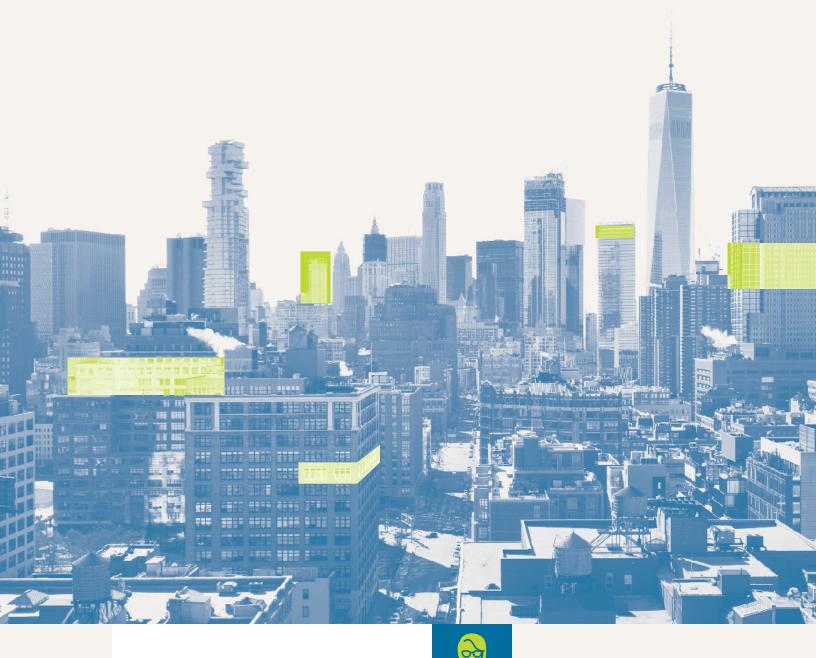
### Decarbonizing New York City Offices

### Guide to

Selecting High-Performance Commercial Spaces



### **Choosing an Efficient Commercial Space**

Evaluating a commercial space to lease can be a challenging endeavor. Gathering key information upfront and prioritizing high-performance, low-carbon building attributes when selecting an office space can guide the decision-making process and result in numerous benefits including:

- Smaller upfront capital investments during fit-out
- Lower operating expenses
- Improved employee health and productivity
- Enhanced ability to attract and retain talent
- Reduced exposure to fines should a building not meet its Local Law 97 (LL97) emissions limits

Involving critical team members — such as brokers, consulting engineers, building operators, internal real estate, leasing, and sustainability team representatives — during the site selection process will help ensure that tenants choose an optimal high-performance building that supports their environmental goals.

#### Purpose

To support tenants and their representatives in prioritizing energy efficiency and carbon reduction attributes during site selection, this guide defines building system and performance information that tenants should gather and assess when choosing a new space. Each topic area includes:

#### **Questions to Ask**

• Strategic questions to ask building owners and their representatives about a building's systems and performance.

#### **Recommended Criteria**

• Key attributes that tenants should strive for when choosing a building and space.

This resource is part of a series of actionable resources developed for the <u>Decarbonizing New York City Offices</u> project, an initiative dedicated to reducing carbon emissions in leased commercial spaces, and aligns with the "Guide to Creating Sustainability-focused Marketing Materials" resource, which advises owners on building system and performance attributes to include in their building marketing materials.

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The questionnaire at the end of this document supports the site selection process by helping to CAPTURE and COMPARE critical building system and performance information about each property being considered.

### **Building Performance**

#### Energy Consumption, Carbon Emissions, & Local Law 97 Compliance

A building's energy consumption and carbon emissions are closely linked. While replacing fossil fuel-powered heating, ventilation, and air conditioning (HVAC) systems with high-performance electric alternatives may seem like the only answer, a focus on reducing energy consumption throughout a building plays a key role in reducing emissions because less energy is needed to keep the building operating.

LL97 places limits on carbon emissions from buildings, with the caps becoming increasingly more stringent over time. Buildings with high-performance, electric systems in both common area and tenant spaces along with strategic plans to improve energy efficiency and replace remaining fossil fuel-powered equipment are better positioned to comply with LL97 limits and avoid exposure to potential fines.

Questions to Ask	Recommended Criteria
• What is the building's Energy Use Intensity (EUI)?	• The building's EUI is lower than the national median source EUI for similar property types defined by the ENERGY STAR Portfolio Manager's most recent <u>U.S. Energy Use Intensity</u> by Property Type.
<ul> <li>Does the building use on-site fossil fuels? Has the building committed to phasing them out, and if so, what is the timeline and plan?</li> <li>Have there been any previous equipment replacements, energy efficiency retrofits, and operational improvements in the building and/or tenant space? If so, when did they occur and what was the scope of work?</li> </ul>	• The owner is actively tracking and making measurable efforts to improve building performance, including a long- term plan to eliminate equipment within the building that runs on fossil fuels.
• What is the building's carbon emissions (GHG/SF of CO2e) and is it in compliance with LL97 emission limits/ reporting periods?	• The owner can demonstrate that the building complies with upcoming LL97 emissions limits.
• Does the owner have any self-set emissions limits and/ or carbon budgets with which tenants must comply? If so, how are they calculated and what is the penalty for exceeding them?	• The owner has defined building performance goal(s), such as emissions thresholds for both whole building and individual tenant spaces in order to comply with LL97 emissions limits.
<ul> <li>In what ways does the owner plan to reduce the building's carbon emissions, especially if it is at risk for noncompliance with upcoming LL97 emission limit(s)?</li> </ul>	<ul> <li>The owner has or is in the process of identifying retrofit and operational improvements for ongoing emissions reductions.</li> </ul>
<ul> <li>Is the owner offering tenant improvement (TI) dollars to apply to high-performance fit-out? If so, how much, and are there any rules around how, or on what, they must be spent?</li> <li>Is the owner offering other financial support, recognition opportunities, or other incentives to improve energy efficiency and reduce carbon emissions in tenant spaces? If so, when are these resources available, e.g. during tenant fit-out, at mid-lease, at lease renewal?</li> </ul>	<ul> <li>The owner can offer incentive(s), such as a rent credit and/ or public recognition, to a tenant should they consume less energy/emit less carbon than a prescribed limit.</li> <li>The owner can pass along expenses should the building not comply with LL97 emission limits based on excess emissions over the tenant's agreed upon share of their LL97 emissions allowance.</li> <li>The owner can pass through the costs of energy efficiency improvements to tenants as building operating expenses so long as the improvements reduce operating costs along with greenhouse gas emissions and enable the building to comply with relevant local laws.</li> </ul>

### **Building Performance**

#### Ratings, Certifications, & Awards

There are a variety of ratings and certifications that indicate sustainability and energy efficiency achievements of a building. Achieving recognition under these certifications can make it easier to save money, improve efficiency, lower carbon emissions, and create healthier places for occupants, while providing supporting resources as owners and tenants strive towards Local Law 97 compliance.

#### Local Law 33: Building Energy Efficiency Ratings

Under Local Law 33, owners of certain large buildings are required to publicly display Building Energy Efficiency Rating labels which include a 1-100 ENERGY STAR score and a corresponding A-D letter grade. This law will give the public a snapshot of a building's energy performance relative to other New York City buildings.

The 1–100 ENERGY STAR score compares this building's energy consumption to similar buildings. Buildings with a score of 75 or better are high performers and eligible for ENERGY STAR certification.

Learn more: Local Law 33: Building Energy Efficiency Ratings brief

Questions to Ask	Recommended Criteria
• What is the building's energy efficiency rating, including its ENERGY STAR score and corresponding letter grade?	• The building has a B or better letter grade and a 75 or higher ENERGY STAR score.
<ul> <li>Is the building ENERGY STAR certified?</li> <li>If so, in what year?</li> </ul>	• The building is ENERGY STAR certified.
• Is the building certified under a sustainability standard, such as LEED BD+C? If so, which standard, version, and tier (if applicable)?	• The building is LEED certified at the Gold or Platinum tier.
• Is the building certified under any other standards, such as WELL or Fitwel? If so, which standard, version, and tier (if applicable)?	• The building is WELL and/or Fitwel certified.
<ul> <li>Are there any specific certifications currently being pursued or considered? If so, which standard, version, and tier (if applicable) and what is the anticipated timeline?</li> </ul>	<ul> <li>The owner is or will pursue certification under a specific rating system(s) and can provide a strategic plan and timeline for achieving the certification.</li> <li>This includes the certifications mentioned above if they are not yet achieved, as well as other high-performance or low-/no-carbon building standards such as Passive House International (PHI), Passive House Institute US (PHIUS), and the International Living Future Institute (ILFI) Zero Carbon Certification.</li> </ul>
• Has the owner earned any industry awards in recognition of energy efficiency and carbon emissions reduction efforts at the building and/or portfolio-level?	• The owner can demonstrate commitments to energy efficiency and carbon emissions through industry awards or recognition.

#### Mechanical, Electrical, & Plumbing (MEP) Systems

It is important to understand the systems consuming energy within a building since they provide insight into the building's performance and efficiency. Information about the systems and equipment allows for a better understanding of how tenant spaces will need to be designed and operated to maximize energy saving opportunities, as well as reducing carbon emissions and operating expenses.

Questions to Ask	Recommended Criteria
• Request a heating and cooling, ventilation (exhaust and outdoor air), domestic hot water, and lighting systems list or schedule, including relevant information, primary fuel sources, distribution systems, installation dates, and anticipated "end of useful life" dates.	<ul> <li>Include a qualified MEP engineer/energy consultant during space walk throughs to ensure comprehensive information is being collected and building-specific questions are addressed.</li> <li>Consult a qualified MEP engineer/energy consultant with any specific questions regarding the building's systems/equipment and their impacts on the leased space.</li> </ul>
• Will the tenant have control over their HVAC systems?	<ul> <li>Confirm alignment between tenant and base building operating plans.</li> </ul>
• Request information about electric capacity within and throughout the building, available information regarding utility service capacity, and any constraints associated with the delivery of electricity to the building.	• The owner has a plan to ensure that the building's electrical capacity can accommodate potential increased electrical demands as the existing fossil fuel systems are converted to high-performance electrical alternatives.
<ul> <li>Does the building have renewable energy systems such as on-site energy generation, electric vehicle (EV) charging stations, solar or EV "ready" measures, etc.? If so, what systems are installed? If not, is there a plan to install any?</li> </ul>	<ul> <li>The building has on-site renewable energy systems, such as solar or EV charging stations.</li> <li>Alternatively, the owner is implementing solar and/or EV "ready" measures to prepare for the installation of future systems or has a plan to assess the feasibility of and constraints to installing renewable energy systems on-site.</li> </ul>
<ul> <li>Is there viable thermal energy source(s) nearby that supply a heat sharing/transfer system within the building?</li> <li>If so, what is the system?</li> <li>If not, is there a plan to implement one?</li> </ul>	<ul> <li>The building utilizes viable nearby thermal energy source(s) to supply a heat sharing/transfer system.</li> <li>Alternatively, the owner has a plan to assess the feasibility of and constraints to installing a heat sharing/transfer system.</li> </ul>

#### **Building Operating Hours, HVAC Controls, & Zones**

Focusing on improving building energy efficiency is critical to reducing energy consumption, carbon emissions, and operating expenses within a tenant space.

Two effective strategies to improve energy efficiency are 1) reducing standard operating hours to align more accurately with when spaces are occupied, and 2) ensuring HVAC systems are sufficiently zoned for variables such as occupancy or use type.

Tighter operating hours ensures that a space is heated/cooled only when needed, e.g. during times when most people are physically on site, whereas zoning allows for specific areas of a space to be appropriately heated/ cooled independently of conditions in other areas. For example, office zones can be conditioned differently based on whether the spaces are occupied or not. Office zones can have different settings than a server room, since the spaces may have different temperature and humidity requirements.

Furthermore, if a space has occupancy-based controls that manage system start-up and shut-down, then energy consumption can align with the actual needs of the space, maximizing the efficiency of operations.

#### **Questions to Ask**

- What are the building's standard operating hours?
- What are the after-hours policies?
- Are there specific zones/locations designated for afterhours use?
- How has the building modified their operations control to adjust for different occupancy rates during the week?
- Can HVAC settings be adjusted based on operating hours and/or occupancy?
- What occupancy-based controls or sensors are installed and where?
- Do tenant spaces have multiple HVAC zones? If yes, how many and where are they located?
- Can base building systems supply HVAC to individual zones?

#### **Recommended Criteria**

- The building has a clear protocol for after-hours HVAC use, with potential any associated cost premiums since after-hours HVAC use often contributes to excessive energy consumption, and occupancy-based space utilization strategies, such as dedicated after-hours zones/locations, that allow for reducing energy usage as much as possible after-hours or when unoccupied.
- The building has occupancy-based controls and space utilization strategies, such as dedicated after-hours zones/locations, that allow for reducing energy usage as much as possible after-hours or when unoccupied.
- Base building systems are granularly zoned so that the building can supply HVAC services to specific tenant space areas.

#### **Data Tracking & Sharing**

Understanding how energy is consumed in a building serves to provide clarity on existing processes, and generate greater insights on how to take action to improve identified inefficiencies. These benefits are amplified when 1) tenant electricity usage is billed according to actual energy usage since the tenant is responsible for the costs and benefits of their actions and 2) tenants and owners openly share energy performance data, enabling for system integration and optimization of whole building energy consumption.

Questions to Ask	Recommended Criteria
<ul> <li>Is the tenant space submetered? If so, is tenant utility usage based on actual tenant energy consumption?</li> </ul>	• Tenant space is submetered to account for different floors, systems, zones, occupancy types, etc. and the owner bills the tenant according to actual energy consumption.
<ul> <li>How is energy consuming equipment in the tenant space controlled?</li> <li>Does the building have a building management system (BMS) that tracks building energy performance?</li> <li>Does the tenant BMS tie into the base building BMS?</li> </ul>	<ul> <li>The building has a central BMS that supports integrations with tenant systems such as HVAC, plug load, and lighting equipment.</li> </ul>
<ul> <li>Does the building employ real time energy management (RTEM) systems to understand energy consumption at the system level?</li> </ul>	<ul> <li>The building has the necessary software and hardware needed to continuously monitor the building's energy performance.</li> </ul>
<ul> <li>How often and in what format is energy consumption data shared?</li> </ul>	<ul> <li>The owner is committed to data transparency and requires tenants to commit to data transparency so each has equal access to energy consumption information.</li> <li>The owner and tenant share electricity consumption data for the tenant's usage, on a monthly basis for the previous year, on an ongoing basis.</li> <li>The owner provides the tenant with an annual energy use summary for all building common areas and the building as a whole, on a monthly basis for the previous year, on an ongoing basis.</li> <li>The owner has a strategy for easily sharing confidential performance information, such as an online portal or emailed reports, and public performance information, such as via lobby or elevator display screens or email blasts.</li> </ul>
<ul> <li>Does the building provide insights into how a tenant space is performing compared to previous reporting periods, similar tenants, reduction targets, or other benchmarks?</li> </ul>	<ul> <li>The owner provides tenant energy consumption reports which include comparisons to key benchmarks such as previous reporting periods, similar tenants, and/or defined reduction targets.</li> </ul>

#### Recommissioning / Retro-commissioning

Periodic recommissioning — or the process of testing and fine-tuning existing building equipment — of both tenant space systems and base building systems is crucial to ensuring they are operating as intended. Properly functioning equipment optimizes energy performance, which in turn creates cost savings and carbon emissions reduction opportunities.

Questions to Ask	Recommended Criteria
• Does the owner have a recommissioning plan and schedule for base building systems?	• The owner has and can share a base building system recommissioning plan.
• Does the owner require the use of a qualified Commissioning (Cx) Agent from an approved agency to recommission systems?	• A qualified Commissioning Agent is required and hired by the owner to recommission base building and common area systems once every three to five years.
• Are the results/final reports shared with tenants?	• The results/final report — which identifies the tested equipment, any corrective actions taken, and confirms that systems are operating as intended — are shared with tenants in a timely and accessible manner.
<ul> <li>Does the owner require and/or incentivize recommissioning of tenant systems? How frequently and at whose expense?</li> </ul>	<ul> <li>The owner requires the recommissioning of tenant spaces by a qualified Commissioning Agent every three to five years, including an evaluation of plug load consumption, water consumption, and operating hours.</li> <li>The results/final report — which identifies the tested equipment, any corrective actions taken, and confirms that systems are operating as intended — are shared</li> </ul>

#### **Decarbonizing New York City Offices**

with the owner in a timely and accessible manner.

### **Building Owner & Tenant Engagement**

#### General

Ongoing communication between owners and tenants regarding building performance — such as energy efficiency upgrades, data access, and billing — is critical to address and mitigate performance issues as they arise. Owners and tenants who collaborate during pre-leasing steps and over the length of the lease tend to generate significant energy, carbon, and cost savings compared to those who operate in isolation.

Questions to Ask	Recommended Criteria
<ul> <li>What is the communication like between building and tenant?</li> <li>Does the building have a dedicated point(s)-of-contact to assist with building system, performance, and sustainability-related questions/efforts?</li> </ul>	• The owner has a dedicated and accessible point(s)- of-contact for building system, performance, and sustainability-related questions/information.
<ul> <li>Does the building have guidance or resources to support high-performance tenant fit-outs?</li> </ul>	• The owner has high-performance fit-out guidance and supports tenant's efforts to optimize the performance of their leased space — through energy and emission reduction measures — prior to move in.
• Does the building have a tenant engagement program or strategy, including owner-tenant aligned Operations & Maintenance (O&M) plans, regular O&M coordination meetings with a dedicated point person or team?	<ul> <li>The owner has an engagement program, including owner-tenant aligned Operations &amp; Maintenance (O&amp;M) plans and regular O&amp;M coordination meetings to review performance.</li> </ul>
<ul> <li>How much collaboration and support is given to the tenant for managing systems and monitoring performance?</li> </ul>	• The owner offers an energy management "program or strategy," providing tenants the tools to identify inefficiency within the bounds of their control and make improvements over time.
<ul> <li>Does the building offer a platform or strategy for communications with the owner and other tenants that allows for knowledge sharing?</li> </ul>	• The owner encourages open communication and provides a platform that facilitates the sharing of best O&M practices and highlights tenant success with regards to energy efficiency, emissions reduction, and sustainability efforts.
<ul> <li>What additional sustainability attributes does the building have?</li> <li>What sustainability-focused policies or resources does the owner offer?</li> </ul>	• The building has additional sustainability-focused features such as sustainable operating policies, recycling, composting, and waste management programs, water conservation strategies, indoor air quality monitoring, use of green cleaning products, green roofs, bicycle storage, etc.

### **Site Selection Questionnaire**

date:

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building owner:

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address:

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### **Building Performance**

What is the building's energy use intensity (EUI)? Does the building use on-site fossil fuels? Has the building committed to phasing them out, and if so, what is the timeline and plan? Have there been any previous equipment replacements, energy efficiency retrofits, and operational improvements in the building and/or tenant space? If so, when did they occur and what was the scope of work? What is the building's carbon emissions (GHG/SF of CO2e) and is it in compliance with LL97 emission limits/reporting periods? Does the owner have any self-set emissions limits and/or carbon budgets with which tenants must comply? If so, how are they calculated and what is the penalty for exceeding them? In what ways does the owner plan to reduce the building's carbon emissions, especially if it is at risk for noncompliance with upcoming LL97 emission limit(s)? Is the owner offering Tenant Improvement (TI) dollars to apply to highperformance fit-out? If so, how much, and are there any rules around how, or on what, they must be spent? Is the owner offering other financial support, recognition opportunities, or other incentives to improve energy efficiency and reduce carbon emissions in tenant spaces? If so, when are these resources available, e.g. during tenant fit-out, at mid-lease, at lease renewal? Is the owner offering tenant improvement dollars to apply to energy efficiency upgrades during tenant fit out? If so, how much?

Energy Consumption, Carbon Emissions, & Local Law 97 Compliance

What is the building's energy efficiency rating, including its ENERGY STAR score and corresponding letter grade?	
Is the building ENERGY STAR certified? If so, in what year?	
Is the building certified under a sustainability standard, such as LEED BD+C? If so, which standard, version, and tier (if applicable)?	
Is the building certified under any other standards, such as WELL or Fitwel? If so, which standard, version, and tier (if applicable)?	
Are there any specific certifications currently being pursued or considered? If so, which standard, version, and tier (if applicable) and what is the anticipated timeline?	
Has the owner earned any industry awards in recognition of energy efficiency and carbon emissions reduction efforts at the building and/or portfolio-level?	

### **Site Selection Questionnaire**

date:

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building owner:

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address:

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# **Building Systems & Operations**

Request a heating and cooling, ventilation (exhaust and outdoor air), domestic hot water, and lighting systems list or schedule, including relevant information, primary fuel sources, distribution systems, installation dates, and anticipated "end of useful life" dates.

Will the tenant have control over their HVAC systems?

Request information about electric capacity within and throughout the building, available information regarding utility service capacity, and any constraints associated with the delivery of electricity to the building.

Does the building have renewable energy systems such as on-site energy generation, electric vehicle (EV) charging stations, solar or EV-ready measures, etc.?

If so, what systems are installed?

If not, is there a plan to install any?

Are there viable thermal energy source(s) nearby that supply a heat sharing/transfer system within the building?

If so, what is the system type?

If not, is there a plan to implement one?

MEP Systems

What are the building's standard operating hours?

What are the after-hours policies?

Are there specific zones/locations designated for after-hours use?

How has the building modified their operations control to adjust for different occupancy rates during the week?

Will the tenant have control over their HVAC systems?

Can HVAC settings be adjusted based on operating hours and/or occupancy?

What occupancy-based controls or sensors are installed and where?

Do tenant spaces have multiple HVAC zones? If yes, how many and where are they located?

Can base building systems supply HVAC to individual zones?

### **Site Selection Questionnaire**

date:

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building owner:

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address:

#### .....

**Building Systems & Operations** 

Is the tenant space submetered? If so, is tenant utility usage based on actual tenant energy consumption? How is energy consuming equipment in the tenant space controlled? Does the building have a building management system (BMS) that tracks building energy performance? Does the tenant BMS tie into the base building BMS? Does the building employ real time energy management (RTEM) systems to understand energy consumption at the system level? How often and in what format is energy consumption data shared? Does the building provide insights into how a tenant space is performing compared to previous reporting periods, similar tenants, reduction targets, or other benchmarks?

Does the owner have a recommissioning plan and schedule for base building systems?

Does the owner require the use of a qualified Commissioning (Cx) Agent from an approved agency to recommission systems?

Are the results/final reports shared with tenants?

Does the owner require and/or incentivize recommissioning of tenant systems?

How frequently and at whose expense?

Data Tracking & Sharing

Site Selection Questionnaire	date: building owner: address:			
			Building Owner & Tenant Engageme What is the communication like between building and tenant?	ent
Does the building have dedicated point(s)-of-contact to assist with building system, performance, and sustainability-related questions. efforts?	/			
Does the building have guidance or resources to support high- performance tenant fit-outs?				
Does the building have a tenant engagement program or strategy, including owner-tenant aligned Operations & Maintenance (O&M) plans, regular O&M coordination meetings with a dedicated point person or team?				
How much collaboration and support is given to the tenant for mana systems and monitoring performance?	aging			

Does the building offer a platform or strategy for communications with

the owner and other tenants that allows for knowledge sharing?

What additional sustainability attributes does the building have?

What sustainability-focused policies or resources does the owner offer?

### Notes:

 See the <u>Project Credits</u> for more information about the Project Team, Steering Committee, and various contributors.

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