

The Empire Building Challenge Knowledge Base

A Made in New York Approach to Cold Climate Tall Building Decarbonization

Welcome to the Empire Building Challenge Knowledge Base. This knowledge base is a resource for building owners and operators, and their design and engineering teams, who wish to develop a cost-effective, long-term decarbonization roadmap for their buildings. By following the decarbonization approach described here, building owners can build a clear path toward carbon neutral operations by adopting an incremental methodology and integrated design process combined with strategic capital planning. Through this platform, the New York State Energy Research and Development Authority (NYSERDA) is sharing the lessons learned from the [Empire Building Challenge](#) (EBC) program and introducing the Resource Efficient Electrification (REE) framework.

The Empire Building Challenge is public-private partnership between NYSERDA and leading real estate companies to advance large building decarbonization strategies and replicable low carbon retrofits of existing buildings. As a result, a novel approach to decarbonization tailored specifically to high-rise buildings in cold climates emerged after over a year of collaboration between EBC real estate partners, their industry-leading consultants, and the NYSERDA team. This is part of a \$6.8 billion NYSERDA effort to help buildings across New York transition off fossil fuels, which will accelerate New York's progress toward the Climate Leadership and Community Protection Act goal of reducing greenhouse gas emissions 85 percent by 2050.

Join us on our quest to decarbonize the New York building stock. We are looking for your feedback, constructive dialogue, and support to broadly and effectively disseminate this information

Problem Statement

As building owners, asset managers and sustainability consultants pursue decarbonization plans, they are often faced with challenges that delay action and progress.

[Misconceptions about Decarbonization](#)
[Technical Barriers to Decarbonization](#)

The Framework

Introducing a rational approach to large building decarbonization: Lessons learned from the Empire Building Challenge.

[Resource Efficient Electrification \(REE\)](#)
[Intervention Points and Best Practices](#)
[Strategic Decarbonization Assessment \(SDA\)](#)

Solutions

The Empire Building Challenge is looking to advance targeted technology focus areas that are critical enablers, and promote first steps toward carbon neutral retrofits in large buildings.

[Technology Focus Areas](#)

Resources

Find below additional resources on this topic.

[EBC Webinar - Thermal Energy Networks for Decarbonization](#)

[EBC Webinar - Cold Climate Tall Building Decarbonization](#)

[Terminology & Definitions](#)

[Informational Webinar - Funding Round 2](#)