



SPRING CONFERENCE 2026

Sustainability Committee check-
in code: Sustainability0318



Sustainability & Value

NCREIF Spring Conference
March 2026

Market forces driving sustainability strategy



1: Stakeholders

Growing expectations around sustainable buildings

Capital Investors

Lenders

Insurers

Tenants

Employees



2: Risk

Requirement for forward view of risk

Physical risk due to climate impacts

Business risk: Regulatory, Legal, Reputational



3: Regulation

New requirements at multiple levels

Disclosure

Performance

Prescriptive Infrastructure

Industry Standards



4: Financial

Increasing impacts across life cycle stages

Liquidity

Rent Premiums

New Revenue Streams

Insurance

Utility Costs

Value shift = risk & opportunity

US Regulatory Environment



Corporate Disclosure



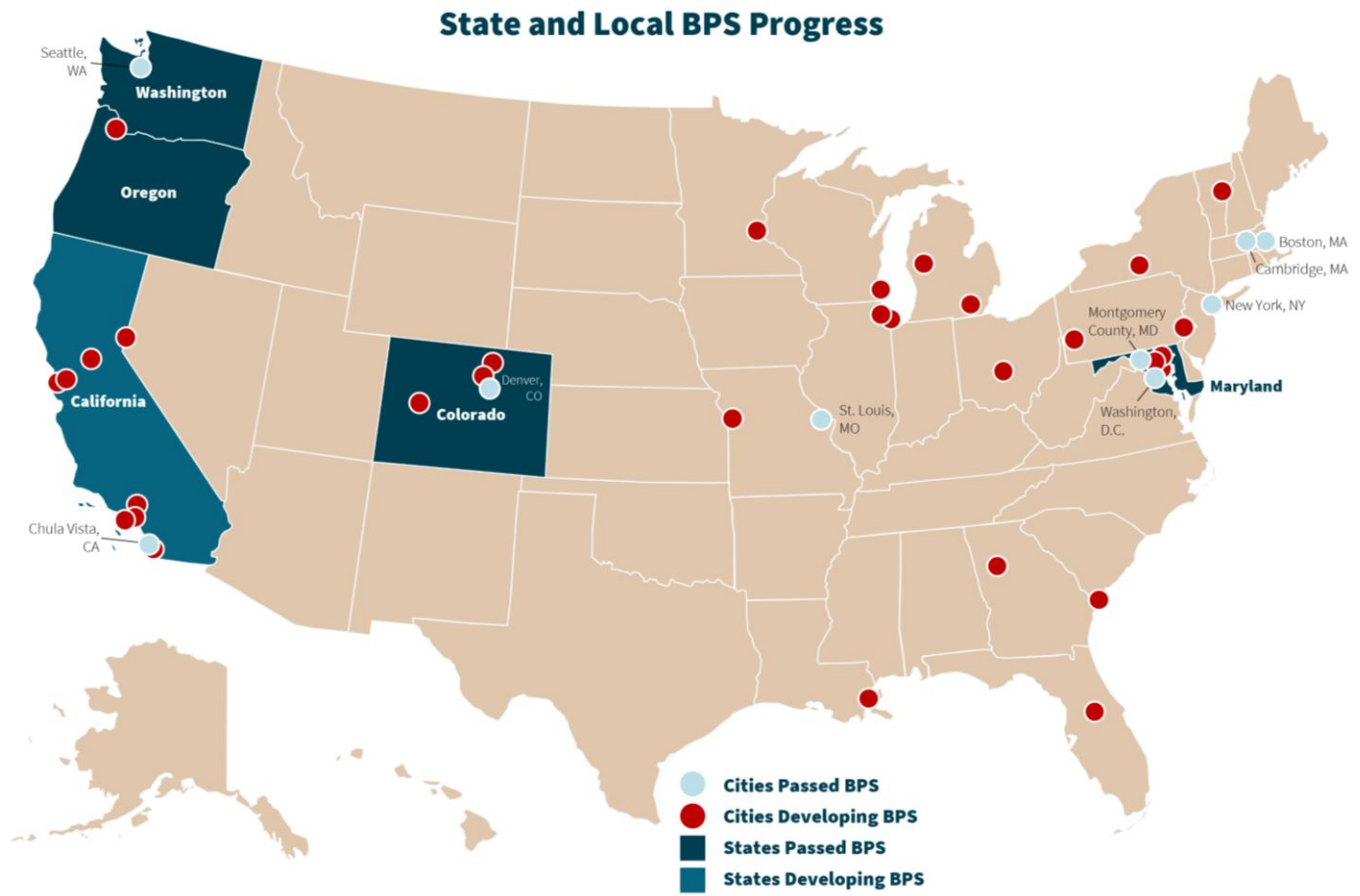
Asset Disclosure



Asset Performance



Specific Components

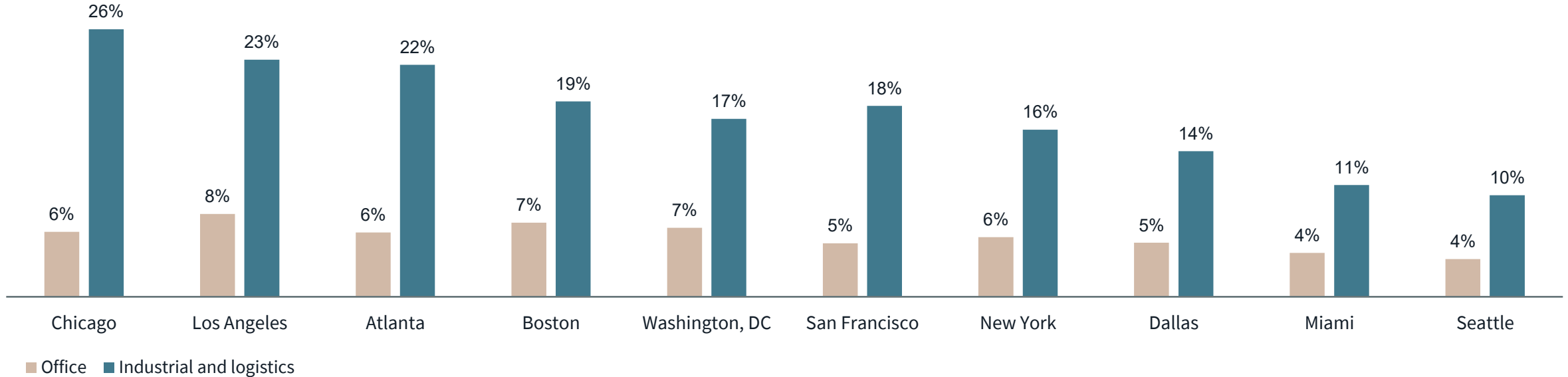


Source: Institute for Market Transformation, National BPS Coalition

Over 40 cities in the U.S. have committed to passing building performance standards by 2026 or earlier

Energy / Rent ratio creates opportunities across markets

**Electricity costs relative to rent, by market
(Office vs. Industrial & logistics)**



Energy represents a material component of property operating expenses, with **electricity costs proportionate to 4%-26% of rent** depending on market and asset class.

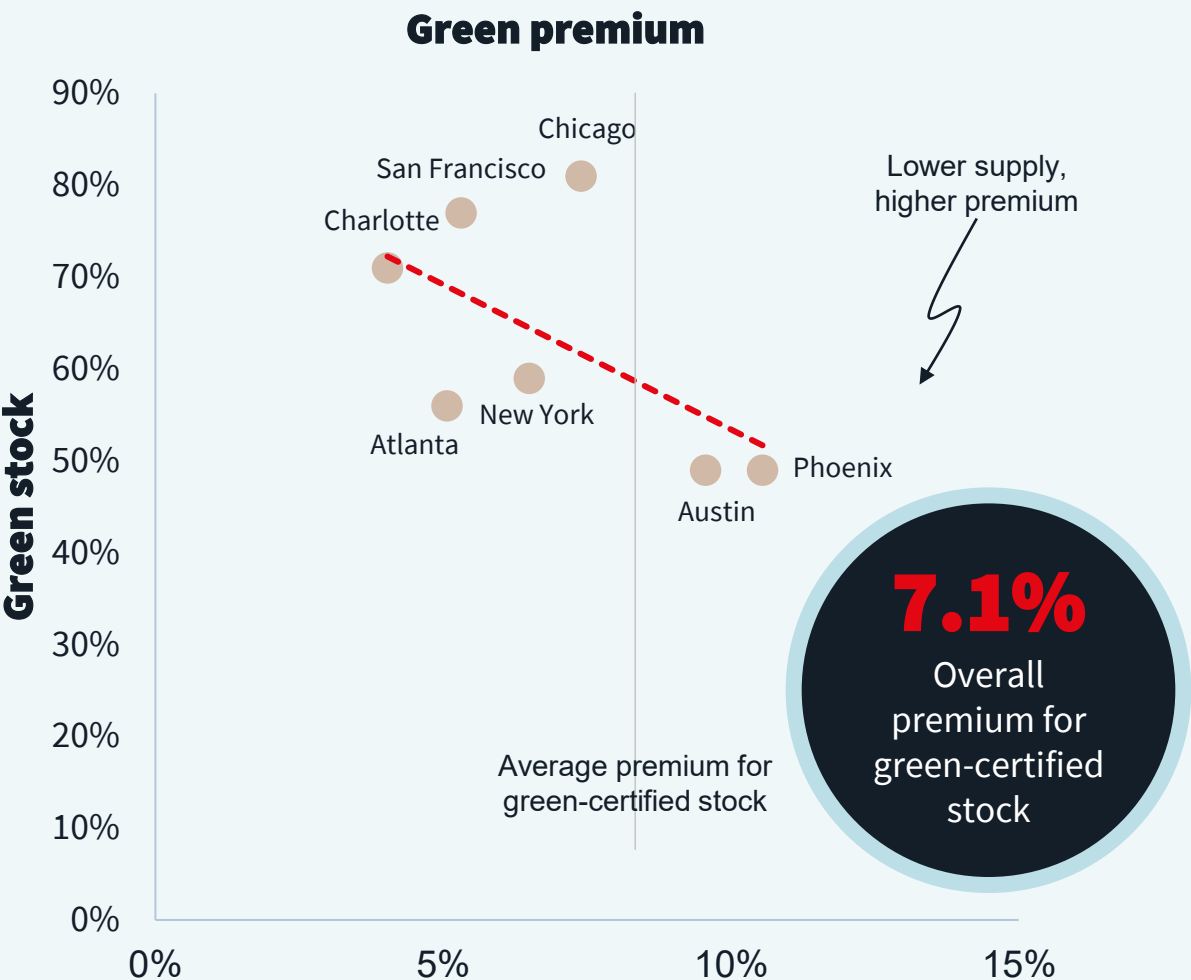
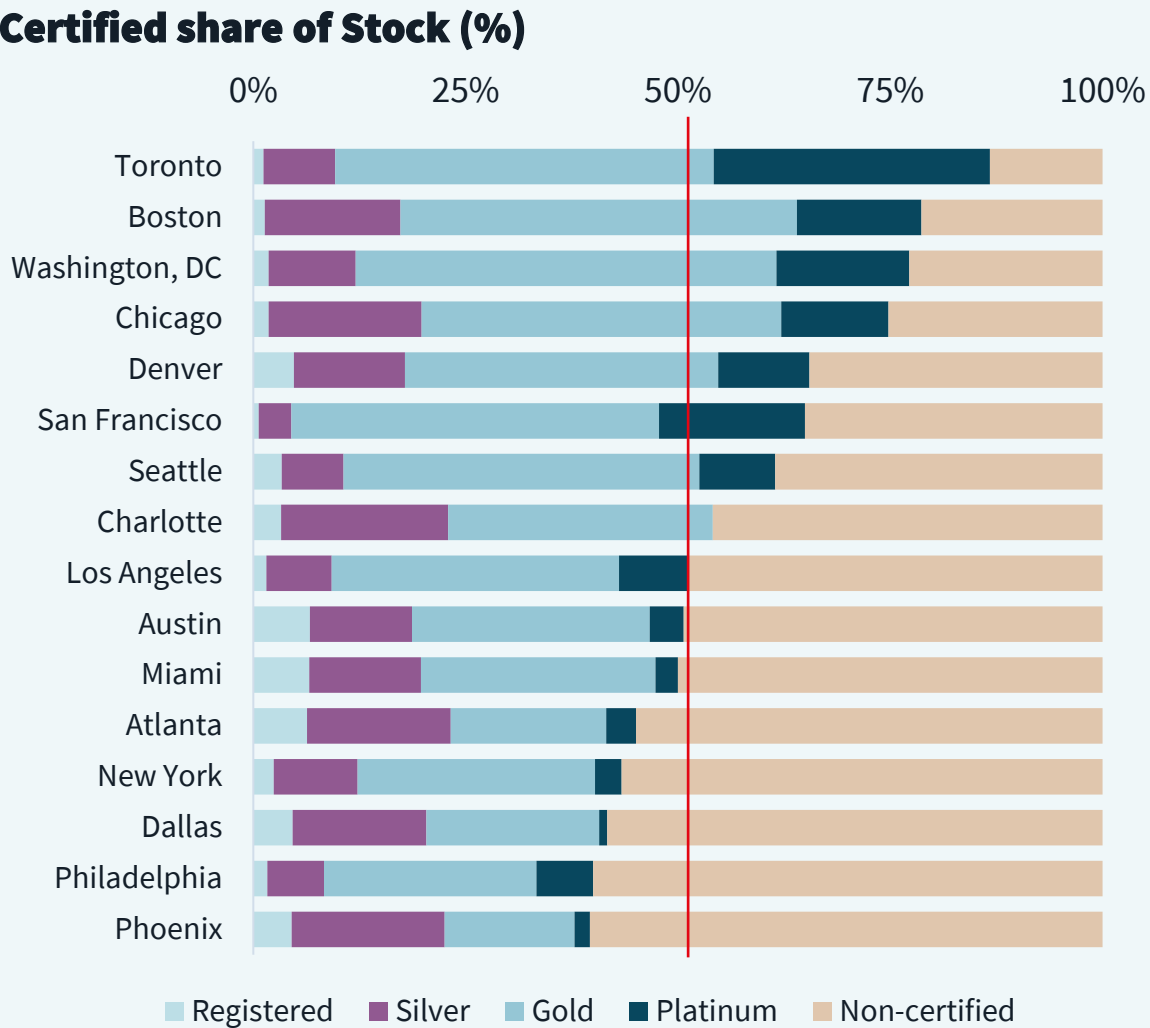
High-burden markets like Chicago and Los Angeles present the strongest business case for energy-focused capital improvements, where efficiency upgrades can drive meaningful value uplifts.

Source: JLL Research, 2025; U.S. Energy Information Administration

Note: Analysis leverages whole building electricity cost estimates on a per square foot basis

Certification premiums today; Low Carbon tomorrow

Premium inversely correlated to supply



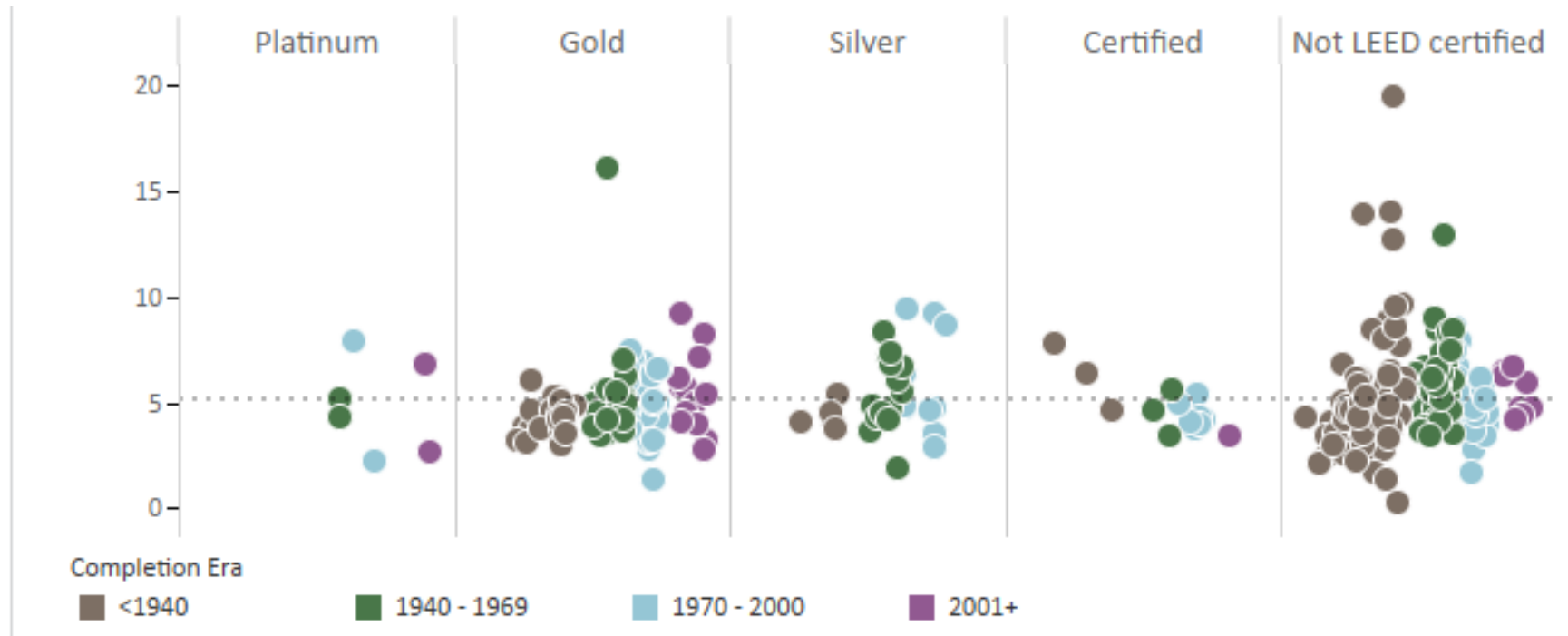
Green certifications do not guarantee lower emissions

Example: New York City

While many occupiers have sought out green-certified space to ensure their sustainable operation, green certifications do not correlate to lower emissions.

Occupiers will be increasingly seeking emissions and energy use performance indicators when considering new locations.

Emissions Intensity (kgCO₂/sf)
by LEED Certification, New York City example

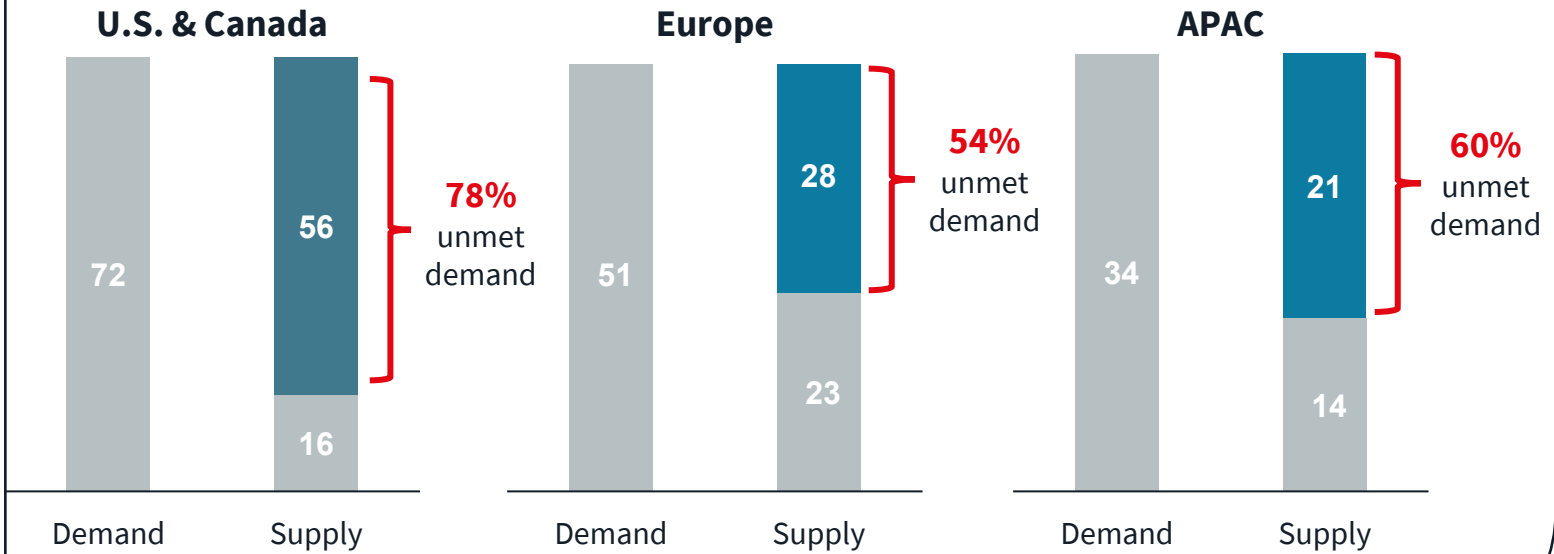


Study includes Class A office buildings, 100k sf +
Market covered: New York City
Source: NYC OpenData, JLL Research

By 2030, demand for low-carbon space will outstrip supply by 3:1

Supply-demand deficit

Occupational requirements compared to development pipeline (Sqft. millions)



Source: JLL Research, 2024. Note: Demand = low carbon occupational requirements by 2030 (2028 for APAC); supply = high quality green supply in pipeline (speculative/available at completion, u/c). Definitions of “high quality” differ by region. 24 cities covered. U.S. cities = Boston, Chicago, Dallas, Miami, New York, San Francisco, Seattle, Toronto, Washington, D.C. European cities = Berlin, Frankfurt, Hamburg, London, Munich, Paris, Madrid, Milan, Amsterdam, Dublin. APAC cities = Delhi, Hong Kong, Melbourne, Singapore, Sydney.

50%

of the world’s companies by market capitalisation have science-based targets

66%

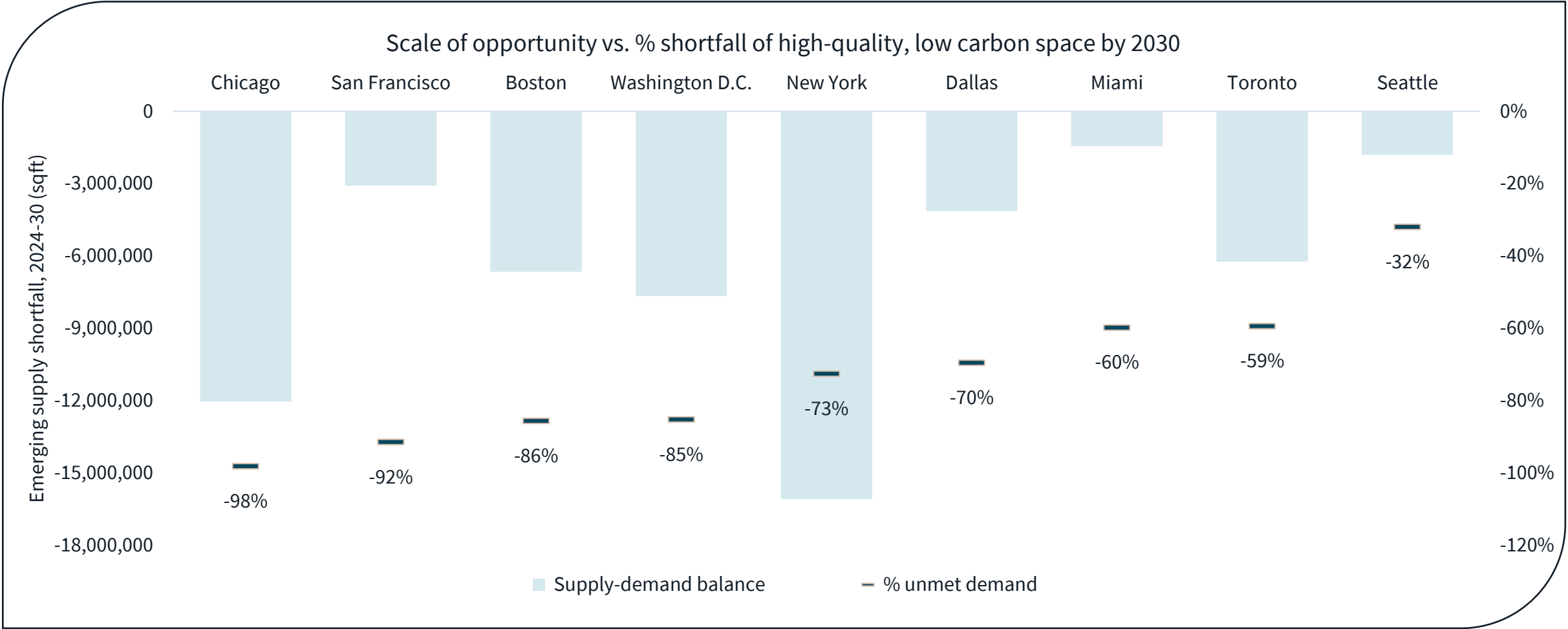
of future global demand for low carbon offices is unlikely to be met

3%

Retrofitting rates must increase from 1% to 3% per year to meet NZC targets

Cities are leading the way with climate policies that directly target the built environment.

Supply-Demand Gap Uneven Across Cities

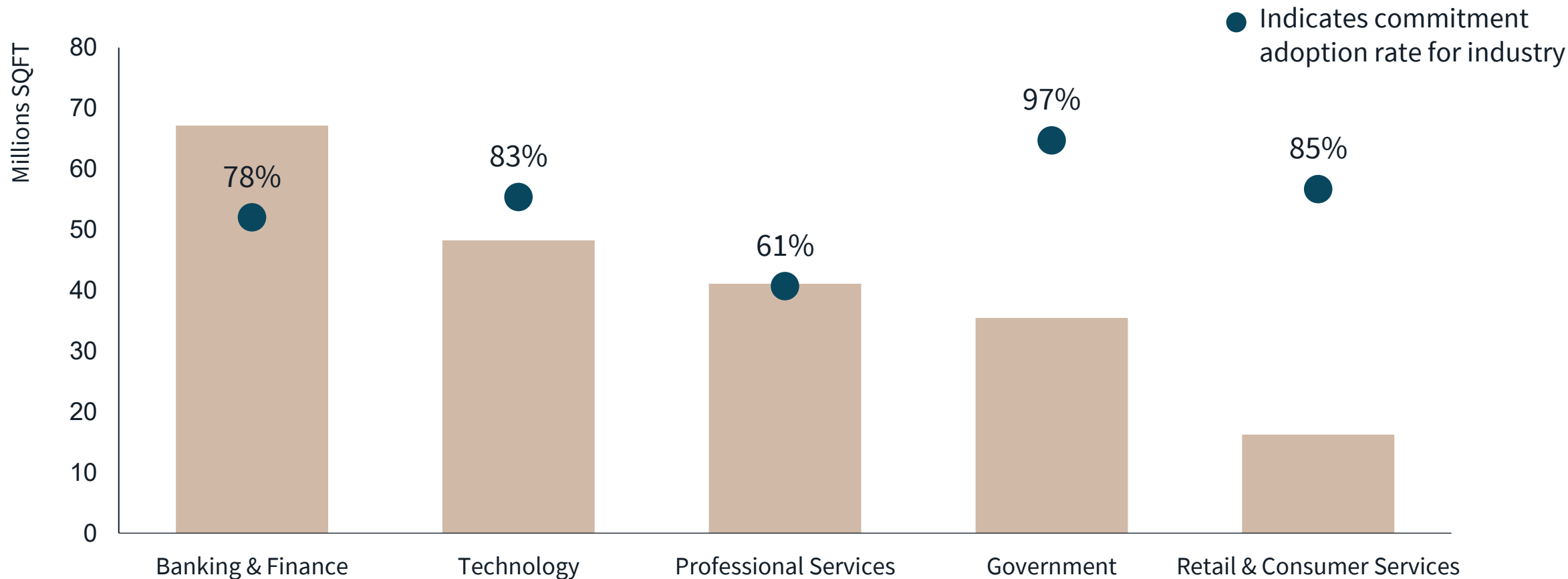


Source: JLL Research, 2024

Demand for low carbon space will vary by industry

Sectoral Demand - Office

Sector breakdown of *total* space requirements from carbon-committed tenants*

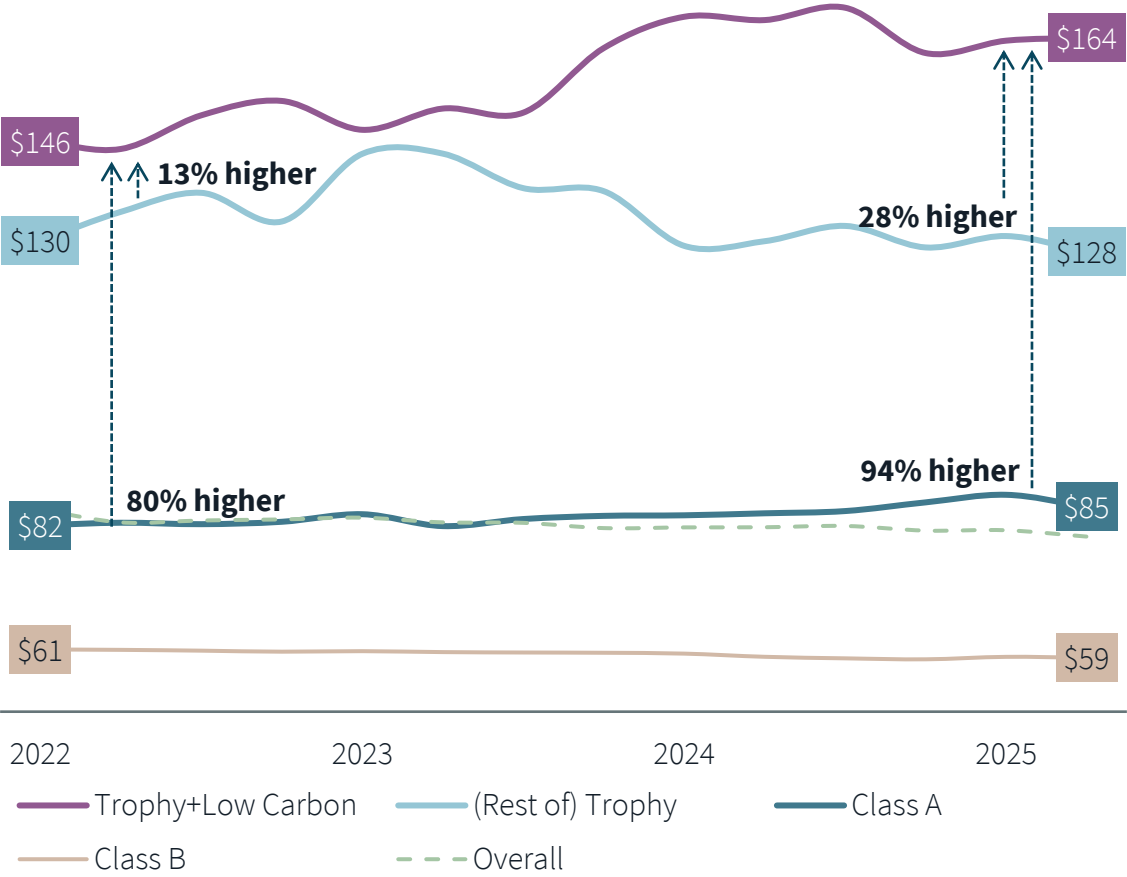


Demand - low carbon occupational requirements, 2024-2030, no adjustments made
City coverage: Boston, Chicago, Dallas, Miami, New York, San Francisco, Seattle, Washington D.C., Berlin, Frankfurt, Hamburg, London, Munich, Paris, Delhi, Hong Kong, Mumbai, Singapore
Source: JLL Research, 2024

Low-carbon features are now integral to the highest quality buildings

A view on the New York market

Direct office asking rents (p.s.f.), New York market



Source: JLL Research, 2025.

Trophy + Low carbon	 One Madison Ave 1 Madison Ave	 The Spiral 66 Hudson Blvd
(Rest of) Trophy	 One Vanderbilt 1 Vanderbilt Ave	 Bank of America Tower 1 Bryant Park
Class A	 One New York Plaza 1 New York Plz	 The Equitable Building 120 Broadway
Class B	 Intergate Manhattan 375 Pearl St	 The News Building 220 E 42 nd St

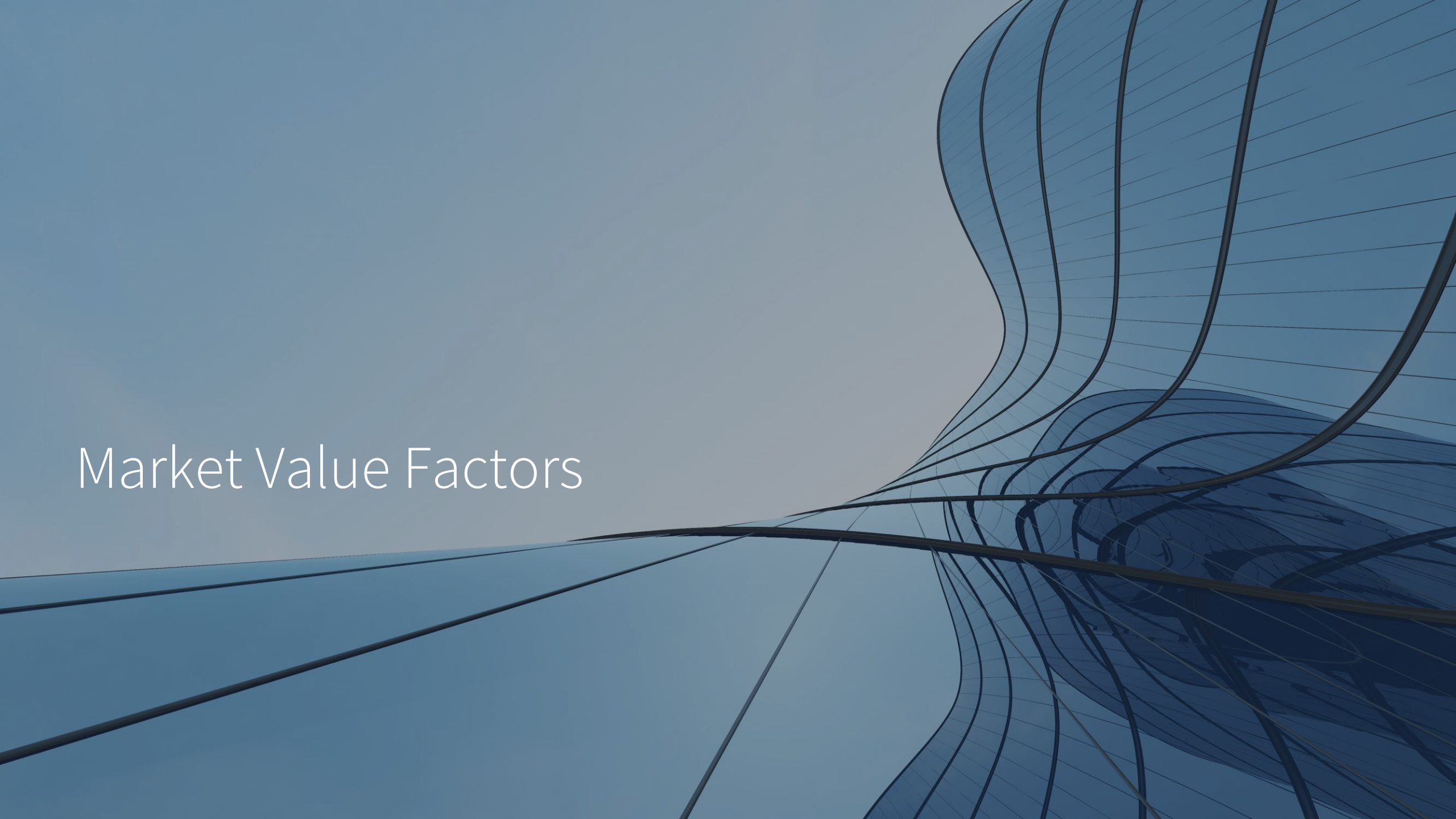
Case studies: Unlocking the value-add opportunity for sustainable real estate



Property	One Madison Ave New York	One Post Office Square Boston	One Exchange Square London	101 Collins Street Melbourne
Strategy	Adaptive reuse, vertical expansion	Recladding, mechanical and amenity upgrades	Comprehensive refurbishment and repositioning scheme	Modernization project with progressive refurbishment
Sustainability improvements	High-efficiency mechanical systems, high-performance curtain wall, 20,925 tCO ₂ e of embodied carbon saved through material reuse and avoided demolition	Triple-glazed curtainwall, high-performance MEP systems, 36% more efficient than like buildings, 14,500 tCO ₂ e of embodied carbon saved through material reuse and avoided demolition	Reusing 90% of structure, 50% lower embodied carbon vs. new build, smart façade design and building systems, 100% electric, net zero in operation, targeting BREEAM Outstanding and NABERS 5*	Onsite energy, EV charging stations, 100% electric - running solely on renewable electricity <i>Note: full electrification was completed without closures or disruption to tenant comfort</i> <i>Read more here.</i>
Market performance	▲32% above prime market rent	▲30% above prime market rent	▲33% above prime market rent	▲39% above prime market rent

Source: JLL Research, 2025.

Market Value Factors

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Sustainable buildings are better buildings

Market fundamentals are creating an opportunity for sustainability to form a critical part of value-add strategies.

The opportunity

High-quality, low-carbon buildings



Energy-efficient



Lower emissions



Asset monetization



Grid-interactive



Future-proofed

The risks

Low-quality, energy-intensive buildings



High OpEx



Lower liquidity



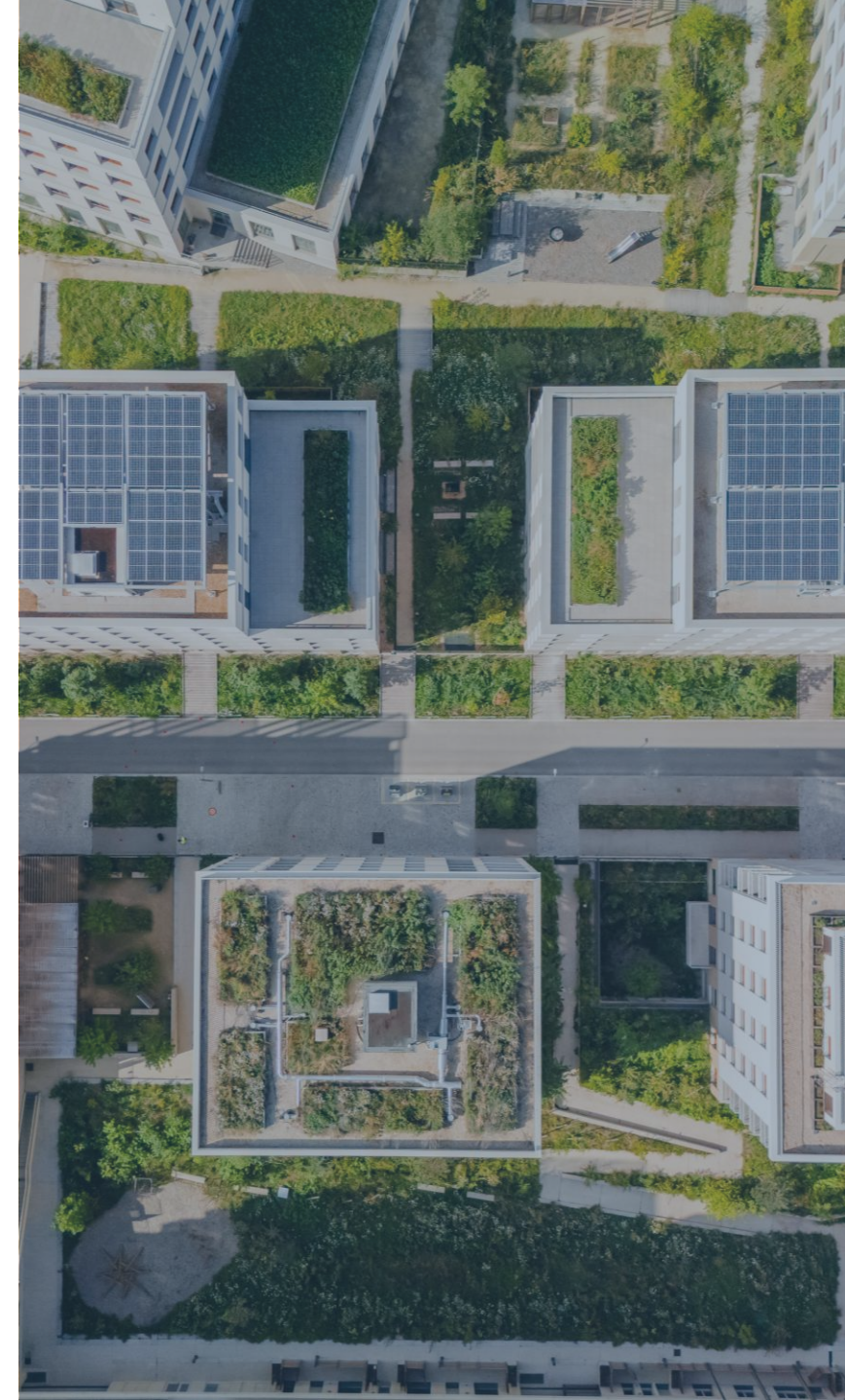
Increased vacancy



Regulatory penalties



Exposure to volatile energy markets



JLL's Sustainability Value-Add Barometer

Evaluates key market drivers to determine where sustainability will be most critical to successful value-add investment strategies

Investment momentum
CRE market strength measured by investment volume recovery, indicating favorable conditions for sustainability value-add strategies

Regulation
Local policies and requirements supporting or mandating sustainable building practices

Physical risk adaptation
Climate-related physical risks (e.g., flooding, fire, wind) increasing urgency for resilient building upgrades

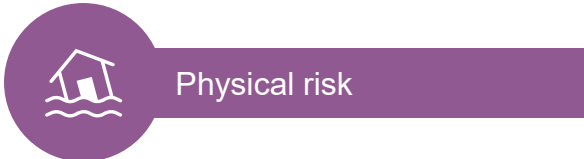
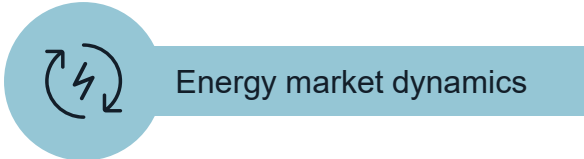
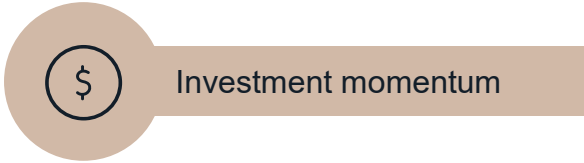
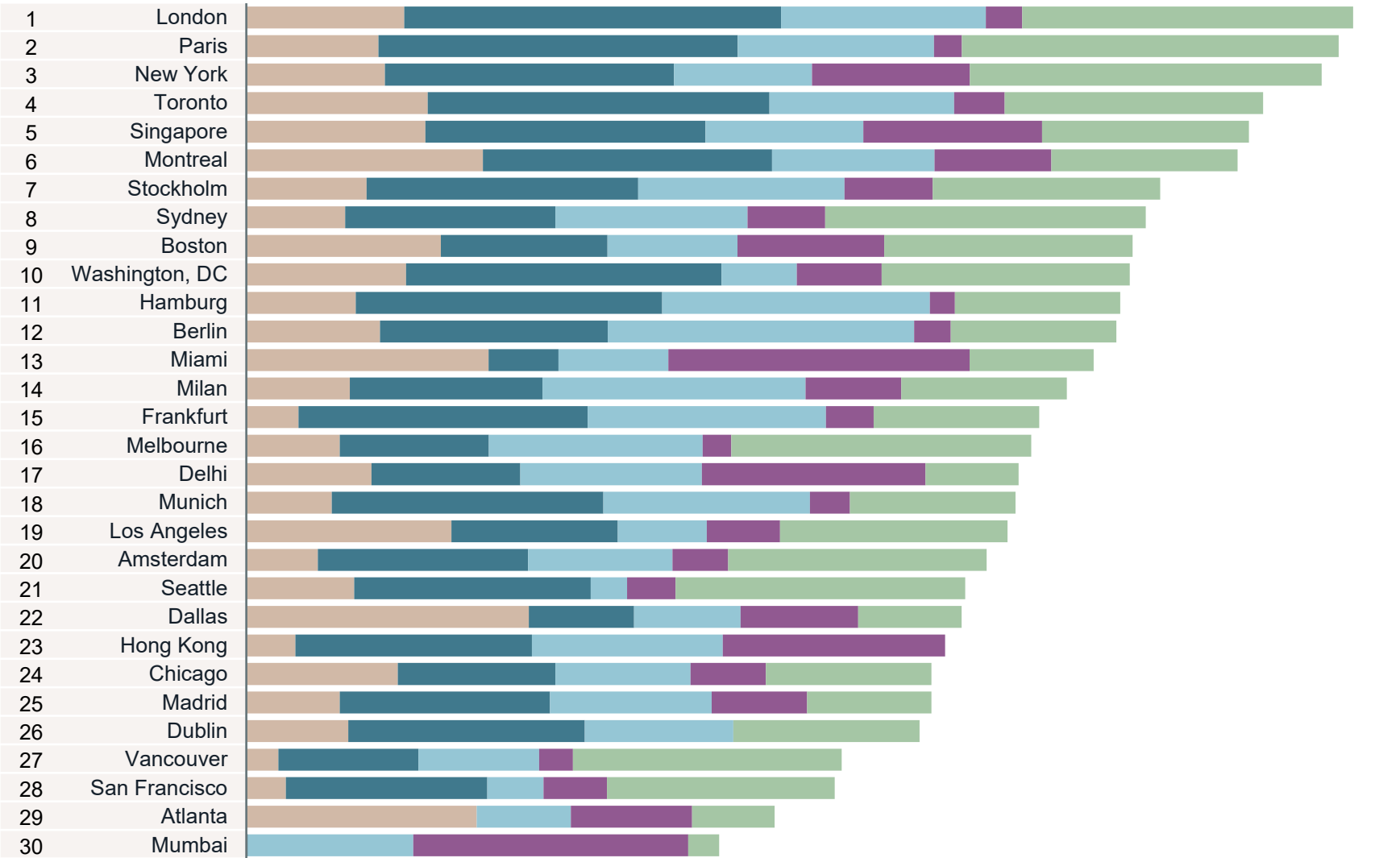


Low-carbon lease demand
Share of lease requirements from top occupiers with stated carbon commitments, driving demand for sustainable buildings

Energy market dynamics
Electricity cost burdens and energy intensity creating economic incentives for efficiency improvements

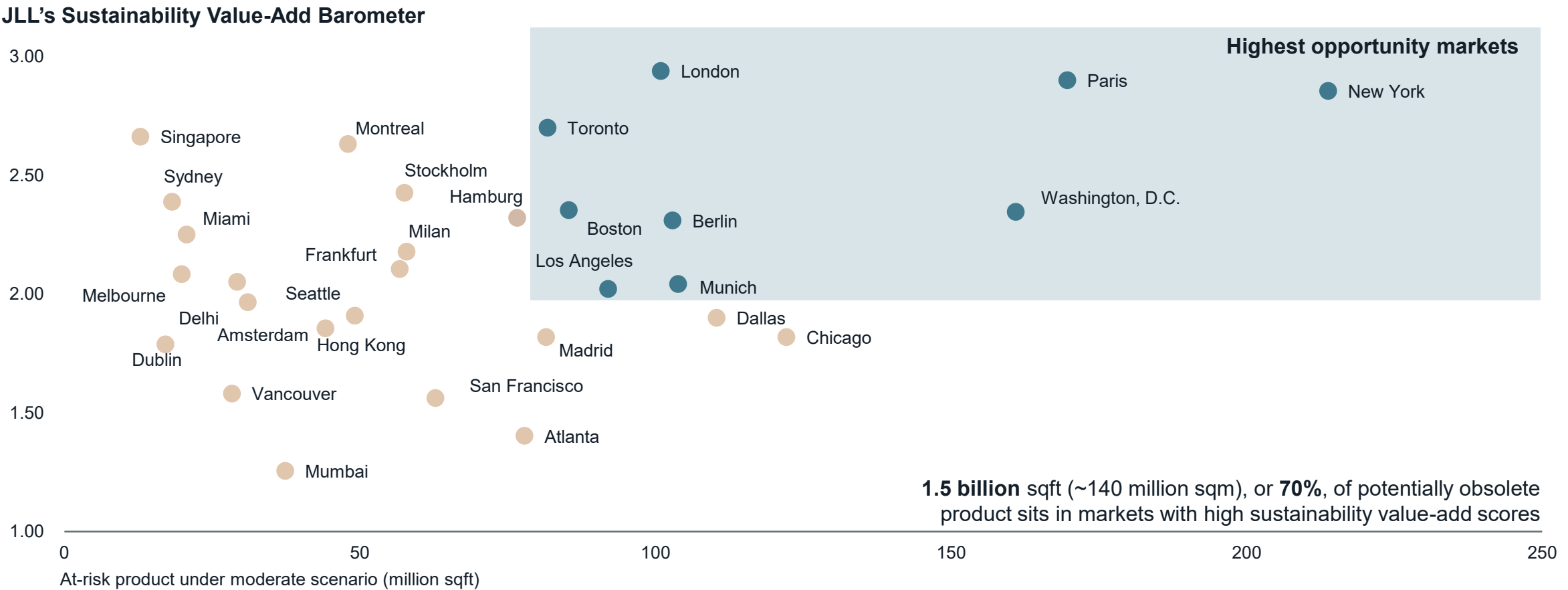
JLL's Sustainability Value-Add Barometer

Rank



Source: JLL Research, 2025.
Note: Each indicator is ranked on scale from 0-1, maximum score of 5

Sizing the sustainability value-add opportunity: 70% of potentially obsolete stock sits in markets with strong value-add opportunity



Source: JLL Research, 2025 – office assets only

Case Study: Realizing Value

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Background



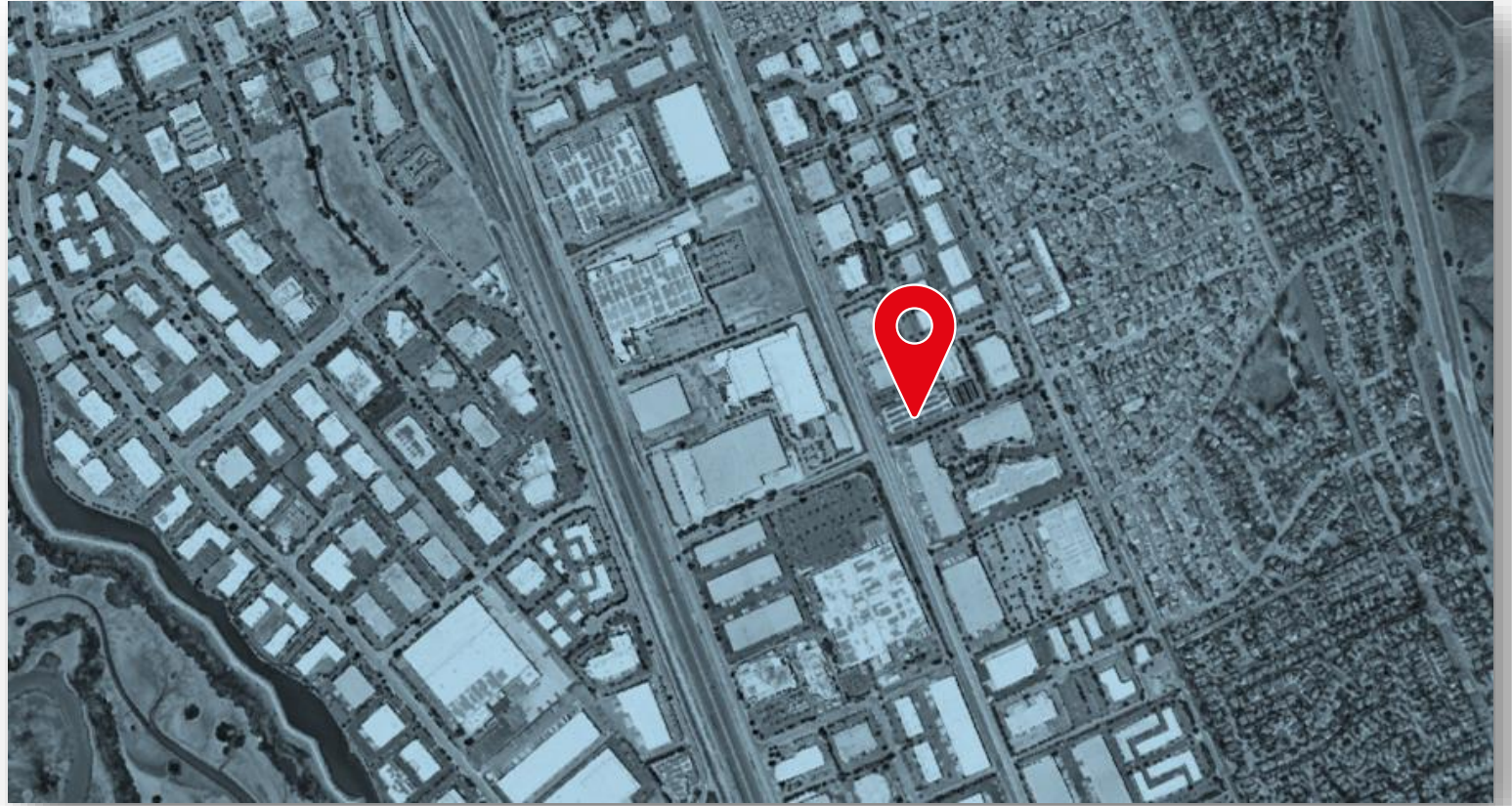
82,400 sf Industrial Asset
Fremont, CA



Single manufacturing tenant,
energy-intensive



Purchased 2017 for \$19M @
6.25 Cap (\$230/sf)



Deal Economics

	LL Cost	cost/sf	TT Savings	per sf	LL add'l rent	per sf
HVAC	\$286,566	\$3.48	\$49,960	\$0.61	\$48,144	\$0.58
New Roof	\$376,607	\$4.57	\$45,040	\$0.55		\$-
Roof Solar	\$1,884,043	\$22.86	\$222,065	\$2.69	\$300,000	\$3.64
Parking Solar	\$785,772	\$9.54	\$86,478	\$1.05		
Tax Incentive	\$(1,371,032)	\$(16.64)				
Net LL Cost	\$1,961,956	\$23.81	\$403,543	\$4.90	\$348,144	\$4.23

Conventional Solar Value Approach

Energy Savings	\$	403,543
Net LL Cost	\$	1,961,956
Simple Payback		4.86
Year 1 IRR		20.6%

"Rentalized" Approach

Increased Value	\$	10,444,627
Net LL Cost	\$	1,961,956
Solar Value	\$	8,482,671
Cash on Cash		432%

Why it Works

Tenant wins:

- **\$55K** net occupancy cost savings
- Hedge against electricity cost escalation (now 10-15%)
- Net zero carbon workplace marketed on website
- New HVAC units, new roof, and shaded parking lot



Owner wins:

- Increased rent of **\$348K** (\$4.23/sf). 30% increase above base
- Lower occupancy risk since tenant's energy costs go up if they relocate
- Cap rate compression of **110 bps** (6.25 initial, **5.15 exit**)
- @6.25 initial cap rate:
 - "energy rent" of \$348K increased asset value \$5.57M
- But cap rate compression uplifted entire asset value
 - "energy rent" \$5.57M @ 6.25 \$6.76M uplift @ 5.15
 - "base rent" NOI uplift: \$4M @5.15
- Total Asset value went from \$19M to \$29.6M in 2 years (\$127/sf)



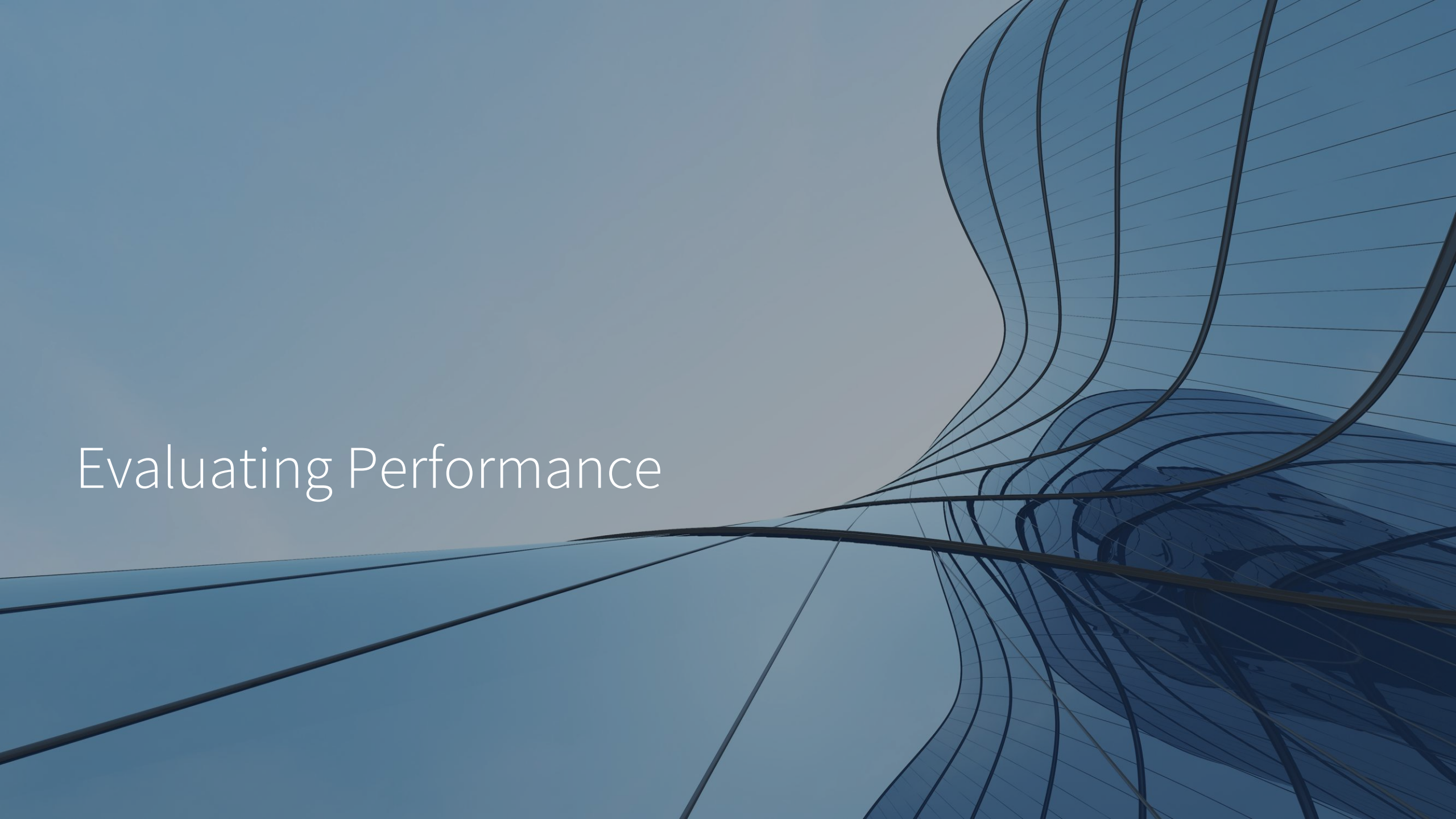
Next Buyer Win

Lower Occupancy risk due to
Tenant energy savings

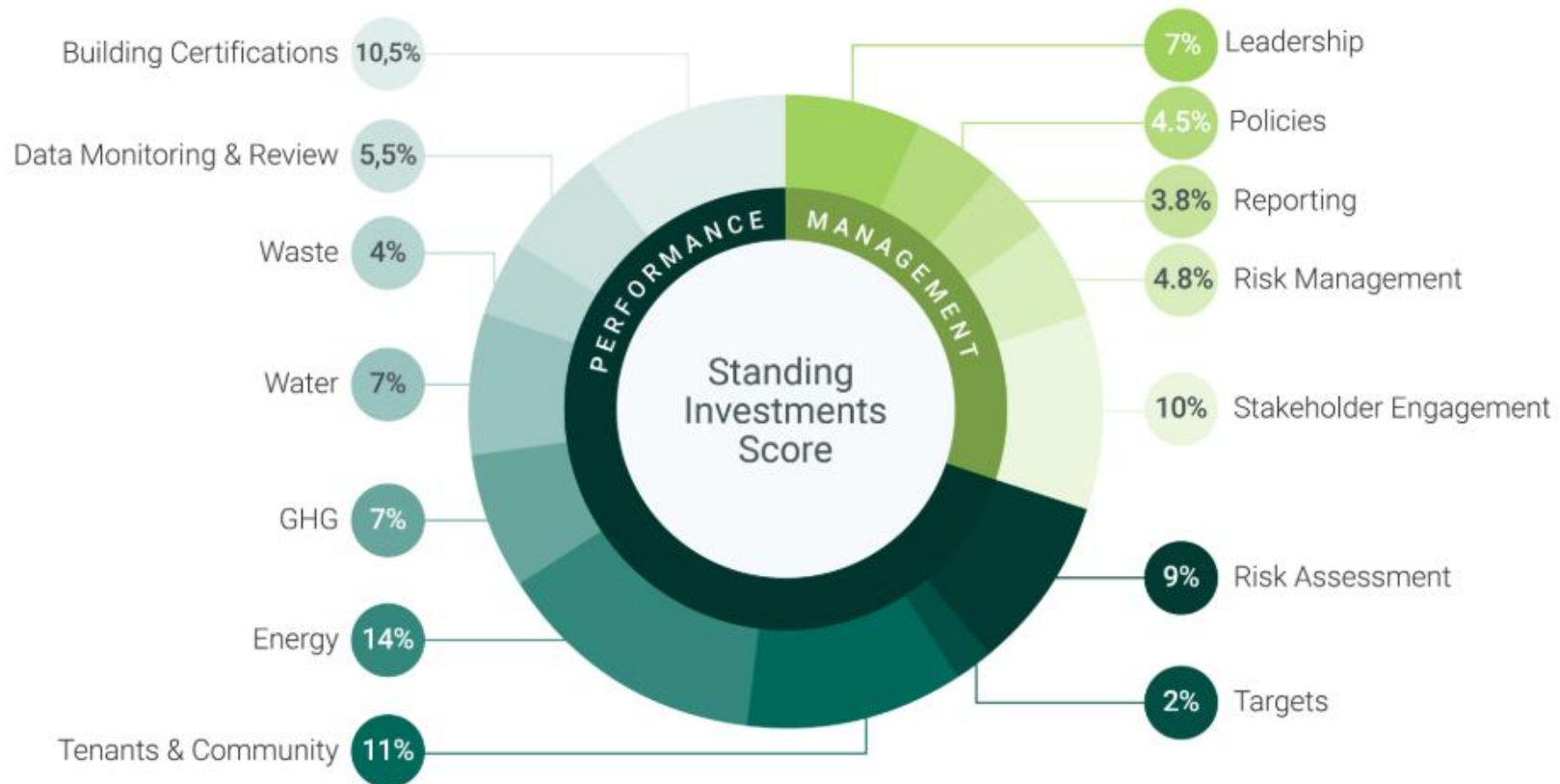


LTV improvement enabled
additional advance on
assumed loan.

Evaluating Performance

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GRESB Overview

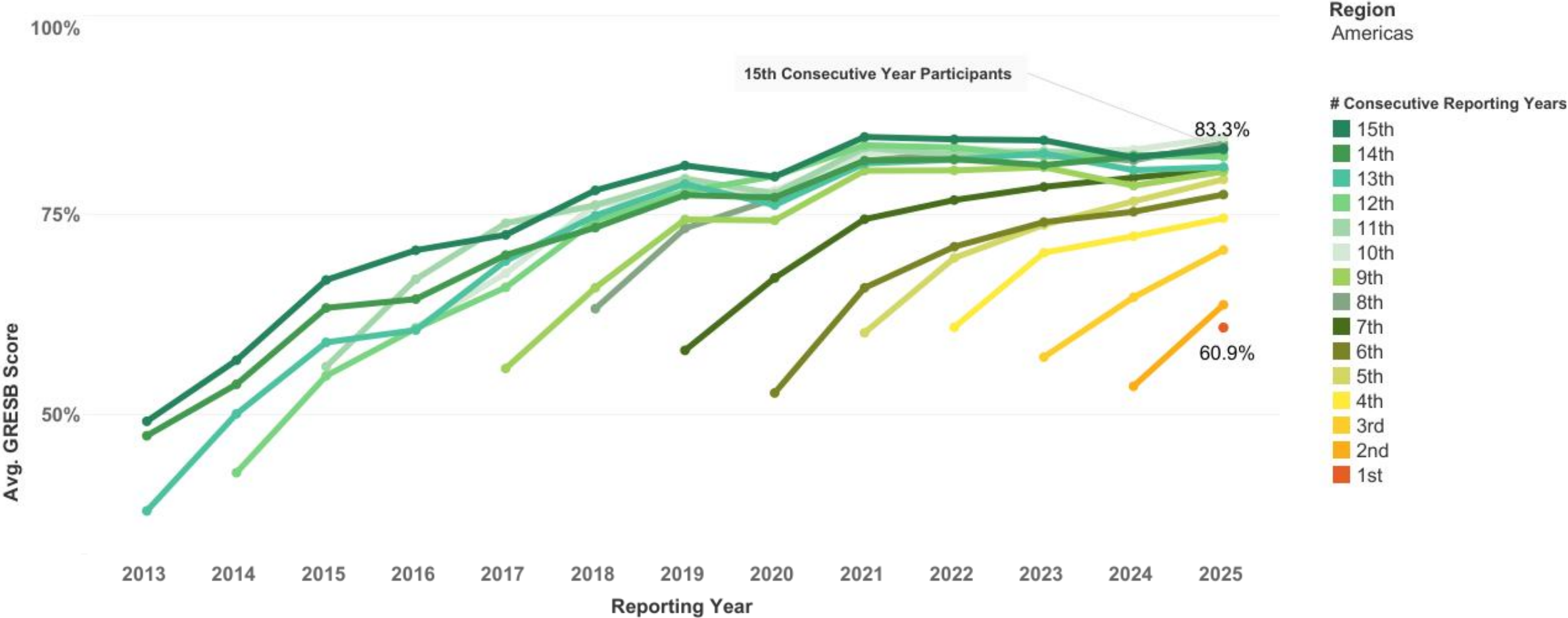


- Score emphasizes Data Coverage
- 1 – 5 Stars are performance quintiles
- Scored against peers
- Blends performance and prescriptive
- Comprehensive but complex

What good looks like?

GRESB 5 Stars				GRESB 4 Stars			
REIT	Ticker	Property Sector	GRESB Total Score	REIT	Ticker	Property Sector	GRESB Total Score
 Hudson Pacific	HPP	Office	93.3	 JBG SMITH	JBGS	Diversified	89.2
 Empire State Realty	ESRT	Office	93.0	 Brandywine Realty	BDN	Office	89.2
 Vornado Realty	VNO	Office	91.2	 Essex Property	ESS	Residential	87.2
 Kilroy Realty	KRC	Office	91.1	 Park Hotels	PK	Lodging/Resorts	87.1
 BXP	BXP	Office	91.0		CUZ	Office	87.0
 Piedmont Office	PDN	Office	90.9	 Cousins Properties	DRH	Lodging/Resorts	86.2
 Paramount Group	PGRE	Office	90.5	 DiamondRock	ELME	Residential	86.2
 SL Green Realty	SLG	Office	90.0	 Elme Communities	VTR	Health Care	84.7
 Veris Residential	VRE	Residential	89.7	 Ventas, Inc.			

What good looks like?



Value implications exist at every point in an asset's life cycle

Capital Raising	Development	Lease & Fit Out	Manage & Operate	Disposition
● Due Diligence ● Investment Thesis / Strategy ● Green Bonds	● Underwriting Climate Risk ● ESG Value Thesis ● Insurance premiums ● Preferential financing	● Green Leasing ● Marketing ● Fit Out Guidance ● Brand Awareness	● OpEx reductions ● Tenant Retention ● Reduced Regulatory Risk	● Expand Buyer Pool ● Regulatory pressure ● Monetize Sustainability Infrastructure
Attracting the CAPITAL		Attracting the TENANT		Attracting the BUYER



Key Questions

- How to balance data and reporting with action?
- How to align Sustainability with value and risk?
- How to align incentives to improve performance?

The background is a solid light blue on the left, transitioning into a series of dark blue, flowing, wavy lines on the right. These lines are layered and curved, creating a sense of movement and depth. The overall aesthetic is modern and minimalist.

Discussion with a Leading Manager



THANK YOU

Check-in code:

Sustainability0318

