

Decarbonizing New York City Offices: Industry Survey Report Summary



project team

project sponsor



IMT
INSTITUTE
FOR MARKET
TRANSFORMATION



NEW YORK
STATE OF
OPPORTUNITY.

NYSERDA

June 22, 2021

ComTenantEfficiencyNYC@be-exchange.org

Decarbonizing New York City Offices:

Industry Survey Report Summary

The *Decarbonizing New York City Offices* project team broadly surveyed real estate industry stakeholders, leveraging their expertise and insight, to guide the development of practical tools designed to promote strategic energy efficiency investments, decarbonization strategies, and forward-thinking leasing practices within commercial real estate.

In the fall of 2020, the New York State Energy Research and Development Authority (NYSERDA) launched the *Decarbonizing New York City Offices* project, an initiative to drive energy efficiency in commercial real estate and advance New York's ambitious climate goals in the midst of pandemic-related workplace changes.

As a critical first step, the project team developed and disseminated an industry survey to gather feedback from key stakeholders who have knowledge of or influence over the tenant leasing process, space design, and operations. Through the survey, the project team sought to assess:

COVID-19 Impacts:

Impacts to business practices and space needs as a result of pandemic related limitations.

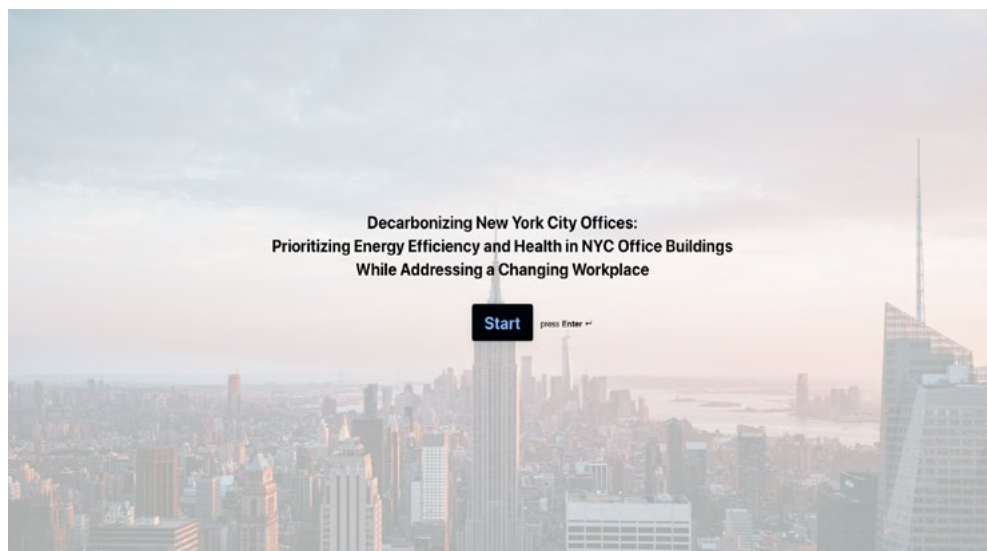
Energy Efficiency Trends:

Current strategies and business-as-usual operations that both enable and impact energy efficiency investments and actions.

Intervention Opportunities:

Challenges within business-as-usual operations that would benefit from strategy changes and resource development.

The survey results shed light on new energy efficiency priorities and provide a deeper understanding of potential stakeholder knowledge gaps. The project team will utilize findings from the survey as well as insights from the project's Steering Committee and other subject matter experts, to inform the development of engaging and actionable industry resources designed to spur impactful retrofits and leasing practices within the commercial real estate sector.



Decarbonizing New York City Offices: Industry Survey Report Summary

Survey Overview

Purpose

To kickstart the *Decarbonizing New York City Offices* project, the project team created a survey to identify barriers and motivators impacting energy efficiency measures and decarbonization strategies in commercial office spaces as a result of shifting priorities due to COVID-19 and recently enacted regulations.

Parameters

Regarding the survey’s structure, the project team:

- Developed fifty-seven (57) questions with each stakeholder type answering a subset of questions.
- Administered the survey online beginning November 30, 2020 and concluding January 29, 2021.
- Collected responses from seven (7) stakeholder types: tenants, building owners, building managers, brokers, attorneys, consultants, and vendors.



Figure 1: Target Commercial Real Estate Stakeholders

Respondents

Overall, 270 individuals took the survey, providing findings that are indicative of industry trends. More than half of all survey respondents were consultants, including: architects, engineers, and sustainability consultants. Brokers and attorneys had just five and three respondents, respectively, highlighting the need for further strategic outreach to these groups in order to gain additional insights. The project team is using targeted interviews and curated workshops to supplement the survey findings.

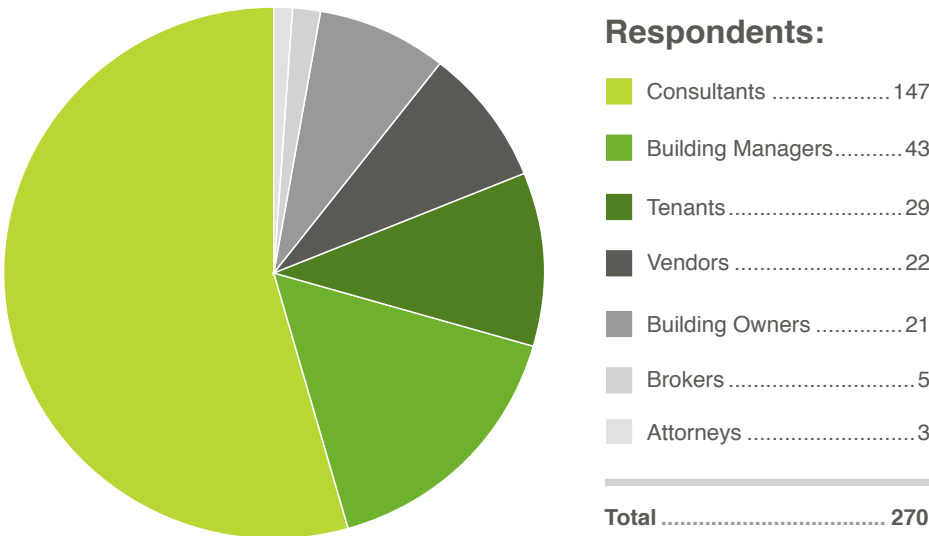


Figure 2: Survey Respondents

Decarbonizing New York City Offices:

Industry Survey Report Summary

Key Findings

After analyzing survey responses, the project team identified findings within three key focus areas: **COVID-19 Impacts**, **Energy Efficiency Trends**, and **Intervention Opportunities**. The following takeaways highlight the challenges and opportunities the commercial real estate industry currently faces.

COVID-19 Impacts

The pandemic has triggered significant shifts in work patterns. Employees have learned new behaviors, adopted new technologies, and adjusted to new ways of working. Meanwhile, employers have strived to determine how to balance dynamic shifts toward remote work with the value of the physical workplace during a time when many firms have short-term challenges and long-term uncertainty. This ambiguity causes owners and tenants to wait as long as possible before making space-related decisions, to seek flexibility in lease terms, and to prioritize indoor air quality to ensure a safe return to work.

Commercial real estate stakeholders are prioritizing safe and healthy buildings, particularly indoor air quality, before energy efficiency. Tenants, specifically, are focusing on indoor environmental quality and frequent cleaning and sanitization of their leased spaces over energy efficiency and flexible lease terms. The clear preference to improve indoor air quality highlights the need to educate tenants on practical approaches for achieving the desired air quality levels in an energy- and cost-conscious way.

As a result, building managers are also implementing a variety of healthy building protocols. The most common measures include low-cost strategies such as frequently cleaning high-touch surfaces and following social distance and traffic flow guidelines as well as higher-cost measures related to improving indoor air quality, such as filtration upgrades.

Uncertainty regarding space needs is driving tenants to postpone major decisions, such as signing new leases or renewals, and to pursue protections, such as flexible lease terms. Tenants are often postponing major decisions regarding space needs until they have a better sense of shifting work preferences. When tenants with existing leases must make decisions, they plan to redesign their existing office space rather than modify existing lease agreements. According to brokers, most tenants seeking new leases are demanding flexible lease terms and reasonable termination options, although some view pandemic-related workplace changes as temporary and are still pursuing long-term leases.

Energy Efficiency Trends

The pandemic revealed a significant misalignment between energy consumption and building occupancy, but the industry aims to mitigate this discrepancy. Based on internal analysis of sample tenant energy data from select New York City office buildings, only 5% of buildings experienced whole-building energy reductions above 30% even though occupancy dropped by as much as 95% at the height of the pandemic and more than 40% of buildings only experienced whole-building energy reductions between 10%-30%.

Decarbonizing New York City Offices:

Industry Survey Report Summary

To address this misalignment, approximately 60% of building owners changed their energy efficiency strategies. Building owners and managers plan to better track occupancy data and control tenant energy use, by turning off lights when not in use and adjusting equipment setpoints where possible for example, in an effort to reduce energy consumption when occupancy is low.

Existing policies are driving increased collaboration and data-sharing between building owners/managers and tenants. Nearly two-thirds of building owners indicated that they are engaging with tenants to help comply with New York City regulations and are already seeking compliance pathways for Local Law 88 which goes into effect in 2025. In addition, 70% of building managers currently measure actual tenant energy usage in some or all spaces, and 75% of these building managers make the data accessible to tenants at least monthly. Furthermore, building owners are beginning to require submetering of tenant spaces in standard leases to ensure Local Law 88 compliance. The survey responses highlight that existing policies are achieving their intended effect, but that additional efforts are needed to support engagement and data-sharing between building owners and their commercial tenants.

Educating stakeholders regarding the financial costs and funding opportunities of energy efficiency projects is an effective engagement strategy. Consultants indicate that return on investment calculations are the most effective strategy to prove the business case for retrofits. Incentive programs, which can shorten the financial return period by lowering the upfront cost, are also considered helpful in securing a commitment from decision makers to advance energy efficiency measures. Building managers indicate that educating tenants on the environmental costs and impacts of advancing (or not advancing) energy efficiency measures is the most effective engagement strategy to promote decarbonization in tenant office spaces.

Intervention Opportunities

Both business-as-usual operations and inefficiencies uncovered in 2020 highlight challenges and opportunities to improving energy efficiency in tenant spaces. While the challenges remain persistent and cost-driven, the development of targeted resources can break down the barriers to retrofits and present opportunities to decarbonize New York City's office buildings.

Reducing operating costs are the primary motivator that drive all stakeholders to pursue energy efficiency within office buildings. Compliance with building regulations along with climate change are also significant motivators according to the survey responses. Other than climate change, indirect monetary benefits such as brand recognition and tenant/employee attraction are additional drivers. Given the significance of operating costs, an opportunity exists to promote existing or new programs that offer financial incentives and/or financing to advance energy efficiency strategies. Approximately 60% of survey respondents have participated in a NYSERDA program offering with the Flexible Technical Assistance Program, Commercial Tenant Program, and Real Time Energy Management Program being the most popular. In contrast, nearly 40% of survey respondents have not participated in any NYSERDA programs, highlighting the opportunity to reach these stakeholders.

Tenants and building owners tend to prefer low- and no-cost measures over capital intensive strategies. Tenants are most motivated by low- and no-cost projects, specifically energy efficient lighting, HVAC equipment, and occupancy sensors, followed by implementing behavioral changes. Building owners also plan to primarily focus on lower-cost measures to reduce whole-building emissions and comply with Local Law 97.

Decarbonizing New York City Offices:

Industry Survey Report Summary

The advancement of less capital-intensive measures indicates that tenants and building owners will benefit from resources that support long-term capital planning that offer guidance on when and how to strategically execute high cost retrofit measures in relation to the leasing cycle.

Building owners plan to leverage leases to advance energy efficiency measures in an effort to comply with LL97 emissions caps by reducing overall building energy consumption. Nearly 70% of building owners currently include, or plan to include, energy efficiency requirements in their standard lease language with tenants. Performance-based or energy-aligned leases are seen as a tool building owners can utilize to promote energy efficiency measures in tenant spaces. Furthermore, performance-based lease language has the potential to make a significant impact on a building's energy consumption and emissions by equitably aligning the costs and benefits of energy investments between building owner and tenant to achieve Local Law 97 thresholds. Additionally, 90% of tenants view building-level sustainability programs as must-haves or very important evidencing an alignment of interest and an opportunity for owners and tenants to work together to advance whole building efficiency.

Next Steps

This survey highlights the current state of the market in terms of energy efficiency motivations and barriers given the changing workplace environment. This investigation represents just the first step in understanding how the commercial real estate industry must shift to achieve a healthier, more efficient, low carbon future.

As part of the next steps in developing impactful resources for each stakeholder that will steer the industry towards sustained decarbonization of tenant spaces, the project team plans to undertake the following:

Strategy:

Through additional research and engagement, the team will narrow in on information and tools required to ensure major energy saving improvements and the most effective methods to deliver information to the appropriate stakeholders.

Resource Development:

Once impactful resource opportunities are identified, the project team will create curated "Stakeholder Playbooks" for each stakeholder to provide them with the knowledge and tools necessary to make deep energy retrofits of commercial tenant spaces the industry standard.

Outreach and Delivery:

The team will then devise and implement an effective outreach strategy to ensure that the resources developed reach the most critical stakeholders with the intention of gaining traction within the industry.

The project team will utilize these strategic steps to form a clear roadmap to help ensure that the wide range of industry stakeholders have access to the right information at the right time to maximize energy savings.

With a renewed focus on energy efficiency, the entire commercial real estate sector can help reimagine the future of buildings, amplify the New York spirit, and create a decarbonized city.

Decarbonizing New York City Offices:

Industry Survey Report Summary

Project Team



The Building Energy Exchange is a center of excellence dedicated to reducing the effects of climate change by improving the built environment. BE-Ex accelerates the transition to healthy, comfortable, and energy efficient buildings by serving as a resource and trusted expert to the building industry.

www.be-exchange.org



INSTITUTE
FOR MARKET
TRANSFORMATION

The Institute for Market Transformation ignites and accelerates demand for high-performing buildings to bring ambitious goals into reach.

www.imt.org



The New York City Climate Action Alliance is building an alliance of New Yorkers from all walks of life who are committed to achieving New York City's ambitious goal to reduce greenhouse gas emissions 80% by 2050 by harnessing our collective ingenuity, inspiration, innovation and identity as New Yorkers.

www.nycclimateaction.org

Project Sponsor



NYSERDA

The New York State Energy Research and Development Authority, known as NYSERDA, promotes energy efficiency and the use of renewable energy sources.

www.nyserda.ny.gov

The Decarbonizing New York Cities project team looks forward to advancing this work. If you have any feedback, questions, or would like to be more involved, please reach out to ComTenantEfficiencyNYC@be-exchange.org.