

**Woodstock Community Heat Pump System
Category A Feasibility Study
NYSERDA PON 4614**

Ulster County

Technical Lead: CHA Consulting



The Site & Beneficiaries

CHA Consulting with support from Woodstock Community Thermal Team (WCTT) will assess a community heat pump district for central corridor through the Town of Woodstock. The selected route consists of Residential and Commercial zoned districts with 170 buildings of diverse types: houses, restaurants, apartments, retail, a school, and community buildings. The project is an ideal opportunity to provide a proof of concept of district heat pump systems in a mixed use and low-and-moderate-income (LMI) application, where residents are currently reliant on delivered fuels for heating such as fuel oil and propane.

Potential Thermal Resource

The area is heavily wooded, and there is little open area for most buildings to have individual ground heat exchangers; however, the town owns unpaved parking lots and large recreation areas that are potentially available for vertical ground heat exchangers for a community-style approach. Geothermal resources will be estimated using data gathered from the existing town courthouse and police station boreholes, including geological data that characterizes the subsurface conditions.

Potential Configuration

The scoping study will investigate an ambient loop configuration on the central corridor through the Town of Woodstock consisting of Mill Hill Road, Tinker Street, and Rock City Road, which has the highest density of buildings. To reduce the cost of installing underground infrastructure, a portion of the distribution system installation may be able to coincide with a sidewalk replacement project planned in the future.