

Q4

October – December 2020



building
energy
exchange

● **BE-Ex team**



Richard Yancey
Executive Director

Yetsuh Frank
Managing Director,
Strategy and Programs

Talia Kula
Manager, Development
and Operations

Helen Chananie
Manager, Projects

Katie Schwamb
Manager, Projects

Jordana Vasquez
Senior Associate, Projects

Will DiMaggio
Senior Associate,
Communications and
Programs

Regana Alicka
Associate, Projects

Becky Kalish
Associate, Programs

Sabrina Tenteromano
Assistant, Programs

Noor Ain
Assistant, Projects

We have rounded out 2020 with an impressive slate of educational content and resources that tackle some of the most critical issues facing the energy efficiency community, including programs on affordable housing, a global report on high-performance commercial towers, and technical assistance for improving ventilation in multifamily buildings.

November 12

High Rise | Low Carbon Report Launch

The High Rise | Low Carbon Report made its debut paneled by project collaborators, BE-Ex, NYSERDA, and Level Infrastructure with an overview of this compendium of diverse projects—the survey methodology, individual project profiles, and key findings—and the implications it holds for building stakeholders as local and State climate policies come into effect.





December 2

The Future of Water

A discussion of the long and short term efficiency measures of one of our increasingly strained resources as water rates rise and management technology improves. Private sector, public works, and institutional portfolios were among the perspectives represented, moderated by Teghpal Sandhu, CEO of Live Building Systems.



► <https://be-exchange.org/the-future-of-water/>

December 8, 2020

Better Ventilation: Solutions for Multifamily Buildings

BE-Ex and a panel of experts from both the private and public sector celebrated the launch of our latest playbook: “Better Ventilation: Solutions for Multifamily Buildings” and a new case study. An affordable co-op in Washington Heights leveraged a ventilation upgrade and simple air sealing measures to improve occupant health and comfort while reducing emissions, as well as touched on COVID-19's impacts on the future of ventilation.

► <https://be-exchange.org/better-ventilation-solutions-for-multifamily-buildings/>

column:

Preventative Efficiency

by Yetsuh Frank

Managing Director, Strategy & Programs

Building Energy Exchange

One of the less remarked on but key takeaways from the COVID-19 pandemic has been the importance of general health in times of crisis. The primary focus during the pandemic, for understandable reasons, has been on immediate actions. How do we limit transmission of the virus? How do we treat those who contract it? But moving forward we must also focus on the general health of everyone in our communities. Limiting the transmission of any virus is important, of course, but it is also important to ensure those that do get it are as resilient as possible.

Consider that a Johns Hopkins and Fair Health study of COVID deaths found that more than 80% had at least one pre-existing comorbidity (such as lung cancer, chronic kidney or heart disease, etc). A similar New York State study found this figure to be 90%. In each study, as the number of a patient's comorbidities increased, so did their chance of dying from COVID-19. It is clear that even in the midst of an acute

health crisis, preventative medicine is every bit as important as immediate action.

All of which has got me thinking about the parallels in our industry to the climate crisis and the need for preventative efficiency within our building stock.

Electrifying all the systems in all of our buildings is a monumental task. Like any project of this scale, we need to break it down into component parts and work our way through them over time because it would be impossible to do it all at once. There's not enough money, not enough tradespeople, and not enough technical expertise on hand to simply switch everything over in a couple of years. So we need to start now, and to the extent feasible we should make our buildings as efficient as possible before we introduce electricity-based heating and hot water systems. This is *preventative efficiency*—retrofitting our buildings so they demand less energy, so we need less electricity to satisfy that demand when

To compliment local efforts already underway, the Biden administration climate action plan includes a goal to halve emissions from buildings by 2035 through an aggressive program to upgrade 4 million buildings and weatherize 2 million homes over 4 years.

we make the switch from fossil fuels.

The COVID-19 pandemic made clear that the health of our neighbors is critical to our own well being. The same is true of electrifying buildings, in the sense that we must all do our part reducing demand through efficiency or there won't be enough electricity to go around. Many in the real estate sector wonder if they should just wait till the last possible moment to electrify their legacy systems, but doing so places you squarely in the bottleneck and there is no guarantee you'll squeeze through it unscathed. The risk involved in waiting is considerable. If you are subject to Local Law 97 carbon emissions limits, you risk significant financial penalties. If you plan on purchasing renewable energy credits to offset your emissions, there is no guarantee they will be available or affordable. Finally, if you hope to market yourself as a leader in any real estate sector, you'll be hard pressed to do so if you rely on dirty

fossil fuels to drive your systems.

Despite the lessons in solidarity we should take away from the global pandemic, it is probably naive to expect everyone to simply do the right thing. But goodwill is not the only pressure the real estate sector will be feeling in the years to come. New buildings will be required to meet both stringent, performance-based energy codes, as well as carbon emissions limits. Existing buildings will be competing with them in the marketplace; in a world that is streaming high-res audio, you don't want to be the one still selling 8-track tapes. Fortunately, we finally have Federal leadership that is determined to reduce the costs of converting our building stock to meet the needs of this century. Energy efficiency is already *the most cost effective* means of reducing carbon emissions across New York State. To compliment local efforts already underway, the Biden administration climate action plan includes a goal

to halve emissions from buildings by 2035 through an aggressive program to upgrade 4 million buildings and weatherize 2 million homes over 4 years. Central to this plan are funds to spur the deployment of retrofit technologies, new and existing.

Public health and the built environment have another thing in common: change typically happens slowly. As a result, it can often feel like the status quo has always been thus—that nothing ever changes.

But incremental change has always been the rule in buildings, where modifications are capital intensive and require significant coordination. This pace of change is why we need as many buildings as possible to advance retrofits now. Over the previous year we have learned that it is useless for only one of us to wear a mask. To mitigate the most dire impacts of climate change, individual building owners can't go it alone. We are all in this together and need to act accordingly, for selfish as well as altruistic reasons.



2020 in review

programs:

4501 attended
53 programs



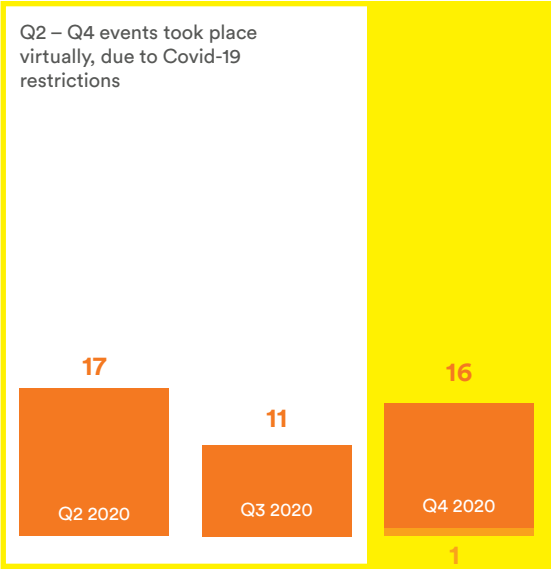
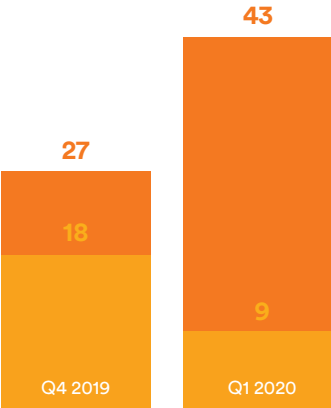
offsite primers:

191 attended
23 Programs

4692 attended
76 Programs

We are thrilled by the number and diversity of events developed in Q4, which span a wide array of topics on energy efficiency in the built environment. Since pivoting to remote programming in mid-March we have continued to expand our traditional formats and increase our audience.

BE-Ex hosted events



BE-Ex developed events

diversity goals

- 1. No all male panels
Q4 number: 1
- 2. 50% female speakers across BE-Ex events
Q4: 41%



average number of days on calendar, BE-Ex events

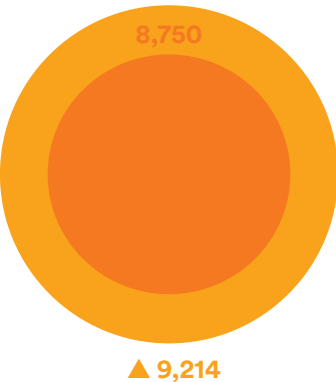


average attendance, BE-Ex events

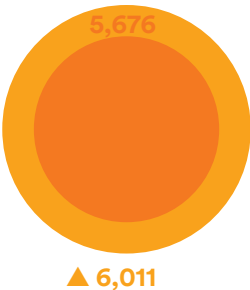
● audience

BE-Ex continues to realize terrific audience growth, with our newsletter and social media audiences growing nearly 40% over the past year. Our online resources were downloaded nearly 7,000 times by over 46,000 users across 71,805 sessions in 2020.

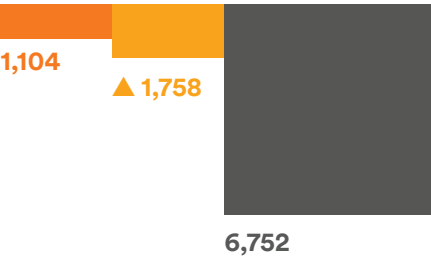
newsletter subscribers



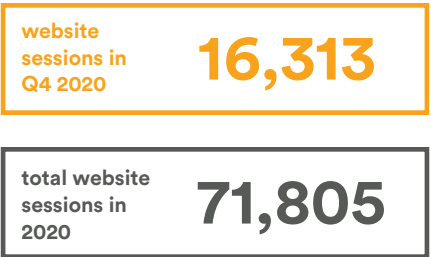
social media followers



resource downloads



website traffic



program audience geographic distribution





Richard Yancey
Executive Director

Richard returned to his native Brooklyn, in 2005, after practicing architecture and starting a family in Seattle, Washington. Responsible for developing and delivering on BE-Ex's mission, Richard leads the organization, staff, and finances, liaises with the Board and BE-Ex members, while taking an active role in key projects, including: the Commercial Data into Action report; our BE-Ex Architect Advisory Council initiative; and the Decarbonizing New York City Offices project.



Yetsuh Frank
**Managing Director,
Strategy and Programs**

Yetsuh originally hails from Seattle and leads our programming and communications efforts. He often hosts our live programming, including our podcast, Radio BE-Ex, and is currently working on a series of Heat Pump Pattern Books, as well as a collection of five Multifamily Retrofit Playbooks.



Talia Kula
**Manager, Development
and Operations**

Talia Kula is originally from Manhattan. She leads fundraising activities and contributes to outreach and engagement with BE-Ex's corporate and government partners. Talia spearheads WISE programming and manages special projects. She recently completed a project creating a visualization and market engagement strategy for NYSERDA's Real Time Energy Management program.



Helen Chananie
Manager, Projects

Helen is originally from Brooklyn, NY. She has been leading the effort to roll out BE-Ex Ed, our new on demand learning platform, and is currently working on the next update to our Passive House Primer series. In Q4 she coordinated diversity, equity and inclusion workshops for the BE-Ex team and Board.



Katie Schwamb
Manager, Projects

Joining the BE-Ex team in Q4, Katie, originally from Texas and currently residing in Brooklyn, NY, has been managing the roll out of the Decarbonizing New York City Offices project, a two-year initiative focused on assessing resource gaps and creating practical tools to support commercial real estate stakeholders in carbon and energy reductions; a series of Heat Pump installation guides for 1-4 family residences; and a LL97 Roadmap aimed at providing NYC Housing Preservation and Development (HPD) data-based strategies for meeting high-performance and carbon emissions goals.



Jordana Vasquez
Senior Associate, Projects

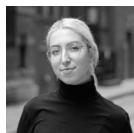
Joining the BE-Ex team in Q4, Jordana trained as an architect and sustainability consultant in New York City. She is currently working on the NYSERDA Multifamily Typology Playbooks and a set of materials for the Multifamily Passive House Playbook for the NYC Accelerator. She is originally from Santo Domingo, Dominican Republic.



Will DiMaggio
Senior Associate,
Communications and
Programs

Will grew up in New Jersey and lives in Queens, New York. He oversees the organization's communications efforts, advises on digital presence, and is central to the development and delivery of programs. He is currently working on the LL97 Carbon Emissions Calculator, the webification of our physical exhibits, and the launch of the Radio BE-Ex podcast series.

Regana Allicka



Associate, Projects

Regana is currently working on developing the Passive House Primer series for BE-Ex Ed, our new on demand learning platform, as well as additions to the High Performance Case Study database. The first Passive House Primer course is available on the platform and the others are rolling out at the end of Q1. She is originally from the Bronx.



Becky Kalish
Associate, Programs

Becky was born in Newton, MA. In Q4, she took on a leading role in BE-Ex programs including logistics, development and marketing. Becky was instrumental in helping to put together a series of five playbooks of different multifamily building typologies for NYSERDA. Before leaving BE-Ex, she was responsible for social media and the weekly newsletter, and contributed to WISE programs.



Sabrina Tenteromano
Assistant, Programs

Sabrina is originally from and is currently residing in the Lower Hudson Valley.

Throughout Q4 Sabrina created social media content to highlight NYC's carbon reduction goals and BE-Ex's current exhibits and projects, assisted in the development of BE-Ex Ed, supported BE-Ex online programming pre and post event, contributed to WISE program development, and consolidated the accomplishments of the BE-Ex team into the Q4 Zine. She is currently pursuing her MS in Sustainability at the City College of New York.



Noor ul Ain
Assistant, Projects

Noor is from Sialkot, Punjab but grew up in Brooklyn where she currently resides. She has been working as Project Assistant at BE-Ex while studying architecture at the City College of New York. For the past few months, she has been working on continuing to identify and log buildings for BE-Ex's high performance building database, assisting the Projects team on the Passive House Primer modules, and helping with WISE programming.

January 13, 2021

Passive House Primer

Our popular one-hour Passive House Primer, refreshed in 2020, will be the first program offering of BE-Ex in 2021. Delivered by John Rockwell, trained architect and now Technical Sales Engineer with Zehnder America, it will cover Passive House fundamentals and their application in the real estate market today.



► <https://be-exchange.org/passive-house-primer-jan-13/>

January 26, 2021

February 17, 2021

Climate Mobilization Act Primer

Designed for key stakeholders and responding to updates in the legislation, the CMA Primer is a one-hour seminar that examines the basic principles of the Climate Mobilization Act, with a focus on Local Law 97, and offers actionable guidance for building decision makers. The January session will be delivered by George Kontraroudis, Senior Project Manager, Morris Adjmi Architects; the February, Pournamasi Rath, Sustainability Program Manager, Etinger Engineering Associates. Our CMA Primers are a part of our ongoing CMA Series.

► <https://be-exchange.org/climate-mobilization-act-primer-jan-26/>

► <https://be-exchange.org/climate-mobilization-act-primer-feb-17/>

January 28

Radio BE-Ex

Financing Deep Retrofits

The first 2021 episode of Radio BE-Ex will feature Sadie McKeown of CPC discussing the financing of high-performance retrofits at scale in a growing market that includes affordable and market rate properties.

► <https://be-exchange.org/radio-beex-financing-deep-retrofits/>

February 23

WISE Media Club

Biden's Climate Policy

This interactive forum will facilitate discussion around President Biden's climate goals and challenges through conversation based on two podcasts.



► <https://be-exchange.org/wise-media-club-bidens-climate-policy/>

completed



presentation RTEM Visualization

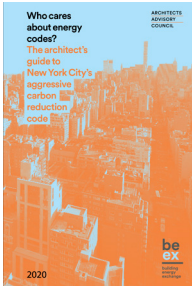
This project created concepts for a future visualization initiative—a side by side comparison of scenarios with and without RTEM—to clearly and directly communicate the benefits of RTEM systems to key market actors, such that they can better understand the enormous potential of these systems.

playbook Better Ventilation

This playbook offers an overview of common ventilation system types, typical ventilation system problems, and solutions for better ventilation. It comes at an especially relevant time when COVID-19 work-from-home policies are being lifted and interest in ventilation system performance enhancements increases.



upcoming



report
Architect Advisory Council

The Architect's Advisory Council provides actionable recommendations to catalyze the design and construction of predicted energy use code compliant buildings, as well as the integration of high performance building practices in architecture.

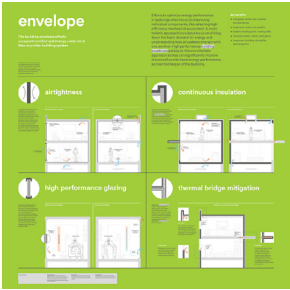


exhibit
**Envelope Showcase
Online Exhibit**

This deeper dive into the building envelope's role in energy efficiency expands on the envelope system as showcased in the Anatomy of an Energy Efficient Building Exhibit which provides a behind-the-scenes look at major building systems within New York City commercial and multifamily buildings.

While it has been an extremely challenging year, we remain heartened by what feels like renewed momentum behind mitigating climate change at the city, state and—finally—federal level. The critical role that buildings will play in climate action across the U.S. is now a regular talking point in mainstream media, which we hope bodes well for the quality of the places we live, work, and play.

programs (online)

ASHRAE Global HQ:

Energy Modeling for Net Zero (Pt. 2)

October 1st

Will Carlin: The Secrets to Pitching Online

October 8th

Passive House Primers

October 13th, November 17th, December 9th

Climate Mobilization Act Primers

October 14th, November 18th, December 15th

What's My Penalty? LL97 Calculator Demo

October 21st

WISE Media Club: Food is Good, Let's Not Waste It

October 22nd

Climate Mobilization Act Series:

Raising the Bar for Affordable Housing

October 28th

High Rise | Low Carbon Report Launch

November 12th

WISE Ask Me Anything with Pfizer's Liz Girardi Schoen

November 13th

The Future of Water

December 2nd

Better Ventilation: Solutions for Multifamily Buildings

December 8th

NYCHA'S Climate Mitigation Roadmap

December 10th

WISE Trivia Night: Goodbye 2020!

December 16th

project status

Q4 2020

■ BE-Ex Ed E-learning Platform

■ Ventilation Playbook

■ RTEM Visualization

Q1 2021

■ NYSERDA Multifamily Retrofit Playbooks

■ Heat Pump Pattern Books

□ Brochure: Buildings of Excellence Awards

□ Passive House Technical Modules

□ Passive House Contractor Training

□ Underwriting Passive House Playbook

□ Architect Advisory Council Report

□ Envelope Showcase Online Exhibit

□ Carbon Calculator 2.0

□ CTP Decarbonization Resources and Training

Ongoing

□ Report: Data Into Action, Commercial

□ HPD LL97 Affordable Guidance

□ BE-Ex Ed Course Development

45

Target number days
for event on calendar

■ COMPLETED

□ ANTICIPATED