

## Energy Catalyst Public Comment on the All Electric Building Act

On May 12th, the New York State Assembly collected public comments from industry leaders on the [All Electric Building Act](#) which would prohibit the use of fossil fuels in new construction throughout the state starting in 2024.

This bill would provide a clear signal to the market about the direction of New York and would demonstrate the Assembly's commitment to the already passed [CLCPA](#).

Our company, [Energy Catalyst Technologies](#), is an Albany-based startup focusing on geothermal heat pump manufacturing. The company's co-founders chose to commit to this field after seeing the All-Electric direction that NY State was forecasting for the coming decades. Energy Catalyst is an early market signal that the passage of clean heating legislation is promoting new clean energy jobs and technologies within the state. The co-founders and employees of Energy Catalyst fully support the passage of this All-Electric Building Act.

Whether this Act is passed or not, we wish to provide some constructive suggestions of how the state can improve the landscape for more rapid conversion to Clean Heating and support more NY based startups like ourselves. Our roadmap has three main parts: Barriers, Funding and Intelligent Planning.

### **Barriers:**

1. **Bureaucracy:** As a product developer, we speak frequently with geothermal installers and the most frequent issue that they face is the paperwork required to receive the Clean Heat incentives. While it is easy to dismiss, we've also heard from traditional boiler installers that the complex and ever changing paperwork was a major reason why they did not want to get into the heat pump industry. Heat pump installers have asked again and again for changes and their voices have not been heard. It takes little to no paperwork for an installer to replace a fuel oil boiler and heat pumps should be no different.
2. **Training:** In order to obtain Clean Heat incentives for ground source heat pumps, a company must be an IGSHPA member and be an accredited installer. These trainings are provided intermittently by IGSHPA; in some cases training is open once a quarter and with a limited number of spots. In order to be successful moving forward the state needs to consider new and alternate training organizations. For instance, Energy Catalyst Technologies was told that we were not qualified to provide NYSERDA funded training for installing our own products.
3. The above two issues are especially important for the All-Electric Act's passage because, to our knowledge, there are currently no mass production building contractors who are currently approved as NYS Clean Heat GSHP Contractors (meaning installers who are pre-approved for the utility rebates). Many Clean Heat Contractors do work on

new construction, but the vast majority of these buildings are custom homes. The combination of excessive paperwork and limited training will be one of the first huddles for production building contractors to overcome if the All-Electric bill is passed.

### **Funding:**

1. The cost of a geothermal borehole for a typical residence in the Capitol Region is around \$15,000. This sounds like a lot until you consider that a gas utility would have charged the same amount or more to the ratepayers to connect the same home to the natural gas pipeline. If homeowners at all socio-economic levels are asked to cover these initial costs, they will need access to low cost loans and increased incentives. An ideal loan would be tied to the building and could be transferred to a new owner if the homeowner sells.

### **Intelligent Planning**

1. The state should start incentivising district heating systems that are coupled with geothermal boreholes. These systems will take years, possibly decades to construct, but they have several advantages. Firstly, they are the most efficient method of heating and cooling on the planet. By connecting a diversity of buildings, the heat rejected by hospitals, grocery stores and ice rinks will be recaptured and used for heating in the winter. Factories benefit from district loops because they can monetize their waste heat. The diversity of heating and cooling loads reduces the amount of geothermal boreholes significantly, making a district loop very cost effective. The same HDPE pipes that carry natural gas to homes today could be a part of a district loop of tomorrow.
2. New York should actively fund innovative, NY-based heat pump technologies. NYSERDA has an Innovation branch and a NextGen HVAC PON (public opportunity notice), but there is an 18 month delay between [new solicitations](#). In addition, the newest solicitation excludes heat pump technologies from its topics.
3. New York should be supporting NY based manufacturing for every technology related to Electrification. 2.6 billion dollars worth of heat pumps alone will be purchased annually to reach the 200,000 heat pump per year target set by the state and currently 100% of those dollars are leaving the state.

New York aims to be a leader in clean heating, but their success will depend heavily on the manner by which projects are supported by the state. We support the All Electric Act, but the current system is too regulated and underfunded to scale at the pace laid out by the CLCPA.

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