

NYSERDA PON 4614 Category D: Guidebooks

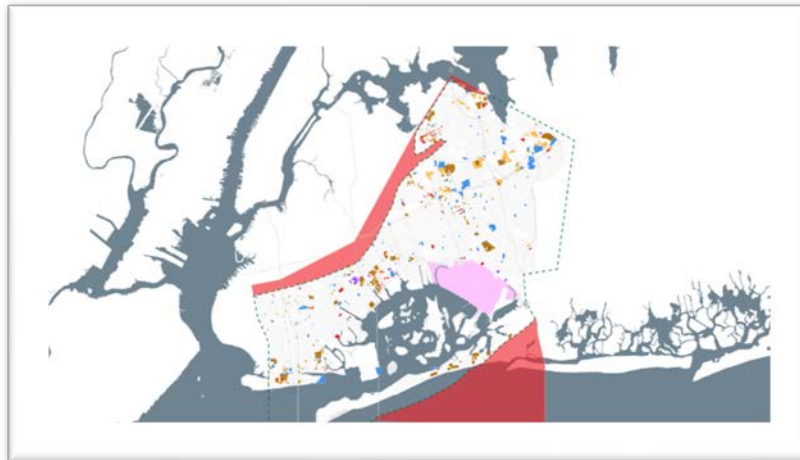
Recipient: One Architecture and Urbanism

Awarded via PON 4614, Round #3, Category D

Anticipated Final Report Availability: December 2022

Market Potential Study regarding Downstate Applicability of Aquifer Thermal Energy Storage (ATES):

- ATES is well-established in The Netherlands, but relatively new to the US. Projects incorporating ATES require less-extensive drilling of boreholes and less footprint space, and thus may expand the applicability of ground-source heat pump systems to more candidate sites as well as improve the value proposition.
- This project will assess the applicability of Dutch drilling techniques and implications for project economics through a technical and benefit cost analysis related to deploying projects in Downstate New York. One Architecture and Urbanism will conduct a mapping exercise to characterize applicable sites in Downstate New York and conduct extensive stakeholder engagement.
- The team will conduct a high-level analysis of four prototypical use cases to assess the threshold for viability and ways to improve projects. The four use cases include a low-density city block, a residential campus, a NYCH campus, and an off-shore well.



ATES application study in
Brooklyn/Queens region,
building developments
/ Aquifer conditions
(Source: One Architecture
and Urbanism)