

Site Selection Factors to Consider

This list is also available as a [worksheet](#) with more detail, resources, and links.

Potential Thermal Energy Resources and Networks

Buildings

- Facilities and buildings that can be thermal energy resources and/or customers
- Buildings that require heating and cooling within ¼ mile or less of thermal energy resources and/or potential borefields
- Compatible heating and cooling (HVAC) systems (see vctn.org/s/Compatible-HVAC-Systems.pdf)
- Existing energy efficiency and electrical capacity
- Local spaces that serve as an emergency shelter and/or provide essential services

Street Conditions and Rights of Way

- Capacity to lay pipe between buildings and to building mechanical rooms
- Available rights of way for street work and street crossings

Complementary Projects

- Town plans to add or improve water and/or wastewater systems
- Current and future plans for residential or commercial development projects
- Projects already in line for street openings

Existing Infrastructure

- Sewer lines where pipes join a larger main before entering the public right of way
- Tunnels, bridges, or stormwater channels that may serve as rights of way or heat sinks or sources
- Other renewable energy or infrastructure that supports thermal storage and TEN development

Geothermal Potential

Land Use and Feasibility

- Ownership and availability of land for geothermal boreholes/borefield(s)
- Existing permitting and land use regulations
- Areas of environmental concern that don't rule out a TEN, but require additional planning and permitting

Geology and Hydrology

- State or regional geologic data and reports that show attractive geological conditions
- Depth to bedrock and underground water flows can determine site suitability

Community Factors and Opportunities

Participants

- Building owners willing to provide thermal energy
- Building owners willing to become TEN customers
- Current residents and/or businesses willing to engage in a TEN process

Housing and Neighborhoods

- Range of housing, including unit sizes, ages, heating sources, etc.
- Inclusion of rental and affordable housing
- Potential for equitable distribution among different populations
- Mix of income levels in order to benefit a wide range of residents and businesses

Workforce

- Availability of professionally certified drillers, installers, inspectors, and maintenance workers
- Worker compensations that qualify for prevailing wage incentives in the Inflation Reduction Act

Gas Service Territory

- Opportunities to replace gas service
- Gas main and service lines in need of repair or replacement
- Sites at or near the end of local gas distribution pipelines