

Utility Thermal Energy Network (UTEN) Pilot Fact Sheet

Project Overview

Our Utility Thermal Energy Network (UTEN) Pilot Project is a pioneering initiative in the state of New York that is designed to empower customers to take an active role in the transition to a clean energy future as outlined in the goals of New York's Climate Leadership and Community Protection Act (CLCPA).

A UTEN is a network of equipment and distribution infrastructure owned and operated by a utility that supplies thermal energy to connected buildings (homes or businesses). The network may use various thermal energy sources like groundwater, geothermal boreholes, surface water, etc. to provide energy for heating and cooling via geothermal heat pumps in the buildings. The geothermal heat pumps use electricity to efficiently transfer heat from the ground or other thermal sources in the winter to heat the building and efficiently cool the building by transferring heat to the ground or other thermal sources in the summer.

UTEN Proposed Pilot Project Scope

An open loop (i.e., groundwater) networked geothermal system located in the Northside neighborhood in the City of Ithaca.

- Estimated CO₂ emissions offset (tons): **609**
- **39** proposed buildings
 - ✓ **8** non-residential buildings
 - ✓ **31** residential buildings

Project Purpose

We are proposing a utility thermal energy network pilot project in Ithaca in response to legislation passed in July 2022 and the subsequent New York Public Service Commission Order on Developing Thermal Energy Networks Pursuant to the Utility Thermal Energy Network and Jobs Act.

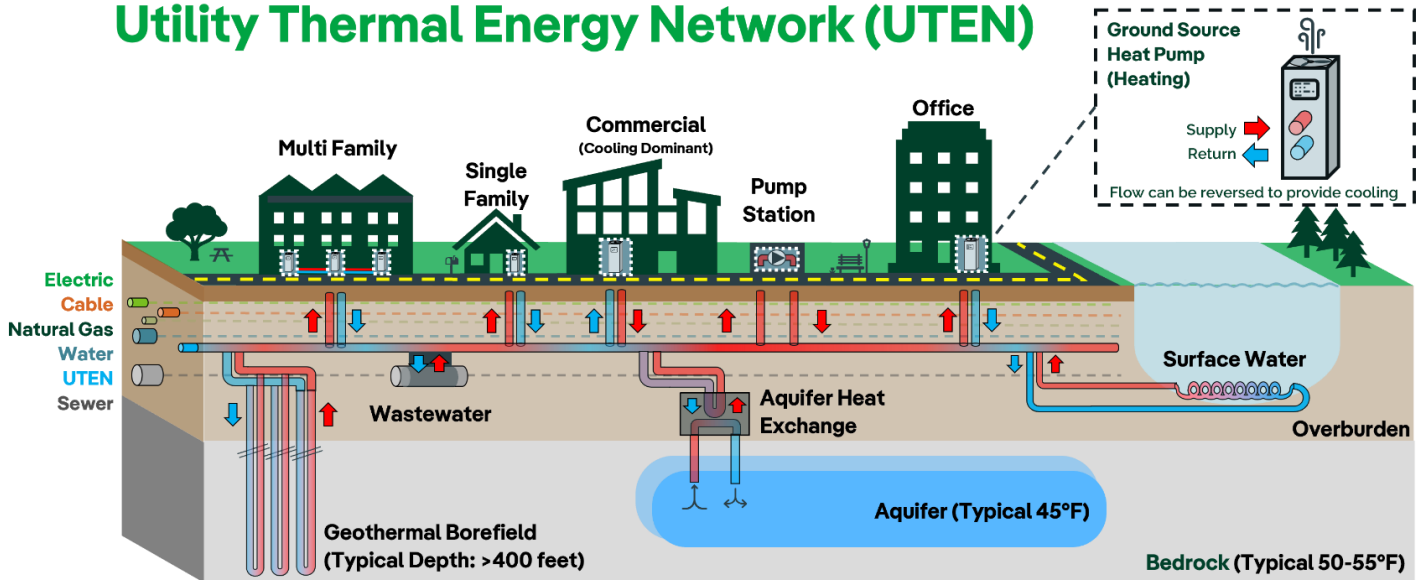
The Order is intended to advance broader and more scalable approaches to building electrification including active engagement of regulated utilities, and to ultimately inform the Commission's rulemaking decisions with respect to utility-owned thermal energy networks.

The pilot will be evaluated based on many characteristics, including but not limited to:

- Cost to install and operate
- Benefits to customers
- Customer feedback
- Emissions reductions
- Impacts on utility infrastructure
- Expandability



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Pilot Project Benefits

Utility Thermal Energy Networks (UTENs) can support the achievement of New York’s clean energy goals while supporting a clean energy transition by:

- Accelerating decarbonization by moving to a community level approach compared to the individual building approach.
- Promoting building electrification.
- Providing the opportunity for the installation of new high-efficiency central HVAC (heating, ventilation, and air conditioning) equipment at no cost to the building owners or tenants.
- Providing a constant and reliable source of renewable energy for heating and cooling buildings.
- Offering opportunity for new utility business models.
- Encouraging local economic development with investments.
- Benefitting disadvantaged communities (DACs).
- Contributing to New York’s goals for energy and the environment:
 - ✓ Reducing building energy consumption.
 - ✓ Reducing on-site building greenhouse gas emissions in accordance with the City of Ithaca’s Green New Deal and New York State’s Climate Leadership and Community Protection Act (CLCPA).
 - ✓ Lessening electric demand compared to air source heat pumps or traditional HVAC equipment (i.e., beneficial electrification).
 - ✓ Potential for energy efficiency improvements.

Project Facts

Municipality:	Ithaca
County:	Tompkins
Permitting Required:	Local and state

Estimated Timetable *(subject to change)*

Project Start:	2026
Project Completion:	2027

Email: uten@nyseg.com

