

**Syracuse East Adams/15<sup>th</sup>  
Ward District Energy System  
Category A Site-Specific  
Scoping Study  
NYSERDA PON 4614**

Onondaga County

Technical Lead: CenTrio and CHA  
Consulting



V1 9/2022

**The Site & Beneficiaries**

The City of Syracuse and the Syracuse Housing Authority are leading an \$800 million revitalization of the East Adams/Old 15th Ward, a 27-block, 118-square-acre area that includes more than 1,037 public housing units. With one of the highest rates of concentrated poverty in the nation, Syracuse is redeveloping a 31-acre site in the 15th Ward, a historic community that was decimated by the construction of I-81 in the late 1950s. The construction resulted in the razing of homes, destruction of hundreds of Black-owned businesses, and the displacement of more than 1,000 African American households. The project will provide 611 units of housing, 293 as replacements for existing units in Pioneer Homes, 178 additional units of low-income housing, 140 market rate units, 10 three-four story multifamily buildings, 55 townhouse style buildings, and a community center. And another 793 housing units in later phases.

**Potential Thermal Resource**

The project proposes a district energy approach that provides for high efficiency heating, cooling, and domestic hot water for all buildings being proposed. The system would consist of ambient loop distribution system served primarily by closed loop geothermal boreholes. Supplemental heating from sewer heat recovery will be investigated and addition heating and heat rejection would be provided by the nearby central plant that currently serves educational and institutional customers in the University Hill area. CenTrio was the developer of the largest US sewer heat recovery system in operation in Denver, CO and would like to bring that technology and experience to Syracuse. A four-pipe, 4th generation system will also be considered to determine which is the best fit for low-rise multifamily and residential buildings.

**Potential Configuration**

The comprehensive manner of the project lends itself to running extensive underground infrastructure, and the distribution system could be installed in conjunction with other new underground utilities, reducing the cost of excavation and restoration. The project would be ideal to provide a proof of concept of district heat pump systems in a mixed income and LMI application, and the residents would benefit from the higher quality equipment that would be provided.