



Developing HVAC and Smart Building Solutions for Building Electrification and Decarbonization

Enabling Energy Efficient, Resilient, and Load Flexible Advanced Buildings

Investment Thesis

Not only do buildings account for 67% of energy use in New York State, but there is a significant difference between their peak (32 GW) and average (18 GW) demand that is driven in large part by heating, ventilation, and air conditioning (HVAC) requirements. To ensure a reliable grid in the face of fluctuating loads, NYSERDA is investing in demand-side building technologies, including clean forms of heating and cooling, enabling low global warming potential (GWP) refrigerants, thermal storage, envelope retrofits, and intelligent buildings.

NYSERDA Experience

The Advanced Buildings Program accelerates the development and commercialization of innovative solutions that enable buildings to decarbonize and electrify through research and stakeholder engagement.

This NYSERDA program issues innovation-based opportunities that address building sector needs and technology gaps.

Areas of Opportunity

NextGen Buildings: Improves the performance and comfort of buildings through the advancement of the next generation of HVAC, building envelope, and thermal storage solutions.

Intelligent Buildings: Enables the pursuit of decarbonization, better management of load and the utilization of energy generation assets, and serves as a reliable distributed energy resource (DER). Develops products, services, and technical and informational resources to accelerate the implementation of smart building solutions.

When you innovate in New York, you get the world.

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NYSERDA Innovation Perspective

“This is beyond increasing energy efficiency. As we pursue our Climate Leadership and Community Protection Act goals, there is a pressing need to identify and deliver on innovative solutions in the timeframe set.”

— **Joseph Borowiec**,
Program Manager,
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