



nationalgrid

A clean energy future is closer than you think.

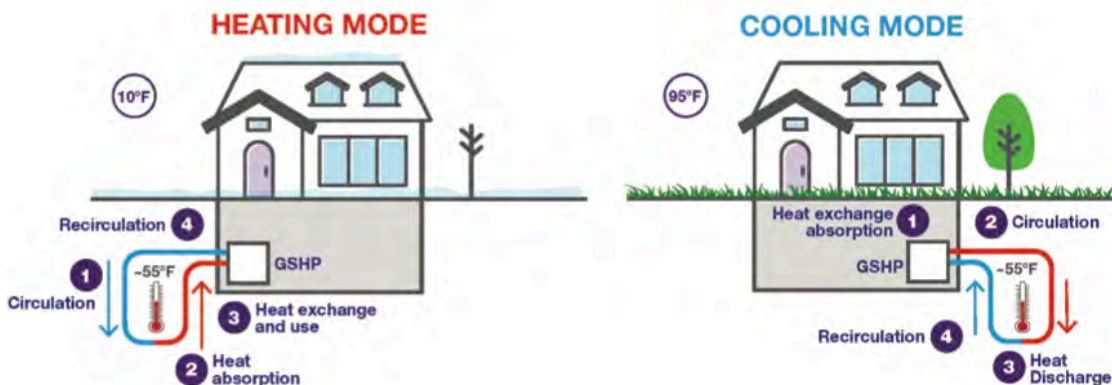
In fact, it's right outside your door.

Introducing Our Geothermal Energy Program.

We're committed to a clean energy future. As part of our vision to achieve net zero greenhouse gas emissions by 2050, we're evaluating the potential for geothermal energy to provide highly efficient space heating and cooling for our residential and commercial customers. We're reaching out to you to join our networked geothermal energy demonstration pilot program. The future of fossil-free clean energy is happening right now. And we'll help you get ready.

How Do Geothermal Energy Systems Work

A geothermal system transports heat through a buried piping network, circulating water with an environmentally friendly additive. The constant temperature of the ground is used as a heat source during winter and transfers indoor heat to the ground for cooling during the summer.



Information About Our Demonstration Pilot Program

Our five-year Networked Geothermal Energy Demonstration Program (Geothermal Program), which has been approved by the Massachusetts Department of Public Utilities, will explore if a geothermal network can be used to replace our residential and commercial customers' natural gas service. As part of the Geothermal Program, National Grid will install and operate geothermal networks at up to four separate locations, serving a group of customers having diversity in size and use. If you're already a natural gas customer, you will be given priority status for participation in the program.

Our Responsibility To All Our Customers

- We will assess the thermal performance and economics of geothermal networks serving many customers with diverse load requirements.
- We will install a geothermal system rather than new gas pipe as part of our gas main replacement program.
- We will install geothermal networks to manage local gas system constraints and peaks.
- We will install geothermal networks to lower operating costs and greenhouse gas emissions for income-eligible customers.

What To Expect When External And Interior Systems Are Installed

On the outside of your home or business, we will install vertical ground loops in the existing right-of-way and on private property within easement areas. During and after the Geothermal Program, we will be responsible for the external equipment up to your meter and that includes piping, pumps, control panels and cooling towers. On the inside of your home or business, we will install a geothermal heat pump and assorted equipment. When possible, components of your existing heating and cooling systems will be reused (i.e., ductwork). If a conversion is needed (i.e. most hot water and all steam heating), National Grid will fund the installation of such equipment. We will work with home and business owners to maintain interior geothermal equipment during the Geothermal Program. After the Geothermal Program, you will be responsible for interior equipment operations and maintenance.

What You Can Count On From National Grid

Our Geothermal Program will provide funding for the following:

- The geothermal network
- The ground source heat pump and associated equipment not covered by rebates or incentives
- The replacement of gas water heaters with electric or heat pump water heating
- The replacement of certain appliances where applicable (i.e. gas stoves, ovens, and dryers) to electric appliances, in instances where customers are disconnecting from natural gas service
- New or upgraded radiators and / or air ducts as needed
- Certain energy efficiency improvements not covered by rebates or incentives

What Are The Costs To Participate In This Program

If you are selected and join our Program, there is a participant fee per heat pump and a customer charge for the geothermal energy service in accordance with the rate schedule shown below.

Program Participant Monthly Charge Rate

Rate Type	Participant Fee	Customer Charge
Residential	\$60.00	\$4.00
Residential Low Income	\$45.00	\$3.00
Commercial or Industrial	\$90.00	\$4.00

This Program will last five years. As always, we will maintain open communication and work with each of you to keep disturbance from construction to a minimum.

How This Program Will Effect Your Electricity Costs

Since you will no longer be using natural gas to heat your homes and businesses, your natural gas costs will be reduced or even eliminated. But because the geothermal system is run by electricity, electric costs will increase. However, due to the efficiency of the geothermal heat pump system, you will see either a slight increase or decrease in annual energy costs. If you are selected to participate in our Geothermal Program, we will help evaluate your energy costs before and after your participation.

Your Options To Terminate Participating In The Program

National Grid has a Clean Energy Vision for the future of Massachusetts. But if under certain conditions, you or National Grid decides to stop using geothermal energy during the term of the Geothermal Program, you will be able to choose to return to your original heating system, shift to an all-electric air source heat pump, or disconnect from the geothermal network and shift to an individual ground source heat pump if site conditions allow. Estimates of costs of each termination alternative, and the conditions that may result in termination, will be provided prior to any agreement to participate.

Contact

For further information, please contact us at:
geothermal@nationalgrid.com

or visit the Geothermal Program website at:
ngrid.com/geothermalma