

# Brookfield Properties

We **develop and operate** real estate investments on behalf of **Brookfield Asset Management** — one of the largest alternative asset managers in the world.

Brookfield Properties develops and operates more than 780 properties and 325 million square feet of high-quality, sustainability-focused real estate assets around the globe.



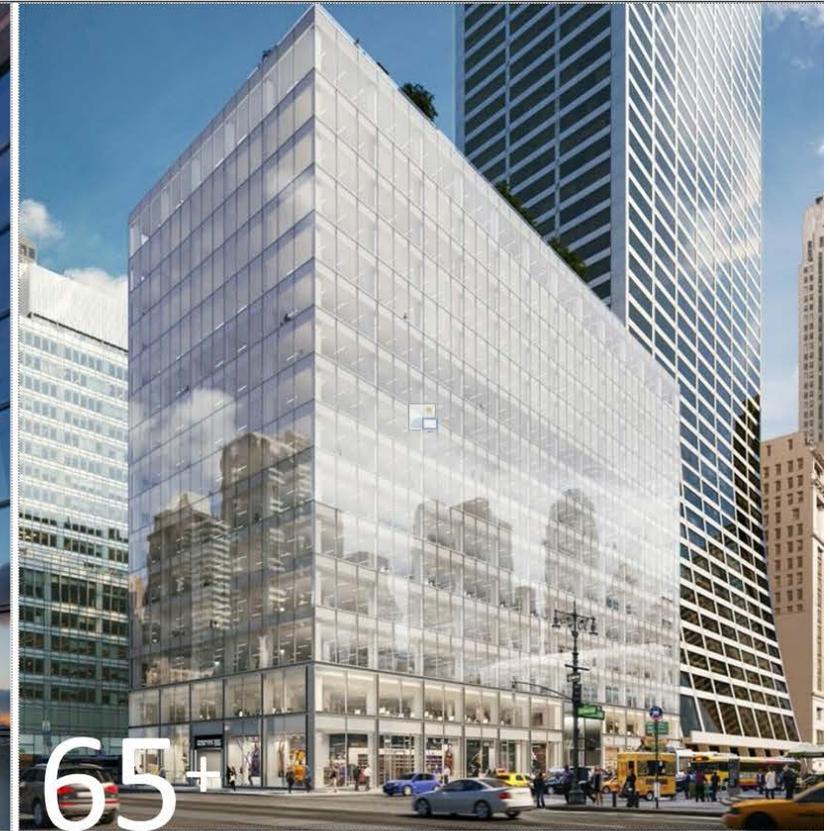
750+

**properties around the world**



325+

**million square feet of commercial space**

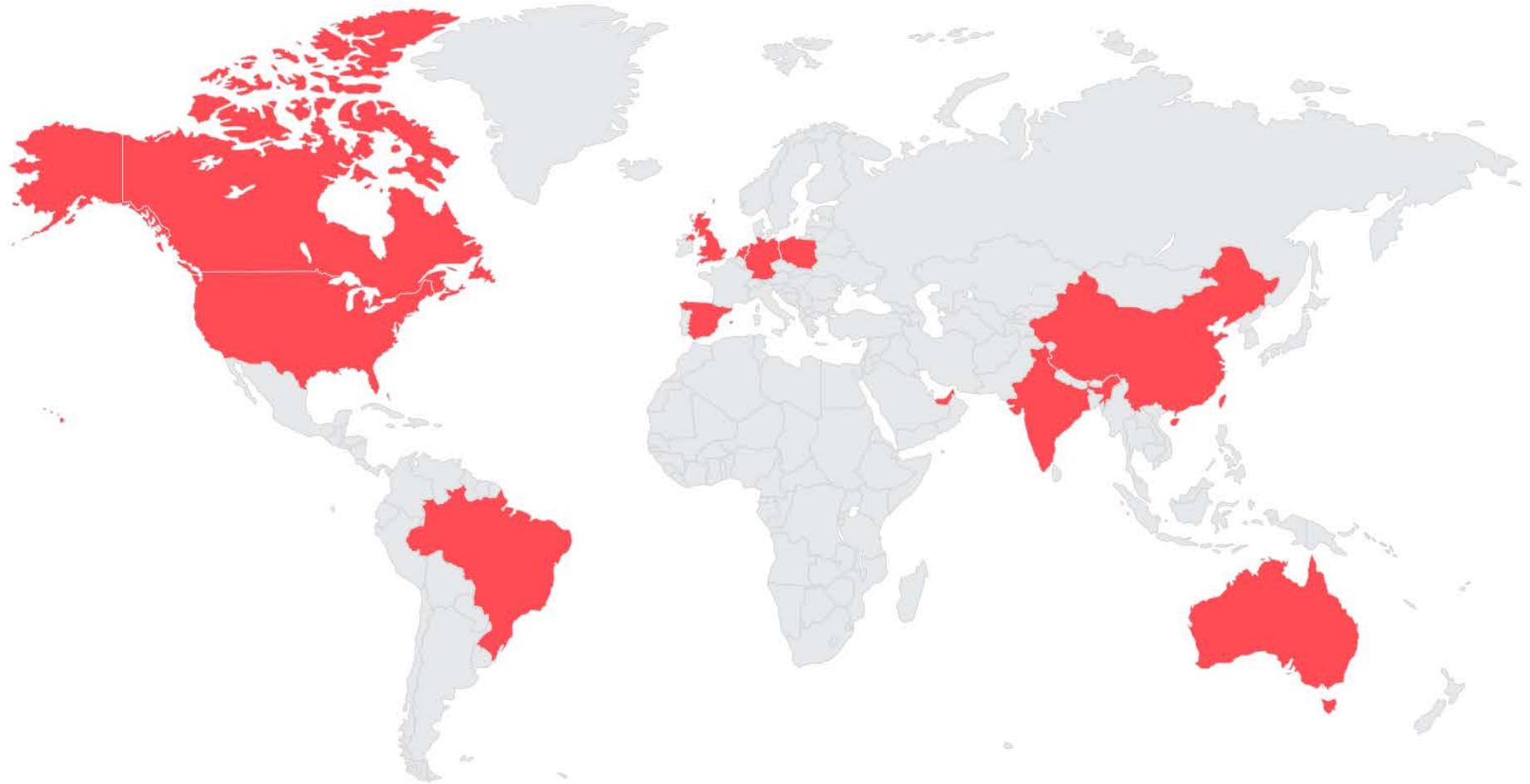


65+

**million square feet of development**

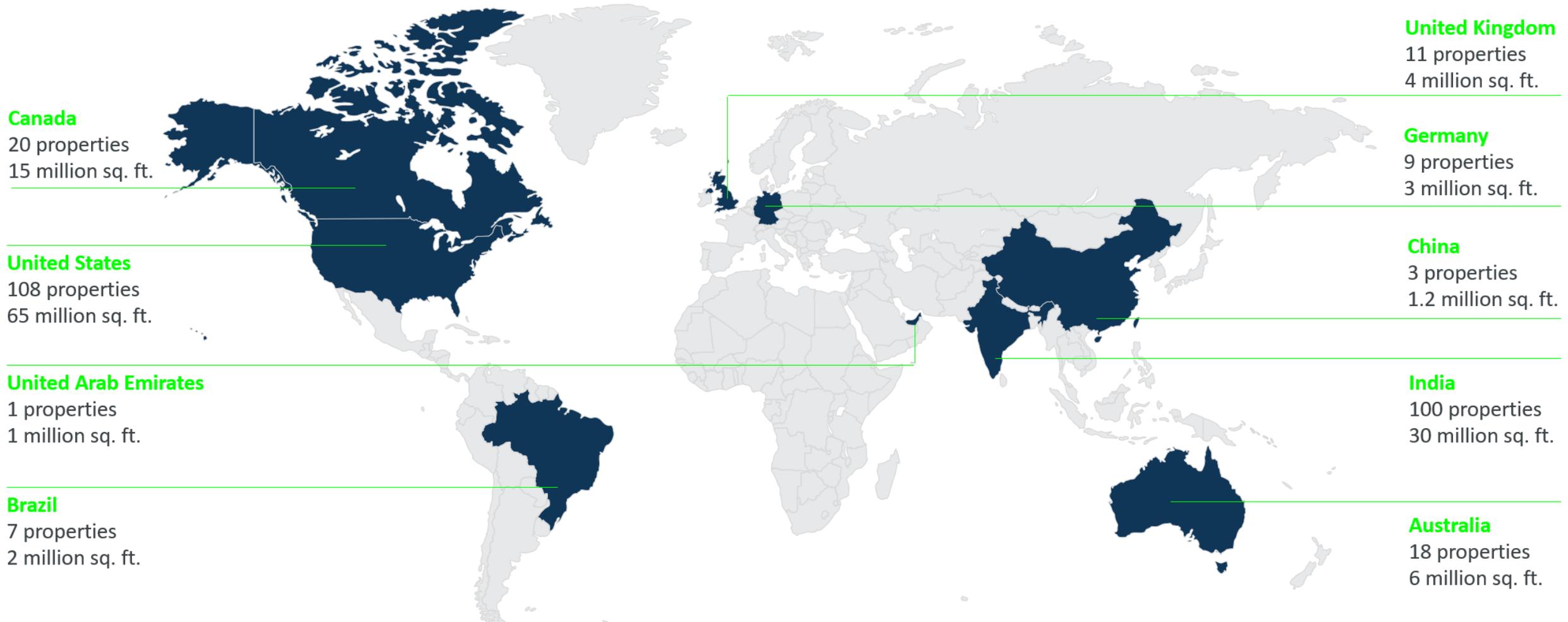
# Our operating portfolio

<b>Australia</b> 6M square feet	<b>327M</b> square feet commercial space
<b>Brazil</b> 2M square feet	<b>27,000</b> multifamily units
<b>Canada</b> 16M square feet	<b>139M</b> square feet of retail
<b>China</b> 8M square feet	<b>128M</b> square feet of office
<b>European Union</b> 7M square feet	<b>244</b> logistics warehouses
<b>India</b> 32M square feet	
<b>United Arab Emirates</b> 1M square feet	
<b>United Kingdom</b> 4M square feet	
<b>United States</b> 251M square feet	

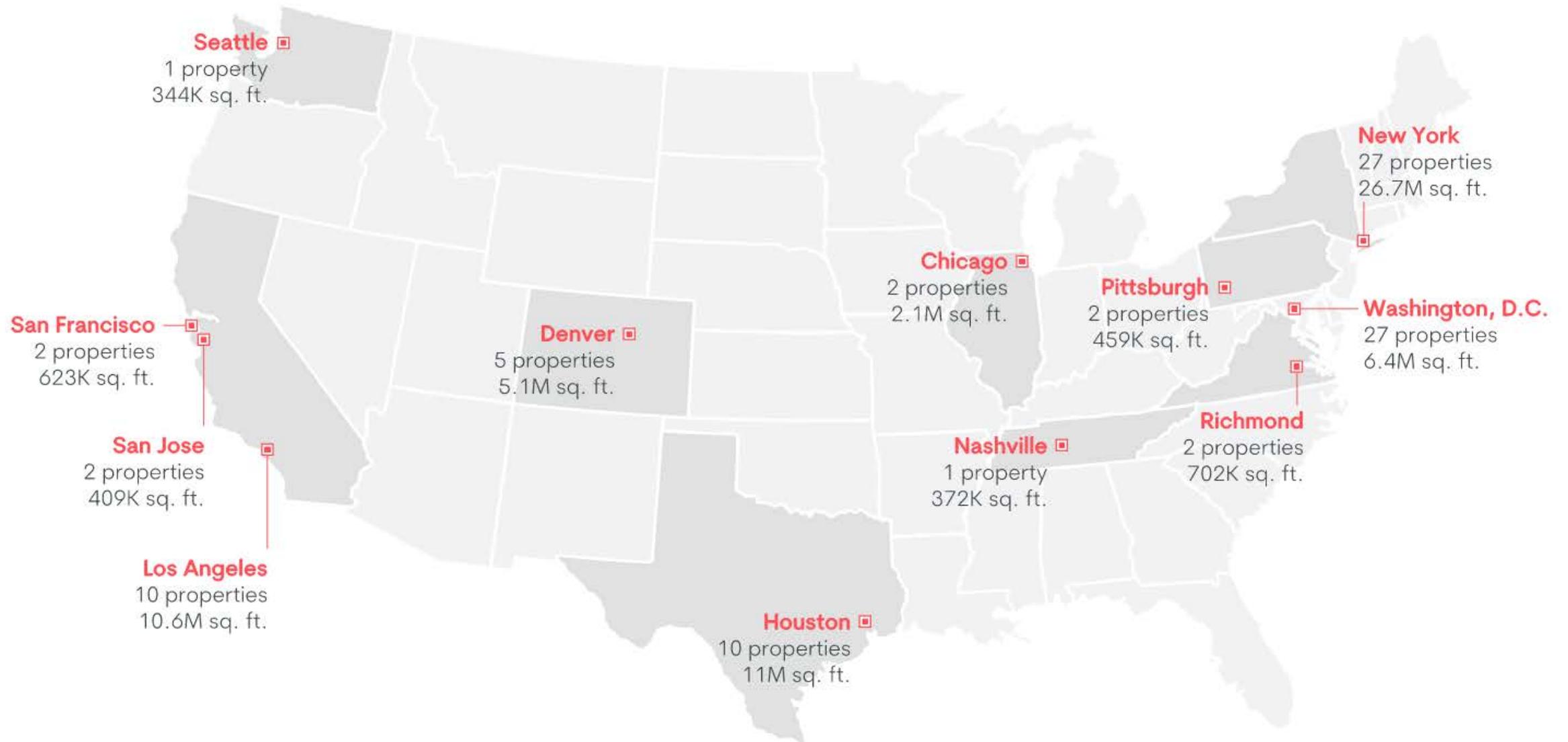


# Our office presence

We operate 297 office properties in premier locations across the North and South America, Europe and Asia Pacific. With over 135 million square feet of office real estate, our scale is always on your side



# United States portfolio



Across our businesses, we integrate development, experience, sustainability and innovation into everything we do.

Why? Because we believe these services elevate our properties and have a positive impact on our communities.

# Company approach to carbon neutrality

- Approach to carbon neutrality:  
<https://www.brookfield.com/responsibility/brookfields-net-zero-commitment>
- What do you hope to achieve through the EBC Challenge?
  - Partner with our engineering team and NYSERDA to identify innovative solutions to achieve net zero carbon at 660 5<sup>th</sup> Avenue

# Track record with sustainability and your EBC carbon commitment

- Track record with sustainability/green buildings
- Carbon neutrality definition
- Commitment (emissions, EUI targets, etc.)
- How does the commitment fit within the company's primary investment thesis (explain in detail)

**Track Record:**

Brookfield Properties has managed its operating portfolio on a long-term hold basis with the objective of consistent improvement in operating efficiency, tenant satisfaction, and asset value growth. Brookfield Properties works with leading companies and partners to ensure upgrades to the latest technology, the best operating principles and to achieve the highest levels of environmental performance and sustainability. Most buildings are LEED Gold Certified and most buildings in Manhattan have letter grades of B, indicating they are high performers among large office buildings. Property management continues to analyze potential improvements for implementation to meet the targeted carbon caps in 2030 including façade upgrades, equipment upgrades, optimization strategies, and working with tenants on employing energy efficiency upgrades and practices within their leased spaces.

Brookfield Properties also acquires older buildings with the goal of renovating them into state of the art, energy efficient buildings. The completed renovation of 5 Manhattan West at 450 West 33rd street shows an example of Brookfield's approach to upgrading existing buildings with leading technologies to achieve energy reductions and improved tenant experiences. Brookfield completed a comprehensive \$350 Million redevelopment program which included a re-cladding of the exterior curtain wall with insulated, low-iron, low-emissivity floor-to-ceiling glass along with a full lobby renovation, elevator modernization and robust upgrades for central heating, cooling and ventilation infrastructure.

The completed renovation of 450 West 33rd Street resulted in significant recorded energy reductions from when comparing the prerenovation energy use in from 2013-2014 to the post renovation energy use in 2017-2018. The Site Energy Use Intensity and carbon emissions were reduced by approximately 40% (see following slide for details).

The carbon reduction impacts have been defined in two categories, as follows:

1. Reduction of CO2 and CO2 equivalent emissions due to improvements in the operational energy efficiency of the building. These reductions accrue on an ongoing basis, and are typically defined as annual savings.
2. Avoidance of CO2 and CO2 equivalent emissions related to the retention of the building's original structural systems. By retaining and reusing these elements, Brookfield has avoided the significant carbon impacts that would have occurred due to the demolition of the existing structure and the development of a new replacement structure. This is considered an immediate carbon reduction impact applicable over the life of this renovation cycle.

The levels of carbon reduction impact for the two strategies are quantified in **Tables 1 and 2** below.

**Table 1: Carbon Reductions from Energy Efficiency Improvements**

Year	% Occupancy	Electricity Consumption (kwh)	Steam Consumption (Mlbs)	Total Metric Tons CO2e	CO2e Reduction vs. Pre-Renovation Average	% Reduction vs. Pre-Renovation Average
2012 (Pre-renovation)	70 -75%	30,454,000	19,820	9,691	--	--
2013 (Pre-renovation)	70 -75%	29,086,400	25,916	9,569	--	--
2014 (Pre-renovation)	71.6	27,670,000	27,819	9,245	--	--
<b>2012 - 2014 Average (Pre-renovation)</b>	--	29,070,133	24,518	9,502	--	--
2017 (Post-renovation)	71.0	16,393,200	17,096	5,505	3,997	57.94%
2018 (Post-renovation)	71.3	16,768,000	17,899	5,650	3,852	59.46%
<b>2017 - 2018 Average (Post-renovation)</b>	--	16,580,600	17,498	5,577	<b>3,924</b>	<b>58.70%</b>

**Energy-to-Carbon Conversions\* :**

Electricity 0.000288962 tCO2e/KWH  
 District Steam 0.044930000 tCO2e/MMBtu

\* As defined under NYC Local Law 97

**Carbon neutrality definition:** net zero carbon is defined as the state in which total carbon emitted through building operations is balanced by carbon emissions avoided or offset.

**Commitment (emissions, EUI targets, etc.):** Brookfield Properties, via our parent company Brookfield Asset Management's commitment to the Net Zero Asset Managers Initiative, has committed to achieve net zero carbon by 2050 or sooner, with an interim reduction target of a 50% reduction in absolute emissions relative to a 2019 baseline by 2030. Specific to 660 5<sup>th</sup> Avenue, Brookfield Properties plans to achieve carbon neutrality for Scope 1 and 2 emissions by 2035.

**How does the commitment fit within the company's primary investment thesis (explain in detail):** Brookfield Properties has a rich history of developing and operating energy efficient buildings and one of the core pillars of our ESG strategy is to strive to minimize the impact of our operations and improve our efficient use of resources over time as well as supporting the goal of net-zero greenhouse gas emissions by 2050 or sooner. Our ESG criteria are integrated into all aspects of our investment decision-making and ongoing portfolio management, including due diligence, investment committee approval, ongoing management, and disposition strategy.

# Committed building: 660 5<sup>th</sup> Avenue

660 Fifth Avenue (formerly 666 Fifth Avenue) is a progressive 39-story office building, offering 1.25M square feet of commercial space, undergoing a \$400M redevelopment. The stunning new façade will be reclad in 11x19 feet single-pane glass units, making them the largest ever used on a redevelopment in New York City. A brand-new lobby, elevators, and upgraded infrastructure make 660 Fifth Avenue the clear choice for business.

- Built/redeveloped: 1957/2022
- 39 stories
- Heating is provided to the building by Con Edison steam. Cooling for the building is provided by a chilled water system, located on the 41st floor, which consists of two 1,600-ton steam turbine-driven, centrifugal water chiller machines manufactured by Carrier and York. The total chiller capacity is 3,200 tons. A Trane 50-ton, multi-stage electric reciprocating chiller and two Carrier 40-ton units are dedicated to the main lobby air-handling unit. The retail units are served by a Carrier 30-ton unit.
- Current EUI: approximately 120 kBtu/SF (pre-redevelopment)
- Current emissions: approximately 11,500 tons of CO<sub>2</sub>e per year (pre-redevelopment)

# SixSixty Fifth Ave

New York, New York

SixSixty has long stood in Manhattan's most sought-after location. Now it's Manhattan's most state-of-the-art workspace for innovative companies.

Brookfield Properties has undertaken a \$400M redevelopment of 660 Fifth is a progressive 39-story office building, offering 1.25M sq ft of commercial space.

The stunning new façade will be reclad in 11x19 ft single-pane glass units, making them the largest ever used on a redevelopment in New York City.

SixSixty Fifth Ave boasts multiple outdoor terraces across four floors, and the ability to remove slabs and columns to create dramatic, double-height atriums for amenity, entertainment or client-facing areas. Large floorplates allow for tenants to create interiors only limited by the imagination.



## Property highlights

- 1.25 million sq. ft.
- 42,000 sq. ft. exclusive terraces
- 11x9 single-pane glass, largest in NYC redevelopment history

## Sustainability + Recognition

- Targeting LEED® Gold V4 certification
- 40% water use reduction
- 75% construction waste will be recycled





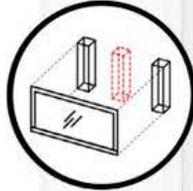
challeng





# Flexible and forward-thinking

State-of-the-art infrastructure to support forward adaptability, wellness, and superior performance



Efficient Perimeter

**1/2**  
of all perimeter  
columns removed



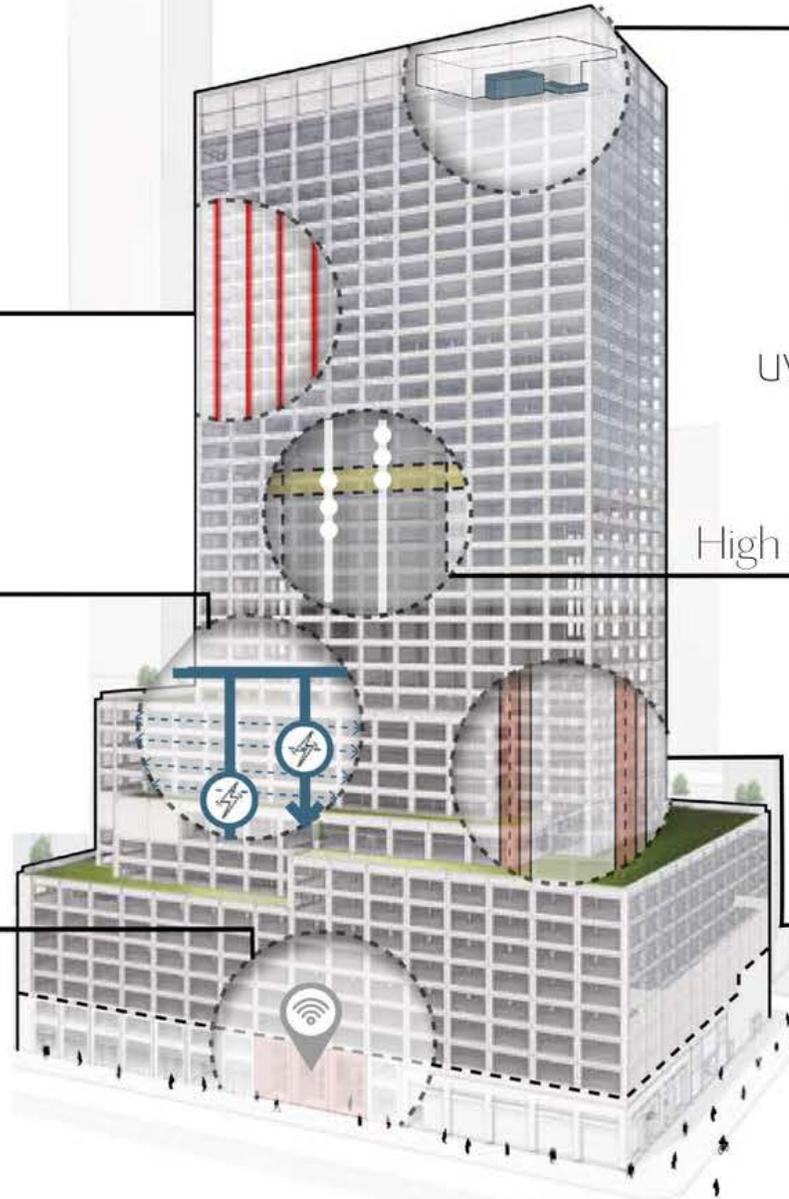
Robust Capacity

**2X**  
Redundant power  
for entire building



Contactless Arrival

**0**  
Touchpoints from  
building entry to  
tenant suite



Flexible Mech Systems

**+28%**

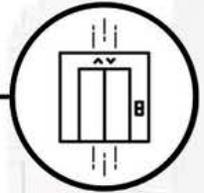
More energy efficient  
than required  
150% more fresh air than  
required by code  
No recirculated air  
UV-C lights for sanitization  
MERV 15 filtration



High Performance Elevators

**+10+**

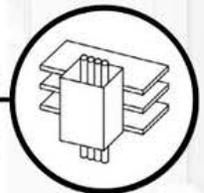
Modernization features



Adaptable Shafts+Risers

**4+**

Additional dedicated  
shafts for amenitized  
spaces



# Testimonial

- “We’re excited to demonstrate our continued commitment to achieving net zero carbon by partnering with leading industry professionals and NYSERDA to identify scalable, effective solutions to drive meaningful reductions in carbon emissions in our properties. We see immense opportunity in collaborating in these types of initiatives to support the successful transition to a net zero economy.”  
- *Michael Daschle, SVP, Sustainability*