Logistics Build-to-Suit Overview

China
We are Brookfield Properties


Brookfield Properties is proud to be a collaborative team of developers, designers, entrepreneurs and out-of-the-box thinkers, well versed in delivering mission-critical facilities for multi-national clientele.

We bring development and operational expertise, a global network and are backed by large scale capital of Brookfield Asset Management – allowing us provide industry-leading development services to make your vision a reality.
Brookfield Properties Values

Passion + Integrity + Partnership

**PARTNERSHIP**
We believe every project is “Mission Critical” so delivering for our partner is priority number one

**PEOPLE**
It starts at the heart, with our team. We believe the right work environment breeds creativity, engagement, collaboration, dedication and authenticity

**SUSTAINABILITY**
We believe we are developing facilities to stand the test of time and are responsible to help the overall environments within the communities they serve

**INNOVATION**
We have a passion to develop facilities that are ahead of the curve and set the bar from the start of design to completion

Collaborative Partner Dedicated to Driving Value
We are possible because of our people.
Chinese Logistics Development Team

**Yiwen Yang**
**Director, Asset Management**
Yiwen joined Brookfield in 2016 to oversee China’s real estate team and drive the financial performance of investment properties in China.

Throughout the investment process, Yiwen maintains communication with all parties, identifies and implements value-add opportunities for existing properties, and monitors the operation and capital expenditure of existing assets.

In her current role, Yiwen leads the logistics team by identifying suitable development sites for partners and manages negotiations with the local government both on behalf of Brookfield Properties and our clients.

**Wenyan Xu**
**Construction Director**
Wenyan oversees project planning and design, cost estimation, site management, and project delivery.

During his 28 years in the industry, Wenyan has developed more than 50 industrial, logistics, and retail projects totaling over three million square meters, including the Walmart Shenzhen Distribution Center, the Liebherr Machinery factory in Dalian, the Beijing Olympics Logistics Center, and the Nike China Distribution Center in Taicang.

**Bob Admire**
**Construction Director**
Bob oversees our customers’ technical design requirements and ensures that projects are delivered according to our world-class international specification and design standards.

Bob plays an active role in the management and development of key account customer relationships and oversees the delivery of projects with a focus on time, quality, cost and safety.

Bob has over 30 years of engineering experience with 14 years in real estate development.

**Tony Tao**
**Project Manager**
Tony acts as onsite Project Manager driving the construction of Chinese development projects.

Ensuring construction is on time and budget, while maintaining quality objectives, Tony leads the onsite efforts by managing schedules and site safety.

Tony has 18 years of engineering and real estate development experience with an extensive background in logistics and manufacturing facility development.
Chinese Logistics Development Team

Stuart Mercier  
Head of Real Estate (Asia)

Stuart joined Brookfield in March 2012 and is responsible for leading real estate investment activities in the Asia-Pacific region. Stuart oversees the strategic development of Brookfield’s business lines in Asia.

Stuart has worked on notable transactions in the region including Brookfield’s strategic partnership with Shui On Land in China Xintiandi and the acquisition of the IFC Seoul Complex in South Korea.

Roxanne Ni  
Manager, Asset Management

Roxanne is responsible for supervising the financial operations of Brookfield’s assets in China. She focuses on asset appreciation, seeking funding opportunities, as well as maintaining and expanding investor relationships.

Roxanne has many years of real estate consulting and investment experience. Before joining the firm, she worked at Goodman China, where she facilitated multiple project transactions, asset sales, and business development planning.

Amanda Wang  
Manager, Logistics Operations

Amanda oversees local business operations. In addition to coordinating with internal groups, Amanda also works with our third-party service providers to ensure seamless project delivery and operations.

Gege Wang  
Analyst

Gege supports local team members by distilling investment feasibility and financial analysis for potential projects. Gege provides analysis reports and presentations on local logistics opportunities that may be well-suited for our multi-national customers.
Global Logistics Development Team

Jay Cornforth  
Managing Partner &  
Global Head of Logistics

Jay is Managing Partner, Global Head of Logistics. After joining Brookfield in 2013, he oversaw the acquisition and rebranding of IDI Logistics into one of the world’s leading investors and developers of logistics real estate. Jay has over 20 years of real estate experience and joining Brookfield from Prologis where he was President, East Region, overseeing an operating portfolio of 92 million square feet and a development land bank in excess of 30 million square feet.

John Morgan  
Senior Vice President &  
Global Head of Development

John oversees Brookfield Properties’ global logistics design and construction standards, establishing an aesthetic and structural standard for current and future developments. John has led numerous projects through every facet of the development and design process, including site selection, master planning, entitlements, design and construction. He has developed approximately 75 million square feet of industrial warehouses and distribution centers on four continents for companies such as Amazon, Wal-Mart, FedEx, Best Buy, Home Depot, Coca-Cola Enterprises and many more.

Professor James Murray  
Brookfield Asset Management  
Scientific Solutions Group

James leads Brookfield’s Scientific Solutions Group. He is an innovative, multi-skilled scientist and engineering professional offering a broad range of mathematical expertise, academic & industry experience and leadership. James has previously held Fellowships at several highly-ranked universities and has been consistently engaged by numerous global firms. James has influenced and/or been responsible for over 30 patents and more than 800 major projects.
We Take Our Responsibility Seriously

Environmental, Social and Governance Management

While every investment across Brookfield is different and therefore will have different considerations, our ESG Program, based on the following principles, informs how we conduct our business.

EMPLOYEE WELLBEING
Meet or exceed all applicable labor laws and standards in jurisdictions where we operate, which includes respecting human rights, offering competitive wages and implementing nondiscriminatory, fully inclusive hiring practices.

HEALTH & SAFETY
Aim to have zero serious safety incidents within our businesses by working towards implementing consistent health and safety principles across the organization.

COMMUNITY ENGAGEMENT
Engage with community groups that might be affected by our actions to ensure that their interests, safety and well-being are appropriately integrated into our decision-making.

PHILANTHROPY
Empower our employees to participate in – and use our resources to give back to – the communities in which we operate.

ENVIRONMENTAL STEWARDSHIP
Strive to minimize the environmental impact of our operations and improve our efficient use of resources over time.

GOVERNANCE, ETHICS & FAIRNESS
Operate with high ethical standards by conducting business activities in compliance with applicable legal and regulatory requirements, and with our Code of Business Conduct and Ethics.

TRANSPARENCY
Be accessible to our investors and stakeholder by being responsive to requests for information and timely in our communication.

This product includes Low Impact Hydropower from facilities certified by the Low Impact Hydropower institute (an independent non-profit organization) to have environmental impacts in key areas below levels the institute considers acceptable for hydropower facilities. For more information about the certification, please see www.lowimpacthydro.org.
Brookfield Asset Management – Complimentary Assets

A global leader in alternative asset management, distinguished by a 120-year history of owning and operating real assets

$500B+

AUM

REAL ESTATE
$194B AUM
- Office
- Multifamily
- Retail
- Logistics
- Hospitality
- Mixed-Use
- Alternative Real Estate

INFRASTRUCTURE
$66B AUM
- Utilities
- Transport
- Energy
- Data Infrastructure
- Sustainable Resources

RENEWABLE POWER
$47B AUM
- Hydroelectric
- Wind
- Solar
- Storage

PRIVATE EQUITY
$61B AUM
- Business Services
- Infrastructure Services
- Real Estate Services
- Industrials

CREDIT
$120B AUM
- Performing Credit
- Opportunistic Credit
- Private and Listed Equities
- Real Estate

As of June 30, 2019. Brookfield Asset Management AUM includes approximately $19 billion of AUM from Public Securities and other corporate businesses.
Our Global Presence – Asia-Pacific

Australia, New Zealand, India, China, Japan, Singapore & South Korea

Real Estate
Australia:
- 15 core office properties
- 7.8 million sf of office properties
- 3.3 million sf of commercial development
- 1 hotel with 433 rooms

India: 69 opportunistic office properties with over 25.3 million sf of space

Seoul, South Korea: 4.5 million sf mixed-use complex consisting of three office towers, a retail mall and five-star hotel

Infrastructure
- Utilities: One of the world’s largest coal export terminals
- Transport: 5,500 km of rail infrastructure (Australia), over 600 km of toll roads (India), and 5 port container terminals (Australia & New Zealand)
- Energy: District energy and water infrastructure systems including gas distribution operations (Australia)
- Data Infrastructure: two high-quality data centers

Renewables
- India: 11 solar facilities, 3 wind farms, with over 300 MW of capacity
- China and South East Asia: 7 solar facilities, 3 wind farms, with over 220 MW of capacity

Private Equity and Other
- Business Services: Construction and facilities management services
- Infrastructure Services: services to nuclear power facilities

$36B
AUM

~9,800
EMPLOYEES
The Brookfield Advantage

As part of Brookfield Asset Management’s global network, our team has access to a wide range of internal expertise that can directly benefit our customers.

**Brookfield Property Partners** is a diversified global real estate company that owns, operates and develops one of the largest portfolios of office, retail, multifamily, and industrial in the world.

**Brookfield Growth Partners** is Brookfield’s venture capital group which plans to invest $300M over the next two years in technology-enabled businesses across Brookfield’s real asset footprint. The fund is focused on Brookfield’s four sectors: real estate, infrastructure, power, and private equity.

**Brookfield Scientific Solutions Group (SSG)** is a multi-disciplinary group motivated to bring efficiencies to industry. The team utilizes a first principles approach informed by the scientific method and inspired by a broad range of scientific, engineering, and design disciplines (particularly physics and mathematics) in order to understand the fundamental nature of the problem presented.

**Terraform Global** owns and operates a high quality, 952-megawatt portfolio of recently constructed, contracted solar and wind assets located predominantly in Brazil, India and China.

**Brookfield Infrastructure Partners** is a leading global infrastructure company that owns and operates high-quality, long-life assets in the utilities, transport, energy and communications infrastructure sectors across North and South America, Asia Pacific and Europe.

**Brookfield Global Integrated Solutions (BGIS)** is a leading provider of customized facility management services, project delivery services, energy and sustainability solutions, building performance management, workplace advisory and management, and real estate services.

**Multiplex** is a leading international construction contractor headquartered in Sydney, Australia. Operating in Australia, India, Canada, Europe and The Middle East.
Case Study: Multi-Sector Customer Relationship

Fortune 100 global business

THE RELATIONSHIP
To date, Brookfield has developed and/or leased over 7 million square feet of office, industrial and retail space for this customer.

OFFICE
Leased approximately 1.4 million square feet of office space in New York, London, Sao Paulo and Delhi.

INDUSTRIAL
• Leased and/or developed approximately 5.8 million square feet of industrial space.
• Facilities in the UK, Germany and the US.

RETAIL
• Leased approximately 100,000 square feet of retail space to New York, NY and Fresno, CA.
• Kiosks have been installed at multiple locations.
Our Competitive Advantage

- Dedicated logistics professionals in eight market offices across the globe
- Over 100 million sq. ft. of high-quality logistics facilities developed or managed since 2012
- A trusted partner by some of the world’s top brands
- A commitment to sustainability and building innovation
Global Logistics Experience

Key
- Existing Portfolio
- Market Office
- Legacy Market / Target Market
- Target Markets
- BAM-owned Cargo Terminals
Global Logistics Experience

As Brookfield affiliates acquire and sell logistics businesses, Brookfield Properties’ expertise is tapped to both asset and portfolio manage the properties in order to drive value for stakeholders

2012
Entered US and Mexico markets with 18M sq. ft. Verde Realty acquisition by BPY (sold business in 2014)

2013

Entered Europe and China with the acquisition of Gazeley – a 5.4M SF portfolio with an additional 24M SF land bank (sold Gazeley in 2017)

2018
Entered Brazil with the acquisition of a 2.2M SF portfolio.

100M+
SQUARE FEET MANAGED SINCE 2012

50+
MARKETS ACROSS 13 COUNTRIES

40M
SQUARE FEET DEVELOPED SINCE 2014
China Logistics Experience

Our Chinese logistics business was established in 2006 and has grown significantly. We have successfully developed major build-to-suit and ready-built projects, providing state-of-the-art and cost-effective manufacturing and logistics facilities.

2006
Established office in Shanghai to provide development capability throughout all of mainland China.

2014
Completed 64,000 sqm state of the art automation distribution center for Adidas in greater Beijing area

2018
Completed 40,000 sqm of high quality cold/frozen storage for Walmart in Dongguan.

7
DEDICATED INDUSTRIAL PROFESSIONALS

100+
COMBINED YEARS OF EXPERIENCE IN CHINA DEVELOPMENT
Commitment to Quality Across the Globe

PEPSICO – USA

WALMART – CHINA

DHL – BRAZIL

AMAZON – GERMANY

AMAZON – USA

MUTH – CHINA

NISSAN – USA

H&M – SPAIN

UPS – USA
Our Integrated Development Process

KEY PLAYERS
• Customer
• Land owner
• Architects / engineers / general contractor
• Senior leadership team
• Additional stakeholders (when applicable) including: city officials, community members, etc.

BENEFITS
• Produces creative solutions
• Fast and effective
• Allows for ease of “buy-in” from stakeholders through participation

GOALS
• Maximize quality
• Alignment of interest
• Deliver on time and on budget

OPPORTUNITY
• Discovery
• Concept Development
• Market Research
• Initial Underwriting

SITE ACQUISITION
• Due Diligence
• Master Planning
• Entitlements

DESIGN
• Site Design
• Building Design
• Tenant Improvements

CONSTRUCTION
• Procurement
• Monitoring
• Reporting
• Acceptance

OPERATIONS
• Leasing/Marketing
• Property Management
• Asset Management

Collaborative Process
We use a collaborative and integrated decision-making process where the exchange of ideas yields innovative solutions to complex issues. We maintain a collaborative process with our customer during the course of the project and at key milestones to ensure a more efficient and successful decision-making process.

Brookfield has the experience and flexibility to work with all stakeholders to create a structure that is beneficial to all.
Warehouse Design and Future Concepts

Brookfield Properties is known for delivering best-in-class logistics buildings in the most cost-effective way possible.

We use high quality materials and sustainable initiatives to add value and bottom-line savings through reduced operating costs and increased energy efficiency.

Buildings and sites can be easily adapted to specific operational requirements to reduce costs, boost productivity and achieve global supply chain efficiencies.

Our logistics team works closely with our Brookfield Venture Capital group to identify new and innovative technologies that can benefit our customers.
Recent Global BTS Projects

WALMART – CHINA
1.3M SF
OF BTS PROJECTS

JOHN LEWIS – UK
1.6M SF
OF BTS PROJECTS

AMAZON – US
5.2M SF
OF BTS PROJECTS
Development Spotlight

Multiple US facility roll-out for Amazon

LOCATION

Three US locations:
• Stockton, CA: 615,400 SF (57k SQM)
• Memphis, TN: 615,400 SF (57k SQM)
• Cincinnati, OH: 1,025,000 SF (95k SQM)

TOTAL SIZE

2,255,880 SF (210,000 SQM)

HANDOVER

Mid 2018

CHALLENGES

• Total time – 11 months for all three projects
• Sophisticated MHE Integration
• Multiple changes by the Tenant throughout the development
• Incurred 65 days of inclement weather days – still delivered on time
• Multi-phased handover to facilitate MHE integration

RESULTS

• All three projects were delivered on time
• A total of $13 million dollars in savings
• Outstanding quality
• Satisfied Customer

US / MULTIPLE AMAZON PROJECTS / 2017-2018

As part of a nationwide rollout, Amazon had critical facility needs in multiple markets. Brookfield Properties was selected to develop three projects in three separate markets. The timing for each project was similar, so the process was coordinated through one team in three different regions of the country.
Development Spotlight

Hamburg, Germany

LOCATION
Greater Hamburg Area, Germany

TOTAL SIZE
130,000 sqm (1,399,308 SF)

HANDOVER
September 2017

A STATE-OF-THE-ART FACILITY
• It was critical that Amazon began 24/7 operations in September in order to satisfy holiday demands.
• The new buildings will be equipped with the latest features and technology. A virtual firewall with additional sprinkler heads ensures seamless implementation of conveyor and robotics systems.
• Hamburg Logistics Park was the first German logistics location where Amazon transport robots were deployed, and because of the innovative floor design it was also the most effective operation in their German network.

NORTHERN GERMANY DISTRIBUTION CENTRE
Amazon was interested in developing a new logistics facility in the Hamburg area as a base for distribution across Northern Europe. Brookfield Properties had begun construction of a speculative building located near the Port of Hamburg and the Hamburg Airport and having excellent access to the Northern Germany metropolitan areas of Bremen, Hanover, Hamburg and Wolfsburg, the site proved to be ideal for Amazon’s needs for a same-day delivery hub in the Hamburg area.

Amazon needed the facility to be operational by September 2017. Brookfield Properties was able to fast track the construction timeline to provide this state-of-the-art e-commerce facility for starting operation within six months of groundbreaking.
Development Spotlight

Walmart DC in Southern China

LOCATION
Dongguan, Guangdong, China

TOTAL SIZE
40,000 sqm (450,000 SF)

HANDOVER
October 2018

OPPORTUNITIES
- Walmart required a cold storage facility to serve as the prototype of its fresh and frozen food storage distribution program that it will roll out across China in the coming years.
- Walmart required a developer who could deliver an international-standard cold storage facility at a competitive cost.

RESULTS
- Brookfield Properties presented over 30 land options to Walmart in the Pearl River Delta to ensure Walmart had the optimal location for its logistics operations.
- After this intensive land sourcing process, Walmart agreed to sign a 20-year lease to have Brookfield Properties develop the property.

SOUTHERN CHINA COLD CHAIN DISTRIBUTION CENTER
Walmart desired to revamp its cold storage supply chain with a new distribution center design and selected Dongguan as its first location. As this project will be the prototype for its future cold storage distribution centers across China over next several years, Walmart wanted to ensure this project would be the most operationally efficient and highest specification warehouse it had ever developed in China.

The facility was completed on time in October 2018. It will incorporate state-of-the-art architectural design, superior quality construction materials and brands, and environmentally friendly cold storage refrigerant systems.
Development Spotlight

Adidas North China Distribution Center

LOCATION
Baodi, Greater Beijing, China

TOTAL SIZE
64,000 sqm (690,000 SF)

HANDOVER
February 2014

OPPORTUNITIES
• Adidas needed a new 64,000 sqm logistics facility in the Beijing area as a base for distribution across Northern China.
• It required to integrate state-of-the-art automation systems into the facility design.

RESULTS
• The facility was constructed on time and on budget and integrates numerous environmental sustainability features.
• Brookfield Properties was able to creatively design several fire corridors so the building complied with local fire regulations while still allowing the installation of the Adidas automation system.

ENHANCED STORAGE CAPACITY
• Clear Height 10m
• Floor Loading 6T/sqm, 7.5T/sqm (feet rack)
• Column Spacing 11.5m
• High density goods storage via ESFR K 25 sprinkler system

SUSTAINABLE DESIGN INTEGRATION
• Energy efficient lighting with photocell sensors
• Double pane windows
• Low VOC paints, finishes and sealants
• Dynamic metering provisions monitor power and water consumption in different areas
Thank You

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