

High Rise / Low Carbon Series

Program Summary Financing Deep Retrofits

Program Brief

On May 4, 2022, NYSERDA and Building Energy Exchange hosted the second event of their <u>High Rise / Low Carbon</u> <u>Series</u>, focusing on long term capital planning, and the tools and strategies used by Empire Building Challenge Partners to finance deep retrofits, future proof their portfolios, and meet City and State climate action objectives.

The Empire Building Challenge (EBC) is a \$50 million NYSERDA program that accelerates the decarbonization of tall buildings through public-private partnerships to bring scalable carbon-neutral retrofit approaches to the New York market. The High Rise / Low Carbon Series highlights NYSERDA's EBC and the commitments of the Challenge Partners. The series is designed to inspire action among New York's building industry stakeholders and invite the world's top solution providers to join New York on its journey towards a low-carbon future.

Program Highlights

beilding energy exchange A primary focus of NYSERDA and the EBC real estate partners, the **Strategic Decarbonization Planning** framework is a long-term financial planning strategy for building owners to manage emissions and energy use. The framework helps owners move away from reactive decisionmaking and towards proactive planning to simultaneously optimize for operational expenses, net operating income, and emission reductions.

Rather than conventional payback calculations—which don't capture the benefit of holistic design approaches where whole-system synergies generate deep savings, or when the cost of inaction is greater than zero—the Strategic Decarbonization Planning framework incorporates detailed Discounted Cash Flow models of different investment scenarios compared to business-as-usual pathways. Key milestones, like tenant turnover or equipment end-of-life, are integrated to smartly phase investments that reduce carbon emissions, minimize costs, and avoid tenant disruption.

The <u>Strategic Decarbonization Assessment Tool</u>, developed by NYSERDA, and piloted by the first EBC cohort, is one of several resources produced by NYSERDA to help the broader real estate investment community incorporate decarbonization strategies into capital planning. These tools will be routinely updated based on industry feedback and will help building owners develop a Strategic Decarbonization Plan and communicate the benefits of their plan to tenants, lenders, and other key stakeholders.

Program Takeaways

Every building needs a decarbonization plan. Effective plans integrate repositioning, tenant amenities, risk management, and regulatory compliance simultaneously.

The cost of inaction is not zero. Financial costs of delaying building decarbonization include regulatory penalties, the potential for stranding assets, and executing a last-minute decarbonization plan under duress.

There are good and bad decarbonization plans. Effective plans incorporate detailed NPV analyses of different pathways relative to a reactive baseline.

Phasing is key. Align decarbonization plans to traditional leasing cycles and equipment end-of-life to take advantage of previously planned capital expenditures. Incorporating decarbonization measures into these key milestones can spread costs and minimize tenant disruption.

Better risk assessment will drive the low-carbon retrofit market.

Lenders, building owners, government agencies, and other key stakeholders should incorporate environmental, physical, and financial risks (e.g., climate change-related impacts, stranded asset risks, future energy cost risks, policy & code risks) into their decisionmaking. Understanding these risks strengthens the case for building decarbonization and accelerates market growth.

A wide range of financial tools are available for decarbonization

projects at di erent stages, from project planning to implementation. Measurement and verification of carbon reduction measures can unlock financial products from green lenders like NYCEEC and NY Green Bank. Smart decarbonization plans can communicate both the financial and carbon benefits to lenders.

Additional Topics for Future Consideration:

- Green lease impact on decarbonization projects
- Impact of federal-level climate risk disclosure rules
- Green workforce development
- Balancing electrification and energy efficiency
- Financing electrifiction for multifamily coops

Panel

Lane Burt Managing Principal Ember Strategies

Grayson Hoffman Investment Manager Norges Bank Investment Management

Erangi Dias Director of Business Development NYCEEC

David Davenport Managing Director NY Green Bank

Moderator

Sadie McKeown President Community Preservation Corporation

Introductory & Closing Remarks

Greg Hale Senior Advisor, Energy Efficie y Markets NYSERDA

Sophie Cardona Senior Project Manager NYSERDA

