



Asia Pacific | June 2021

Research

Sustainable real estate: From ambitions to actions

Table of contents

Sustainability is business critical

The undeniable urgency and importance of sustainability Translating green intent into carbon emissions reduction Leveraging real estate to deliver on net zero carbon goals

A partnership ecosystem is key for sustainable real estate Technology to transform and accelerate decarbonisation of real estate How to accelerate the pace of sustainability?

Conclusion

Mouse over table of contents to click to preferred topic or navigate pages by clicking on left and right arrows/page numbers on top left. The current crisis is ushering in a new age of heightened responsibility. Corporates are now expected to demonstrate how they are contributing to making the world a more sustainable place and solving long-standing issues such as climate change and inequality. With its global reach; real estate wants to be at the forefront of the systemic changes that corporates introduce as part of their sustainability agenda. For every company, real estate is a major source of resource consumption and accounts for a large part of its global greenhouse gas emissions. This makes a compelling case for a more responsible and sustainable corporate portfolio.

01 Sustainability is business critical

JLL conducted a research study with 550+ corporate real estate leaders in Asia Pacific (478 occupiers and 76 investors) to get a better understanding of how organisations are translating their sustainability ambitions into actions while leveraging real estate to do so.

Recognition of financial and non-financial value generated through green strategies has made sustainability a critical pillar for business success. Evolving and adapting the built environment in sustainable and responsible ways is creating upfront value for landlords, investors and occupiers alike; especially in the form of risk mitigation, potentially higher asset values and rents, lower operational costs and a more productive work environment to attract and retain talent. Evolving and adapting the built environment in sustainable and responsible ways is creating upfront value for landlords, investors and occupiers alike





1. Sustainability has gone mainstream and real estate is at the core

Most major corporates have come out with sustainability pledges. Driving this is investor pressure, desire for companies to be seen as ethical and expectation that employees in the future will demand green and sustainable spaces. After location and rent, sustainability is the third consideration for occupiers when leasing real estate.

2. Organisations leading in the real estate sustainability race are setting the pace

2 in 10 corporate occupiers and investors are significantly ahead on the sustainability maturity curve; making them 'Leading' in sustainable real estate. They have adopted net zero carbon goals and intend to achieve them by 2030 – committing to a "decade of action" in the process. They will continue to drive the sustainability agenda as they influence and set the bar for green investment, leasing and operations.

3. Real estate occupiers are ahead of investors on sustainability

The pandemic has acted as a wake-up call for environmental and social responsibility. Occupiers have responded by putting sustainability and employee wellbeing at the center of their future real estate strategies. 82% of occupiers are either 'Leading' or 'On the Path' to sustainability in comparison to 66% of investors.

4. Commitment to responsible behavior boosts demand for green certified real estate

7 in 10 occupiers are willing to pay a rental premium to lease green buildings in the future. However, the current supply of green buildings is insufficient to meet the ambitious net zero targets set by occupiers. This imbalance will force landlords to consider refurbishing and retrofitting of their buildings to meet existing and future regulatory standards and the demands of their tenants. Investors, in turn, will prioritise future investments in green certified assets to ensure adequate supply.

5. A partnership ecosystem will be necessary to accelerate the race to net zero

The race to net zero needs to shift beyond traditional boundaries and bring together investors, occupiers and landlords to work together towards common sustainable real estate ambitions. 7 in 10 occupiers report a lack of incentives from city governments and a lack of support from landlords as barriers to meeting their net zero goals. Investors and landlords will have to work together towards meeting the future demand for green assets.

6. Closing the technology and data gap will be crucial for making real estate sustainable

3 in 4 occupiers and investors identify insufficient technological infrastructure as a barrier to reaching environmental goals. Enhanced technology and data capabilities, including smart buildings and energy monitoring, will be a massive enabler in achieving net zero goals faster. Technology will also promote transparency and more structured reporting. 02 The undeniable urgency and importance of sustainability

There is a consensus that environmental impact has the potential to adversely affect businesses in the long run. 83% of occupiers and 78% of investors in our survey accept that 'climate risk poses a financial risk'. There is recognition of strong value creation through green strategies, green certifications and operational efficiency; that can boost the attractiveness of premium real estate assets. As a result, two-thirds of corporate occupiers and half of the polled investors have already incorporated carbon emissions reduction as part of their enterprise sustainability strategy. Significantly, the sustainability agenda push is coming not only from external and regulatory pressures, but also from within – 8 in 10 occupiers and 7 in 10 investors agree that employees in the future will demand green and sustainable spaces.

Even though many corporates are recognising the importance of sustainability, evidence suggests that more can be done to translate the commitments into tangible actions. We found that only a handful of corporate occupiers and investors are implementing a sustainability strategy that will move the needle on their carbon emissions reduction targets.





02

Figure 1 Maturity on sustainability journey



Based on their response, we assigned a maturity score between 0-100 to occupiers and investors to classify them into three distinct groups to define their position on the sustainability maturity journey. We classify these groups as Leading, On-the-Path and Starting Out.

Our research identifies a wide gap in the level of commitment and action between the 'Leading' set and others. The 'Leading' set have well-defined sustainability goals and decarbonisation is an integral part of their sustainability and real estate strategies. They have the buy-in of their senior leadership teams to allocate the necessary personnel and resources to achieve their goals. Those identified as 'On-the-Path' are in the planning stages and those 'Starting Out', do not yet have clearly defined real estate sustainability strategies. Companies above 10,000 employees are clearly leading the drive towards net zero. Investors with the largest real estate holdings also tend towards greater maturity.

Occupiers are ahead of investors on sustainability journey

Sustainability maturity: Where are you?

Leading

- Carbon emissions reduction integrated into corporate sustainability strategy or real estate investment strategy
- Already adopted specific carbon emissions reduction targets
- Have a clear roadmap for delivering on ambitions
- Superior technology and data capabilities

On the path

- Making progress towards defining specific carbon emissions reduction targets
- Carbon emissions reduction activities happening on an ad hoc basis, but on the cusp on taking a more strategic approach
- Technology and data capabilities are developing

Starting out

- Carbon emissions reduction is less likely to be part of the corporate sustainability strategy or real estate investment strategy
- Yet to adopt any specific carbon emissions reduction targets, though may be working towards that over the longer-term
- Carbon emissions reduction activity focused on quick wins or low cost solutions
- Limited technology and data capabilities



03 Translating green intent into carbon emissions reduction

A global push to reduce human-caused emissions to as close to zero as possible has emerged. Simultaneously a movement to find ways to absorb carbon from the environment such that the net result is zero carbon emissions, or "net zero carbon," has also gathered momentum. The key focus is on limiting the damage and finding ways to undo the harm that has been done to the environment. Two-thirds of occupiers have carbon emissions reduction as part of their sustainability strategy, but only one-third of these decarbonisation programmes are well defined with strategic objectives to display continuous progress.

Following the 2019 launch of the UN 'Race to Zero' campaign, occupier adoption of net zero carbon commitment is set to double in Asia Pacific by 2025. 40% of real estate occupiers have already adopted net zero targets and another 40% are planning to adopt them by 2025.

Figure 2

State of occupier decarbonisation program in Asia Pacific



03

Net zero is becoming the new driver for corporate sustainability, especially with the realisation that a low carbon economy is not only good for the environment but also beneficial for the corporate bottom line. However, with so many companies announcing their ambitious net zero carbon goals, the real question is how rigorous they are at implementing meaningful actions.

A sizeable challenge is that corporates making net zero pledges are flexible in their definitions. When

some companies say they are aiming for net zero, they are usually talking about targeting emissions that come directly from their own operations; classified as Scope 1* and Scope 2*. Other indirect emissions occurring from sources not in the direct control of an organisation, including what its suppliers and customers are responsible for, the Scope 3* emissions, are often overlooked. In our survey, we found that among those who had already adopted net zero targets, only 36% included Scope 3 emissions as part of their plans. However, 77% of those in the 'Leading occupier' set had Scope 3 emissions reductions targets as part of their net zero commitments. If companies do not look at the full impact of their products and services—including the Scope 3 emissions—the world will not stay on track to actually achieve the ambitious goals set by the Paris Agreement.

* Carbon emissions are divided into Scope1, 2 and 3, as per the definition of GHG Protocol. It establishes comprehensive global standardized frameworks to measure and manage greenhouse gas (GHG) emissions.

Figure 3 Adoption of carbon emissions scope among occupiers



A low carbon footprint is not only good for the environment, but also for the corporate bottom line

04 Leveraging real estate to deliver on net zero carbon goals

To implement ambitious decarbonisation goals, corporates will need a multi-pronged action strategy at the enterprise level. One of the best opportunities to tackle carbon emissions lies in their real estate, whether it is owned or leased. Recognition of this fact is clear given that 90% of occupiers agree that real estate is a game changer in achieving the net zero carbon agenda. Furthermore, for 61% of occupiers' carbon emissions reduction is specifically part of their real estate strategy; 94% for the Leading occupier set.

A majority of occupiers (80%) agree that they will proactively prioritise locations that help them reduce carbon emissions in the future and investors (65%) agree that they would prioritise investing in cities that are climate change progressive. Occupiers also aspire to have market recognised sustainability certification for at least half of their portfolio by 2025 and 7 in 10 are also willing to pay a rental premium to lease sustainability certified buildings in the future. Among those who currently lease space in a green building, majority of them are paying a rental premium of 7-10%. This validates the belief held by 72% of investors that green certifications drive higher occupancy, higher rents, higher tenant retention and overall higher value for the asset. As a result when building or buying assets, 1 in 2 investors prioritise buildings with green certification. We also found that overall LEED certification is most sought after in Asia Pacific, followed by country specific certifications such as BCA Greenmark for Singapore and NABERS for Australia.



When probed on specific decarbonisation initiatives implemented across their portfolio, occupiers agree that due to the relative ease of implementation, water and energy initiatives have the highest adoption rate. 70% of the organisations undertaking sustainability initiatives are reducing water consumption, incrementally reusing and recycling water and finding ways to reduce energy use (smart heating, smart lighting, etc.). Renewable energy adoption also features high on the list of actions, as it will be impossible to get to a net zero position without the use of renewables. Both onsite and offsite solutions are being considered as real estate professionals realise the benefits of renewable energy, in terms of the cost savings for landlords and occupiers and enhanced value for investors. Leading occupiers are a step ahead of the rest; 6 in 10 have adopted RE100 (100% renewable energy) and EP100 (improved energy productivity) as part of their decarbonisation strategy. They are also following other sophisticated strategies to stay on course to achieve their ambitious carbon emission goals.

04

Top 5 strategies/initiatives adopted by Leading set

Occupiers

- 1. Footprint optimisation
- 2. Responsible procurement practices
- 3. Self-generate renewable energy
- 4. Reduce embodied carbon
- 5. Green lease agreement

Investors

- 1. Procurement of renewable energy
- 2. Real time building level performance and energy monitoring
- 3. Green lease clauses
- 4. Reduce waste to landfill
- 5. Adopt technologies to optimise building performance and maintenance

Figure 4

Adoption of commitment among occupiers



Bigger ambitions bring bigger challenges. We found that the lack of funding and lack of support from landlords are primary barriers highlighted by occupiers when implementing a decarbonisation strategy. When we asked the same question, real estate investors identify aging building infrastructure and systems as their top challenge. With new and upcoming building stock more aligned to the green agenda and regulatory requirements, it is no surprise that investors display their concern about the aging buildings and stock that needs to be brought into the green fold if ambitious net zero targets are to be achieved. Retrofitting buildings is a clear opportunity and a sizable challenge as green strategies drive higher returns on investment and value.

The current supply of net zero buildings is not sufficient to meet the ambitious targets set by occupiers and investors unless further developments come on-stream quickly. Demand risks outstripping supply unless a long tail of investments is unlocked. Investors are on-board with this idea, as evidence from our survey shows that asset refurbishment and renovation is going to be the largest area of investment for investors in the next three years, followed by digital solutions, renewables and carbon offsets.

Retrofitting buildings is a clear opportunity and a sizeable challenge

Renewables: A fundamental pillar of net zero

Clean energy is a fundamental pillar of the net zero carbon action plan and thus procuring renewables becomes an important part of the equation. An early green strategy is to develop on-site renewable energy through the installation of rooftop solar panels. However, this source is enough only for a small fraction of the total requirement of a building's operations. So, it becomes imperative to look at purchasing green power created offsite that can get the energy scale needed to move the needle on net zero priorities. Many companies use direct energy contracting and power purchase agreements (PPAs) to ensure long-term supply of clean energy for their portfolios.

However, buying clean and renewable energy is only one part; another aspect to consider is energy efficiency. Corporates need to accept that too much energy is being used and we need to look at ways to make our buildings more energy efficient. Buying green energy and then wasting it does not make sense and goes against the principles of decarbonisation. Thus, installing predictive maintenance technology to track usage and monitor issues, while helping to reduce energy consumption, can help make buildings more efficient.



05 A partnership ecosystem is key for sustainable real estate

There is clear recognition that ambitious net zero commitments cannot be achieved alone, and will rely on collaboration from numerous parties. Encouragingly, support for a more collaborative approach is evident from our survey. 90% of occupiers and 78% of investors in our survey agree that collaboration between cities, investors, developers and occupiers will be instrumental in achieving the net zero ambitions of the built environment.

Even though they are setting up ambitious net zero targets, real estate occupiers and investors are not expecting to shoulder the burden alone. They expect more support from landlords and city governments to make significant progress. There is also a sense that administrations in top-tier cities are not doing enough. 8 in 10 investors agree that they would like to see bolder actions being taken by city administrations to mitigate climate risks. Decarbonisation of the built environment requires society-wide buy-in and mobilisation of resources across multiple stakeholder groups, thus the importance of public-private partnerships will be paramount in achieving this goal.

A win-win solution to promote landlord-occupier cooperation are "green leases" that commit the landlord and the tenant to co-operate and communicate. It can promote proactive data sharing and metering; rights to carry out work; and rent reviews that recognise the tenant's contribution to the increased value of the building. Evidence suggests that adoption of green leases is on the upswing, with 4 in 10 occupiers and investors in Asia having already adopted green lease agreements and another 4 in 10 planning to do so by 2025.



06 Technology to transform and accelerate decarbonisation of real estate

Both investors and occupiers recognise the potential of technology in driving measurement and reporting as a means to accelerate their journey to net zero carbon. Efforts are needed to tighten both reporting processes and enhance data capabilities. The dependency on data will continue to expand, propelled further by the needs of stronger, more transparent reporting. However, current technology and data capabilities do not match future requirements and 74% of occupiers agree that insufficient technological infrastructure is a major barrier to achieving their decarbonisation goals, while an equal percentage of investors feel that a lack of consistent and validated data poses a huge reporting challenge. This means that the technology gap will need to be bridged with significant investment and this cause is not lost on either occupiers or investors.

Our survey shows that technology is the number one area of investment for occupiers over the next three years and 60% of occupiers are looking to invest in technologies that underpin new solutions.

While occupiers are themselves charged up to take action on improving their technology infrastructure, with 90% agreeing digital solutions will be critical in achieving decarbonisation goals, they have the same expectation from their landlords too. 43% of occupiers expect landlords to actively adopt technology such as digital inspection, HVAC analytics and more. These results highlight that the technology gap in real estate needs to be closed very fast, especially to gain momentum when it comes to fighting the carbon emissions battle.



07 How to accelerate the pace of sustainability?

Organisational alignment on sustainability

- 1. Strive for leadership buy-in
- 2. Have clear ownership and oversight of sustainability agenda across the organisation
- 3. Ensure sufficient resource allocation effort, time, budget and personnel
- 4. Create action plans with intermediate goals to monitor progress
- 5. Draw on external expertise to co-create sustainability solutions
- 6. Share access to data and resources to enhance the power of partnership between occupiers, investors and landlords.
- 7. Invest in cities that are the most climate change progressive

Leveraging real estate to deliver on the sustainability agenda

- 1. Make sustainability a key criteria in building acquisition, management and refurbishment
- 2. Take a whole-building lifecycle approach to carbon reduction
- 3. Strive for green certifications as a means to demonstrate green credibility
- 4. Accelerate retrofitting of legacy buildings
- 5. Include renewable energy and green leases in sustainability action plan
- 6. Monitor and benchmark energy performance to achieve highest energy efficiency
- 7. Enhance data capabilities for continuous improvement and transparency
- 8. Prioritise real estate location search to those that help reduce carbon emissions



Figure 5 A roadmap for sustainable real estate

Collaborate Participate in the ecosystem of partnerships to accelerate our collective sustainability impact



Execute your detailed action plan including investments in operational

and capital improvements

Invest



08 Conclusion

Sustainability has become a dominant global economic risk with the power to transform business, industries and society. Real estate holds many of the solutions to alleviate sustainability concerns and addressing real estate can have a huge impact on reducing greenhouse gas emissions. The opportunity for the real estate sector is not only in physical buildings, it is also in health and the wellbeing of customers and employees, social sustainability, inclusion and diversity and accessibility. However, there is broad recognition that transitioning to a low carbon economy is both complex and critical. An ecosystem of partnerships will be necessary to accelerate the transformation and deploy a robust roadmap to meet sustainability targets. The drive to decarbonise the built environment needs to shift beyond traditional boundaries and bring investors, occupiers and cities together to work towards common sustainable targets.



Research

Author

Kamya Miglani Director Corporate Solutions Research Asia Pacific kamya.miglani@ap.jll.com

Roddy Allan Chief Research Officer Asia Pacific roddy.allan@ap.jll.com

James Taylor Head of Corporate Solutions Research Asia Pacific james.taylor@ap.jll.com

Asia Pacific

1 Paya Lebar Link #10-08 PLQ2 Singapore 408533 tel +65 6220 3888 fax +65 6438 3361 www.jll.com.sg

Advisory

Energy & Sustainability Services

Mark Cameron Regional Energy & Sustainability Operations Lead Asia Pacific mark cameron@ap.jll.com

Capital Markets

Stuart Crow CEO, Capital Markets Asia Pacific stuart.crow@ap.jll.com

Logistics & Industrial

Tom Woolhouse Head of Logistics & Industrial Asia Pacific tom.woolhouse@ap.jll.com

Project Design Services

Andrew Macpherson Head of Asset Development Asia Pacific andrew.macpherson@ap.jll.com

Leasing

Jeremy Sheldon (FRICS) Head of Office Leasing Advisory Asia Pacific jeremy.sheldon@ap.jll.com Corporate Solutions Marina Krishnan

Division President, Corporate Solutions Asia Pacific marina.krishnan@ap.jll.com

Susheel Koul

Division President, Corporate Solutions Asia Pacific susheel.koul@ap.jll.com

About JLL

JLL (NYSE: JLL) is a leading professional services firm that specializes in real estate and investment management. JLL shapes the future of real estate for a better world by using the most advanced technology to create rewarding opportunities, amazing spaces and sustainable real estate solutions for our clients, our people and our communities. JLL is a Fortune 500 company with annual revenue of \$16.6 billion, operations in over 80 countries and a global workforce of more than 91,000 as of March 31, 2021. JLL is the brand name, and a registered trademark, of Jones Lang LaSalle Incorporated. For further information, visit **ill.com**.

JLL is supporting the High-Level Climate Champions team to galvanize commitment from the built environment sector towards Race to Zero. Alongside Arup, we are appointed as the build environment sector and infrastructure lead to drive net zero carbon systems transformation within the real estate sector. We are committed to taking urgent action on decarbonisation of real estate and contribute our fair share towards reductions in global emissions. Whilst we work towards our 2040 net zero goal, we are also strongly advocating for our clients to join the Race to Net Zero. We are fully committed to supporting our clients to make their commitments and drive action by sharing knowledge and best practice.

jll.com

Jones Lang LaSalle © 2021 Jones Lang LaSalle IP, Inc. All rights reserved. The information contained in this document is proprietary to Jones Lang LaSalle and shall be used solely for the purposes of evaluating this proposal. All such documentation and information remains the property of Jones Lang LaSalle and shall be kept confi dential. Reproduction of any part of this document is authorized only to the extent necessary for its evaluation. It is not to be shown to any third party without the prior written authorization of Jones Lang LaSalle. All information contained herein is from sources deemed reliable; however, no representation or warranty is made as to the accuracy thereof.