Energy Plan:

In developing the Draft Energy Plan, the Planning Board had the great advantage of having the excellent Climate Action Council's Scoping Plan as a comprehensive resource and guide. We urge the Board to amend the Draft Energy Plan to bring it more in line with the Climate Scoping Plan. Doing so is necessary to enable New York to meet the legal mandates and targets laid out in the CLCPA. In the building sector, three of the primary amendments would be for the Energy Plan to call for:

- The rapid implementation of Cap and Invest, a key feature of the scoping plan designed to provide the funds needed to enact a rapid and just clean energy transition;
- The signing of A8888/S8417 that would repeal the 100-foot rule and create a more level playing field for heating technologies; and
- The elimination of the limitation inherent in the current law that stipulates an obligation to serve gas. Instead give utilities the broader option to deliver energy in a way that ensures New Yorkers have their heating, cooling, and other energy needs met.

Thank you for the planning and development of this plan and for the opportunity to comment. We are looking forward to partnering on the path to achieve New York's climate goals.

About NY-GEO

The New York Geothermal Energy Organization (NY-GEO) is a not-for-profit trade organization representing the geothermal heat pump (GHP) industry in New York State, dedicated to promoting geothermal heating and cooling.

Works Cited

New York State Climate Action Council. 2022. "New York State Climate Action Council Scoping Plan." climate.ny.gov/ScopingPlan [Appendix G p. 89](#)

New York State Energy Research and Development Authority. (2022, December). *The future of buildings: New York's carbon neutral buildings roadmap*. <https://www.nyserda.ny.gov/All-Programs/Carbon-Neutral-Buildings>

Natural Resources Canada. (2025, February 10). *Heat pumps: Energy Star — heating and cooling*. Natural Resources Canada. <https://natural-resources.canada.ca/energy-efficiency/energy-star/heating-cooling-heat-pump>

U.S. Department of Energy. (2011, February). *Guide to geothermal heat pumps*. U.S. Department of Energy. https://www.energy.gov/sites/prod/files/guide_to_geothermal_heat_pumps.pdf

New York Independent System Operator. (2024, June 6). *Power Trends 2024: The New York ISO annual grid and markets report*. <https://www.nyiso.com/documents/20142/2223020/2024-Power-Trends.pdf>

Sincerely,

A handwritten signature in black ink that reads "Christine Hoffer". The signature is written in a cursive, flowing style.

Christine Hoffer
Executive Director