



July 2024

Aligned for Action: LL97 Commercial Landlord & Tenant Forum



Summary

In New York City, commercial tenants can drive 60 percent or more of a large building's energy use and carbon emissions. But under Local Law 97 (LL97)—the city's groundbreaking building performance standard—owners alone are responsible for hitting carbon emissions targets and are on the hook for penalties if they fail to do so.

At the request of the NYC Department of Buildings (DOB), Urban Green Council convened a LL97 Commercial Landlord and Tenant Forum to examine this challenge. Participating experts and stakeholders discussed ways to better align commercial landlord and tenant energy management to meet LL97 requirements.

Several overarching takeaways emerged from the forum:

- Separate regulation of commercial tenants through LL97 is not currently

feasible because of significant data, infrastructure, legal and other barriers;

- Commercial landlords and tenants in buildings with fewer resources—particularly Class B and C office buildings—have the most pressing need for help navigating and complying with LL97; and
- Leases are ultimately the strongest lever to catalyze commercial tenant action and alignment for LL97 over time.

With forum participant input, we identified a range of **issues** and **recommendations** related to commercial owner-tenant alignment, grouped under **four priority opportunities** summarized in Table 1 below. While some of the issues may be addressed by government action, many require broader engagement from industry associations, nonprofits and other entities.

Table 1: Summary of opportunities to align commercial landlords and tenants for LL97.

Opportunity	Issues	Recommendations
1. Educate tenants and promote voluntary engagement.	Few commercial tenants understand LL97 and its relevance to their energy use.	Increase guidance, education, outreach and recognition to help spur commercial tenant action.
2. Support market adaptation on commercial leases.	Landlord-tenant alignment depends heavily on commercial lease negotiations, and LL97 is new territory.	Elevate and promote ongoing efforts by experts and industry associations to help the commercial real estate market develop new LL97-aligned leases.
3. Help owners and service providers navigate the data.	Data errors are prevalent in LL97 commercial buildings, and owners and service providers aren't sure how to proceed.	Provide additional guidance and resources to help owners and service providers ensure accurate data, in particular for energy use and floor area.
4. Leverage related laws and regulations.	New or updated laws and regulations could help align landlords and tenants for LL97.	Assess strategic opportunities to boost alignment, such as revisions to LL87 and LL88, fit-out requirements or new construction standards.

Background

In most commercial buildings, tenants lease space for commercial activity spanning a range of LL97 property types, such as offices, retail, restaurants, data centers, bank branches and grocery stores. Because these commercial tenants can account for 60 percent or more of a building's total energy use and carbon emissions, commercial owners are necessarily seeking to engage and include tenants in efforts to meet the law's requirements.

About 60 percent of office buildings covered by LL97 need to reduce emissions by 2030, and retrofitting commercial tenant space can lower emissions as much as 35 percent. But there is currently no clear driver for tenant action under LL97: commercial tenants have no performance targets and existing leases often do not align incentives for landlords and tenants to improve energy performance.

Many prior efforts have focused on these challenges. Most recently, the LL97 Advisory Board issued a report in December 2022 with recommendations to better clarify the responsibility of owners and tenants under the law, including to:

- Create guidance for owners and tenants for incremental decarbonization;
- Encourage an active role for tenants through submetering;
- Align LL97 with Local Law 87 (LL87) audit and retrocommissioning requirements;
- Explore beyond-energy-code requirements for tenant space alterations; and
- Develop model lease language.

At DOB's request, Urban Green Council convened over 30 experts and stakeholders for a LL97 Commercial Landlord & Tenant Forum to discuss these and other ideas for LL97 alignment. Participants included commercial owners, tenants, service providers, lawyers, policy experts and government agencies. We interviewed select experts and held two meetings in late 2023 to cover metering and data issues, commercial tenant metrics and performance, and commercial leases and penalty allocation. We also discussed existing efforts to address owner and tenant alignment for building performance, including:

- Australia's Commercial Building Disclosure Program and NABERS energy efficiency ratings, which clearly delineate landlord and tenant performance metrics;¹
- EPA Energy Star Tenant Space and ULI's Tenant Energy Optimization Program, two U.S. programs focused on performance in leased office spaces; and
- Best practices for commercial leases including IMT's Performance-Based Leasing toolkit and the prior NYC model Energy-Aligned Clause.

Our findings from the forum include overarching takeaways and a range of **issues** and **recommendations** across **four priority opportunities** to improve commercial landlord and tenant alignment for LL97. The findings support and expand on the LL97 Advisory Board Report based on participant input and Urban Green analysis. Individual participants and their organizations do not necessarily endorse any specific content.

Key takeaways

Several overarching takeaways emerged from the forum that should inform the scope and focus of potential actions to better align commercial landlords and tenants for LL97.

First, separate regulation of commercial tenants through LL97 is not currently feasible because of significant data, infrastructure, legal and other barriers.

Clear, standardized and separate responsibility for each party over different aspects of energy performance could help ensure owner and tenant alignment. Australia's NABERS rating system, with separate metrics and ratings for commercial owners and tenants, provides the best example of this approach.

But in New York City, a standardized separation of commercial owner and tenant responsibility is virtually impossible at this time for many reasons, including:

- Commercial building system design and configuration vary enormously, with no consistent delineation between base-building and tenant-controlled systems.
- Accurate tenant data is limited, despite increased electric submetering. Other energy sources like district steam and gas are not widely tracked to the tenant level. And many factors that could affect tenant responsibility for carbon—like occupancy and density—are hard to monitor and not typically tracked.
- Legal authority and enforcement pathways are not clear for direct regulation of thousands of commercial tenants.

Second, commercial landlords and tenants in Class B and C office buildings have the

most pressing need for help navigating and complying with LL97.

Premier “Class A” office buildings typically have sophisticated teams, state-of-the-art mechanical systems and building energy management systems to coordinate carbon reductions for LL97. Forum participants voiced that many “Class B and C” office buildings are smaller and have older and less sophisticated systems and fewer resources, and so they need extra financial and technical support to understand and comply with LL97. For example, the data issues outlined below are likely pervasive in Class B and C buildings.

In part because this sector is harder to engage, Class B and C buildings were not well represented in the forum. But forum participants voiced a clear need for outreach and support targeting landlords, tenants, brokers, property managers, service providers and other players in the Class B and C market to address all of the issues discussed below. Data analysis to identify these priority commercial buildings is a good starting point.

Third, commercial leases are ultimately the strongest lever to catalyze tenant action and alignment for LL97 over time.

Given the enormous variety in commercial buildings—from business structures to building systems—lease negotiations are likely the most flexible and effective avenue for owner-tenant alignment for LL97. While city government can help educate the market and amplify potential leasing solutions, industry entities and associations have greater expertise and are better placed to develop and implement new lease terms over time.

Opportunities to align commercial landlords and tenants

With forum participant input, we identified a range of issues and recommendations to improve commercial landlord and tenant alignment for LL97. We grouped these under four priority opportunities, listed below.

Some of the issues may be addressed

by city government, including the NYC Department of Buildings, through outreach, guidance and rulemaking. Many issues likely require broader action from City Council, state government, industry associations, nonprofits or other entities.

1. Educate tenants and promote voluntary action

Educating commercial tenants on LL97 is an important step toward alignment for improved building performance. Many commercial tenants are not even aware of the law or how their activities affect building performance. Commercial tenants—and indeed many Class B and C commercial landlords—would particularly benefit from outreach and education on best practices for tenant fit-outs, which are often the most feasible and cost-effective time for LL97-focused upgrades to tenant spaces.

At the same time, some commercial tenants are becoming more engaged in decarbonization because of environmental, social and governance (ESG) goals and new GHG disclosure requirements. Recognizing superior tenant performance and harnessing engagement in decarbonization can support landlord-tenant alignment to meet LL97 requirements. It could also help foster broader market transformation to ensure NYC commercial real estate is ESG-friendly and GHG-disclosure ready.

1.1 Resource page

Issue: Commercial landlord and tenant issues have minimal visibility under LL97 and existing resources are hard to find.

Recommendation: Create a dedicated page within the [NYC Sustainable Buildings portal](#) or the [NYC Accelerator site](#) focused on commercial landlords and tenants under LL97, integrating much of the material below.

1.2 Tenant education

Issue: Thousands of commercial tenants in LL97-covered buildings are unaware of the law and why it should matter to them.

Recommendation: Develop and disseminate educational material that targets a range of commercial tenant sectors to explain LL97, how tenants affect building energy use, the benefits of energy improvements and the relevance of LL97 to commercial leases.² Leverage existing resources like the Washington D.C. Building Innovation Hub's [explainer](#) and NYSERDA's [Retail and Office programs](#) and new [Retrofit Playbook Tenant Resources](#).

1.3 Fit-out best practices

Issue: Tenant fit-out is often the most cost-effective and feasible time for LL97-focused upgrades, but minimal guidance exists to help landlords and tenants seize this crucial opportunity.

Recommendation: Engage NYSERDA and other partners to find and promote case studies and best practices for LL97-aligned tenant fit-outs and related tenant improvement allowances. Build on existing resources like ULI's [Tenant Energy Optimization Program](#) and IMT's [Performance-Based Leasing toolkit](#).

1.4 Tenant recognition

Issue: Greater recognition of tenant action and landlord-tenant collaboration in support of LL97 could generate awareness, reward progress and help motivate the broader commercial market.

Recommendation: Refresh the [NYC Carbon Challenge](#) for Commercial Owners and Tenants with a new LL97 focus and a broader commercial building target audience (beyond market leaders). The program could serve as a forum for sharing knowledge, celebrating successes and increasing landlord-tenant engagement to support LL97.³

1.5 Tenant ESG action

Issue: Tenant ESG goals are rarely linked to LL97, despite that many tenant actions to improve sustainability yield mutual benefits under the law. Plus, increasing tenant focus on corporate GHG disclosure could foster better landlord-tenant data collaboration.

Recommendation: Develop educational material to highlight the corporate ESG and LL97 nexus, including:

- Mutual benefits of tenant action to save energy and decarbonize, with tenant-centric explanations of LL97 credits and deductions for solar, storage and heat pumps; and
- Opportunities for data sharing that support both landlord LL97 compliance and tenant GHG disclosure (including under [new SEC rules](#) and recent laws in [California](#) and the [E.U.](#)).⁴

2. Support market adaptation on commercial leases

The commercial lease is the primary tool to align landlords and tenants for building performance. Currently, very few leases do so. Instead, they include terms that can inhibit alignment: they have long time frames; mandate space conditioning regardless of occupancy; require little or no action to support LL97 compliance; lack language to allow landlords to share penalties; and often allocate base-building energy costs to tenants on a pro-rated, per square foot basis rather than actual energy use. Tenants have little incentive to care about LL97 performance, and current leases give landlords limited means to change that reality. Over time, LL97 will necessarily drive [new commercial lease structures](#) to address this disconnect.

Market leaders are already exploring ways to share LL97 responsibility through lease negotiations, including by offering more tenant improvement allowance (TI) for energy efficiency and decarbonization

measures at fit-out. Many commercial landlords, tenants and brokers don't know where to start, but some existing resources can help: NYC's 2012 model [Energy Aligned Clause](#) addresses split incentives by allowing owners to recoup the capital costs of efficiency retrofits based on predicted savings (not useful life), while protecting tenants from underperformance. And IMT's [Performance-Based Leasing](#) toolkit offers in-depth guidance on aligning leases with building performance standards, providing lease templates and drawing heavily on LL97 examples.

Ultimately, shared responsibility for LL97 will be determined through market innovation and case-by-case negotiations between landlords and tenants. But city government can support the market by elevating potential leasing solutions and engaging industry associations and nonprofits to educate landlords, tenants and brokers.

2.1 Model leases

Issue: LL97 is new territory for commercial leases. Limited guidance exists on how to align landlords and tenants with fair terms and shared responsibility.

Recommendation: Promote model lease resources like IMT's [Performance-Based Leasing toolkit](#) through existing outlets and the new commercial landlord/tenant resource page (see 1.1 above). Engage legal associations, nonprofits and other relevant stakeholders to assess the need for additional LL97-specific model lease resources, including on how parties can share responsibility for necessary alterations, operating expenses and LL97 penalties.

2.2 Technical guidance

Issue: The crux of a LL97-aligned lease will be a formula that fairly allocates responsibility for carbon emissions. Most market actors are not well versed in the technical variables that bear on that formula.

Recommendation: Ask industry associations, NYSERDA, IMT or other relevant experts to develop illustrative methodologies for fairly allocating carbon emissions among tenants based on building typologies, system configurations, metering, occupancy or other relevant variables.⁵ Include or link to these methodologies in educational resources.

2.3 Broker education

Issue: Commercial brokers are central to lease negotiations but have limited understanding of LL97, appropriate technical questions and potential lease strategies.

Recommendation: Ask relevant nonprofits and industry associations like REBNY and the New York State Association of Realtors to develop LL97 education for brokers.

3. Help owners and service providers navigate the data

Accurate data is the cornerstone of LL97 compliance and enforcement. In theory, much of the data necessary for LL97 is already collected and reported for Local Law 84 (LL84) benchmarking through EPA's [Energy Star Portfolio Manager](#), including aggregated whole-building energy use data for commercial properties with direct-metered tenants. But the stakes are much higher with LL97: targets, progress and penalties depend on a verified assessment of data on all energy use, building area, property types and more. And LL97 reports require sign-off by a licensed registered design professional (RDP).

Forum participants and practitioners voiced grave concerns about the prevalence and

depth of data errors in LL97 buildings, and about the industry's ability to resolve them in time. Examples shared included:

- Very basic omissions of energy consumption from one or more fuels;
- Incorrect square footage, often based on Department of Finance (DOF) data instead of measured gross floor area (which rarely matches DOF data);
- Commercial properties with incomplete aggregated whole-building utility data, missing energy use from direct-metered tenants typically because of issues related to old utility service addresses.

The compliance requirements of LL97 are designed to address data errors. RDP sign-off is required in part to ensure the expertise necessary to identify and resolve data issues, and the initial burden on RDPs will significantly lessen after the first compliance submissions. But the sheer number of commercial buildings and

seeming prevalence of data issues raises red flags. While some RDPs can identify and address these types of errors, others may lack the expertise, and the time-sensitive burden may exceed workforce capacity. Additional guidance and resources may be necessary to help owners and practitioners navigate these challenges in time.

3.1 Data errors

Issue: Data errors are prevalent in LL97 buildings, particularly in commercial buildings with many meters. Building owners and RDPs may fail to identify and resolve these errors, which is particularly critical for buildings potentially facing fines in early years.

Recommendation: Screen LL84 data for likely errors, such as missing fuels, abnormal energy intensity or use of DOF floor area, and if feasible provide notice to building owners and Con Edison (where relevant). Alternatively, develop high-level guidance (e.g. rules of thumb) for RDPs to identify likely data errors.

3.2 Additional guidance

Issue: Building owners and service providers aren't certain what they need to do to ensure accurate data, or where to turn for help. They may need extra support navigating data issues related to tenant meters, floor area, property type and energy use measurements.

Recommendation: Promote the NYC Sustainability Help Center for data assistance, and publish additional guidance on requirements for reasonable data verification, including on floor area, utility consumption and meters. Ask RDP associations or nonprofits to conduct training on best practices for navigating LL97 data challenges.

3.3 Data sharing

Issue: Commercial landlords and tenants may have separate direct meters and manage energy use independently, which reduces opportunities for alignment.

Recommendation: Conduct industry outreach on opportunities to improve landlord-tenant data sharing. Possibilities include using existing utility data-sharing tenant authorization platforms (e.g. Green Button) for LL97, leveraging NYSERDA's [RTEM+T Program](#), or identifying ways to better sync landlord and tenant building management systems.

4. Leverage related laws and regulations

The issues and recommendations above focus mostly on actions to educate, facilitate and provide guidance to the market. New or updated laws and regulations could also help better align commercial landlords and tenants for LL97 and lower carbon emissions in NYC's commercial tenant spaces.

For example, the Greener Greater Buildings Plan was conceived a decade before LL97, with minimal focus on commercial tenants. The Plan's requirements for audits, retrocommissioning, submetering and lighting upgrades could all be revisited with landlord-tenant alignment in mind. And updated standards for tenant space

alterations and new construction could potentially drive better building performance today and better base-building and tenant system delineation tomorrow.

While the NYC Department of Buildings could explore and develop recommendations for these updates, ultimately most would likely require legislative action by the New York City Council.

4.1 Audit and retrocommissioning

Issue: Local Law 87 (LL87) largely exempts tenant-owned and -maintained systems from audit and retrocommissioning requirements, which leaves substantial potential energy savings on the table.

Recommendation: Consult commercial landlords, tenants and service providers to develop recommended amendments to LL87 that integrate audits and retrocommissioning of commercial tenant spaces and systems where feasible. Include leeway for implementation challenges like inability to access tenant space.

4.2 Submetering

Issue: Submeters are crucial to tracking electricity use in commercial tenant spaces and to aligning tenants with LL97 performance, but practitioner input suggests compliance with Local Law 88 (LL88) is problematically low.

Recommendation: Assess LL88 compliance submissions after May 2025 to identify lagging sectors or typologies, and work with industry associations and nonprofits on outreach to boost compliance. If compliance remains low, evaluate the need for increased penalties or other measures to move the market.

4.3 Fit-out requirements

Issue: Tenant fit-out is the ideal time for long-lasting energy performance improvements, but most tenant fit-outs pay scant attention to energy and carbon, reaching code minimum at best and leaving many building systems untouched.

Recommendation: Consult commercial landlords, tenants and service providers to assess what new requirements could drive impactful upgrades when tenant spaces are altered. Potential opportunities vary by tenant sector, but may include lighting controls, steam system controls, plug load controls, radiant barriers, demand-controlled kitchen ventilation, wall insulation, and energy display boards. Any requirements should balance cost, logistical challenges, property type of the tenant, energy savings and carbon benefits.

4.4 New construction

Issue: Most new commercial buildings have clearer delineation between base-building and tenant systems, but it's not necessarily universal practice. Standards for new construction could solidify this industry trend and bolster future alignment of landlords and tenants for LL97.⁶

Recommendation: Ask the next NYC Commercial Energy Conservation Code Advisory Committee to assess the potential for new construction requirements to facilitate clearer separation and responsibility for base-building and tenant energy use, for example through better end-use submetering. Alternatively, engage ASHRAE, IECC or the Department of Energy to elevate this topic in the national model code development process.

4.5 Performance-based code

Issue: Local Law 32 of 2018 requires that NYC's next energy code include energy performance targets. Tenant energy use is a crucial component of commercial building performance.

Recommendation: Ask the next NYC Commercial Energy Conservation Code Advisory Committee to explore whether and how to address commercial tenant energy use with the new performance-based energy code, such as through separate performance targets for base-building and tenant systems or guidance on modeling assumptions.

4.6 Meter-based billing

Issue: Under many commercial leases, tenants are billed a fixed pro rata share of a building's total electricity use, so they are not clearly and directly accountable for their energy use even with submeters in place.

Recommendation: Engage the New York Public Service Commission to advance billing that aligns with energy use for submetered commercial buildings, which would promote awareness, accountability and fairness.⁷ One outcome could be a PSC directive to amend commercial tariffs so submetered bills may not exceed direct metered rates.

Endnotes

1. Several forum participants pointed to Australia as the leading example of commercial landlord-tenant alignment on energy management.

The Australian government's Commercial Building Disclosure (CBD) Program requires commercial buildings to maintain an annual NABERS energy efficiency rating. The National Australian Built Environment Rating System (NABERS) creates sustainability ratings for whole Office Buildings as well as voluntary ratings for Individual Office Tenancies.

NABERS office ratings include energy ratings. Landlords are required to disclose consumption data, net lettable area and hours of occupancy. Through these variables, assessors can determine the energy intensity of a building's central services, including heating and cooling systems, common area lighting and elevators.

While office tenancy ratings are not required by the government, NABERS offers tools like Co-Assess that make it easy for owners and tenants to collaborate on obtaining tenancy ratings, and incentivizes tenants to do so at the time the whole-building rating is being assessed. The CBD also requires that all office buildings disclose a Building Energy Efficiency Certificate (BEEC) – which must include the NABERS rating of the whole building and a Tenancy Lighting Assessment of the relevant space – at the time of sale or lease of a building or commercial space over 1,000 square meters.

Australia's large commercial building stock is relatively new, with a small number of commercial owners and largely homogenous owner-tenant system configurations. New York City's large commercial building stock presents greater challenges, with a different regulatory context and enormous variety in owner-tenant configurations. Still, the Australian approach may offer helpful guidance to improve landlord-tenant alignment for LL97.

2. Educational material should address the variety of commercial tenant sectors – like offices, restaurants, retail and grocery stores – because energy use and potential efficiency measures vary significantly across different sectors.

Materials can also leverage and link to many existing resources, such as U.S. Department of Energy guidance for a range of economic sectors, commercial real estate, retailers, and restaurants and commercial kitchens. This resource also links to strategies employed by large grocery chains like Whole Foods, data centers like Iron Mountain, and technical resources for assessing plug and process loads in retail stores.

3. Forum participants discussed whether voluntary tenant energy disclosure and recognition programs like EPA's Energy Star Tenant Space could play a role in engaging or even rewarding commercial tenants under LL97. Participants voiced that the impact of existing tenant programs is limited because these programs are not performance-based.
4. Recent changes to federal SEC disclosure requirements will require corporations – many of whom lease space in NYC's commercial buildings – to disclose scope 1 and scope 2 greenhouse gas emissions. LL97 requires owners to aggregate much of the energy use information that corporate tenants will need to report, and tenants would likely benefit from an owner's help in getting the data to meet this requirement. Combined with global corporate climate disclosure trends – including a similar California law and a proposed NYS bill on the topic – this SEC rule is likely to drive many commercial tenants to approach owners for information about carbon accounting in their space.
5. Potential methodologies raised in the forum included allocations based on percentage of total building square footage, percentage of total building energy use, tenant space use or property type, and hours of operation or after-hours use of base-building heating and cooling. Some participants also raised the possibility of assigning favorable or reduced allocations for predetermined actions by tenants to lower carbon emissions in their space, such as the adoption of on-site solar, storage, beneficial electrification or energy efficiency improvements.
6. In NYC, submetering requirements are creating

data that clarify responsibility for commercial tenant lighting and plug loads. But in contrast to Australia, in most commercial NYC buildings it is very difficult to draw distinct lines between commercial landlord services and tenant end uses for heating, cooling, hot water and ventilation (e.g. from cooling towers, pumps, fans, and chilled water).

Few, if any, new construction code requirements in NYC currently promote clear mechanisms to separate energy systems or energy use data by base-building and tenant energy systems. Despite the lack of code requirements, forum participants expressed that in NYC it is becoming common practice to design and build new buildings with clearer base-building and tenant system delineation. New code requirements could potentially solidify that practice, but any new requirement shouldn't close the door on the benefits of holistic HVAC strategies like heat recovery and potential efficiencies from centralized systems where optimal.

7. The PSC has broad authority to regulate the terms under which electric corporations provide electric service to their customers, including an owner who is submetering electricity to commercial tenants. The PSC substantially deregulated commercial submetering in Con Edison's territory in 1979 (Case # 26998; Opinion 79-24) and then statewide in 2013 (CASE # 12-E-0381) ([see 2013 PSC Order Authorizing Commercial Submetering And Requiring Rate Cap Bill Calculator](#)), though conversions from direct meters to submeters still require PSC approval. Given this history, the PSC may be able to take a range of regulatory steps, including directing utilities to amend tariffs to require that submetered commercial tenants aren't billed for more than commercial direct-metered rates. For a recent discussion of a commercial submetering approval, including mention that the owner's submetered bills to the tenant will not exceed Con Edison's tariff commercial rate for direct metered service, [see 2019 PSC CASE # 18-E-0340](#).

Acronyms & terms

ASHRAE: American Society of Heating, Refrigerating and Air-Conditioning Engineers

DOB: New York City Department of Buildings

EPA: U.S. Environmental Protection Agency

ESG: Environmental, social and governance

GHG: Greenhouse gas

IECC: International Energy Conservation Code

IMT: Institute for Market Transformation

LL84: Local Law 84 of 2009 - Benchmarking Energy and Water Use

LL87: Local Law 87 of 2009 - Energy Audits and Retrocommissioning

LL88: Local Law 88 of 2009 - Lighting Upgrades and Sub-meter Installation

LL97: Local Law 97 of 2019 - Building Energy and Emissions Limits

NABERS: National Australian Built Environment Rating System

NYSERDA: New York State Energy Research and Development Authority

PSC: New York State Public Service Commission

RDP: Registered design professional

REBNY: Real Estate Board of New York

SEC: Securities and Exchange Commission

Forum participants

Daniel Avery Real Estate Board of New York	Michael Barry Bloomberg	Christopher Cayten CodeGreen Sustainability
Chris Colasanti JB&B Deep Carbon Reduction	Tom Damsell Brookfield Properties	Michael Daschle Brookfield Properties
Jonathan Flaherty Tishman Speyer	Scott Frank JB&B	Hrisa Gatzoulis Rudin Management Company
Adam Hinge Sustainable Energy Partnerships	Meg Holden Sive, Paget & Riesel PC	Ryan D. Hughes Structure Tone
Jack Jenkins Robert Derector Energy & Sustainability	Stuart D. Kaplan Blank Rome LLP	Laurie Kerr U.S. Green Building Council
Emily Kidlow SL Green Realty	Yasemin Kologlu Skidmore, Owings & Merrill	Cliff Majersik Institute for Market Transformation
Stephanie Margolis New York University	Eric Menkes Adler & Stachenfeld LLP	Lauren Moss Vornado Realty Trust
Simon Mugo NYC Accelerator	YuhTyng Patka Adler & Stachenfeld LLP	Michael Reed NYSERDA
Jeffrey Rios AKF Group	Alexis Saba Sive, Paget & Riesel PC	Cecil Scheib New York University
Dana Robbins Schneider Empire State Realty Trust	Danielle Spiegel-Feld Hines	Harleen Paul Srivastava NYC Mayor's Office of Climate and Environmental Justice
Byron Stigge Level Infrastructure	Marla Thalheimer Institute for Market Transformation	

Urban Green Council thanks forum participants for their time and expertise. Findings and recommendations in this report are based on their input and Urban Green's analysis. Participating individuals or organizations do not necessarily endorse any specific content.



Building solutions for climate change

Urban Green staff

Project leads

Chris Halfnight
Senior Director, Research & Policy

Danielle Manley
Manager, Policy

Project team

Jack Archambault
Associate Manager, Communications

Sheena McDermott
Senior Director, Development & Communications

Jada Shannon
Associate, Communications

Special thanks to

