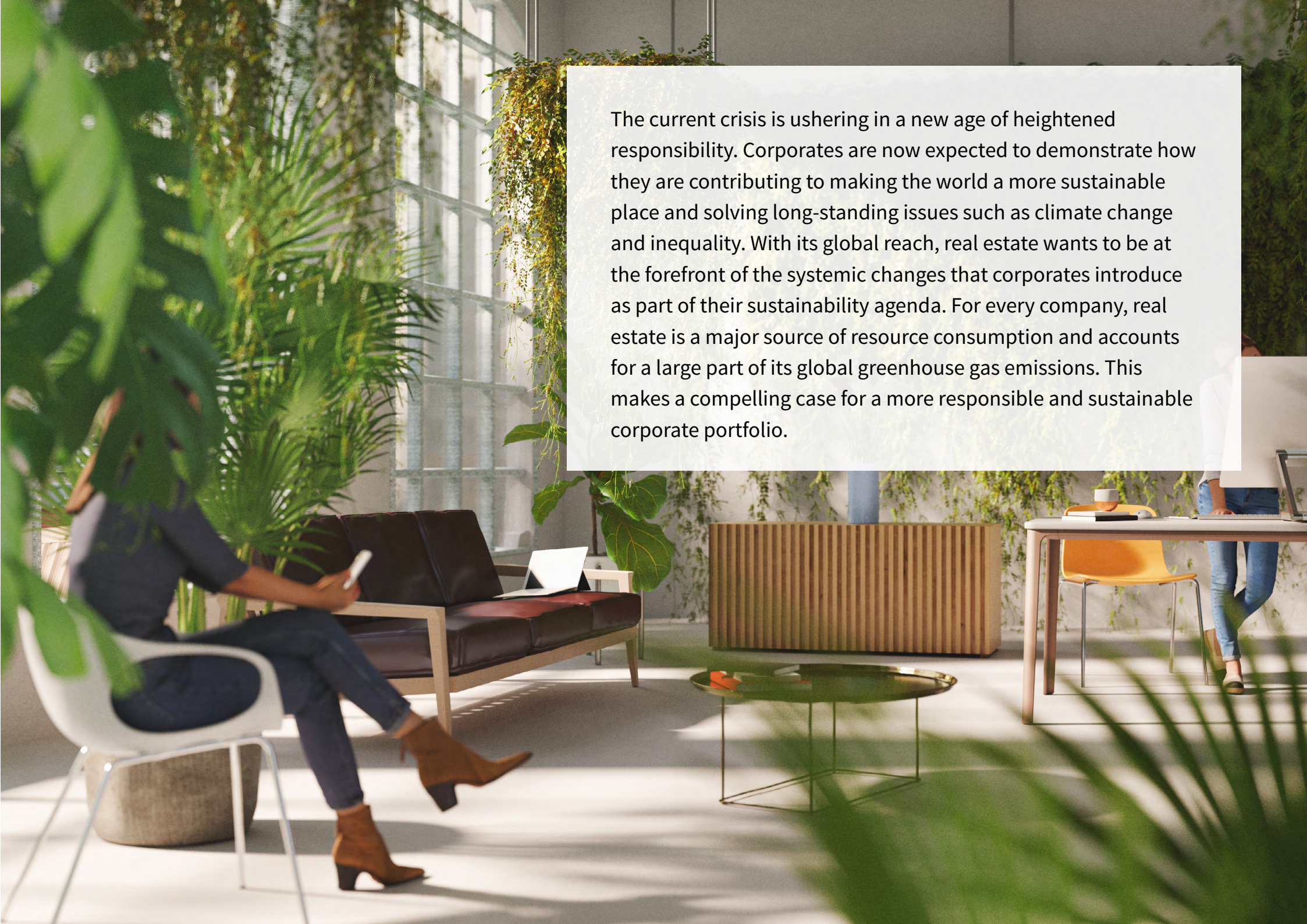


China | August 2021

Research

Sustainable Real Estate: From ambitions to actions

Where does China stand?



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.

Table of contents

Introduction

China:
The top-down push

Where do Chinese
corporates stand in the
sustainability drive?

Best practices in
sustainability: Learnings
from the leading occupiers
and investors

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.



01 Introduction

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. Companies with domiciles in China also actively participated in the survey, contributing to about one-fifth of all respondents.

Our survey with real estate users, owners and investors revealed that sustainability has become a critical pillar of business success. 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.

In this paper, we look into the private sector's drive on this sustainability journey. In China, this has become acutely more pressing given the pledge to go carbon neutral by 2060 – not a small feat to be accomplished. Despite low per capita emissions, China's carbon dioxide emissions in 2019 amounted to 11.5 billion metric tons, the most by a single country, and

accounted for an estimated 27% of global emissions. In order to reach the stated goals, this will have to slow down fast and considerably¹. Given there is little doubt about the government's resolve, the private sector will stand in good stead to commit rather than hesitate, lead rather than follow, and innovate rather than imitate.

The survey covers both domestic (34%) and multinational (66%) companies coming from a variety of industries and sectors. The top five industries represented among the respondents are listed in the table.

Industry	% of respondents
Business and Financial Services	23%
Manufacturing	21%
Technology	11%
Business Advisory	6%
Consumer Goods	5%

¹ Source: statista.com, Rhodium Group

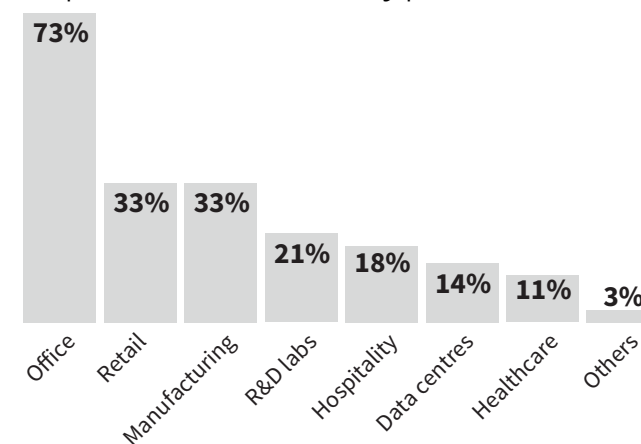




While any single respondent may occupy/use multiple types of real estate assets, perhaps not too surprising, offices are the primary asset type that most respondents (73%) said they are currently using, with one-third of users operating retail or manufacturing facilities. The large number of respondents having exposure to office assets suggests that office premises will likely be a highly focused area in the decarbonisation drive of the corporate sector.

Figure 1

Exposure to asset types



Six key takeaways from the APAC Sustainability Survey

1. Sustainability has gone mainstream and real estate is at the core
2. Organisations leading in the real estate sustainability race are setting the pace
3. Real estate occupiers are ahead of investors on sustainability
4. Commitment to responsible behavior boosts demand for green-certified real estate
5. A partnership ecosystem will be necessary to accelerate the race to net zero
6. Closing the technology and data gap will be crucial for making real estate sustainable

02

China: The top-down push

In China, the urgency to go sustainable and de-carbonise has been raised a notch as the government committed to reach peak carbon emission by 2030 and carbon neutral in 2060, as President Xi announced in the United Nations General Assembly in September 2020. Importantly, not all is static. The Chinese economy is expected to grow at a fast pace of circa 5% annually in the coming 10-15 years. Energy consumption will inevitably rise as the nation's economic quantum expands. The pace to engage in sustainable development will have to be expedited sufficiently fast simply to abate, let alone reduce, carbon emissions. Increasingly forceful regulatory requirements will be promulgated. The leaders and early adopters of sustainability drive in the private sector will be the winners.

Already various provinces and cities have rolled out measures and regulations in a drive to attain the goals. The measures and regulations can be broadly categorised as:

Policy area	Policies	Provinces
Energy conservation	<ul style="list-style-type: none">• Reduce or limit the production capacity of polluting industries such as steel, stainless steel, cement, methanol, etc.• Post stringent measurements to approving extra manufacturing capacity of above industries	Guangdong, Zhejiang, Inner Mongolia, Shandong, Guizhou
Electricity price discrimination	<ul style="list-style-type: none">• Higher electricity price for high emission companies	Shandong, Hebei, Jiangxi, Liaoning, Tibet
Energy replacement	<ul style="list-style-type: none">• Encourage the development of new energy and associated infrastructures (wind, solar, hydrogen)• Promote alternative fuel vehicles and related infrastructures	Shanxi, Guangdong, Zhejiang, Jiangsu, Liaoning
Technology advancement	<ul style="list-style-type: none">• R&D on carbon sequestration, carbon capture and storage capability• Develop energy internet to better integrate energy saving with Big Data, AI and other digital platforms	Inner Mongolia, Shanxi, Tianjin, Hainan
Carbon sink	<ul style="list-style-type: none">• Increase total forest, lakes, wetland areas to enhance natural ecosystems	Beijing, Liaoning, Sichuan, Tianjin, Anhui
Carbon trading market	On trial	Nation-wide

03

Where do Chinese corporates stand in the sustainability drive?

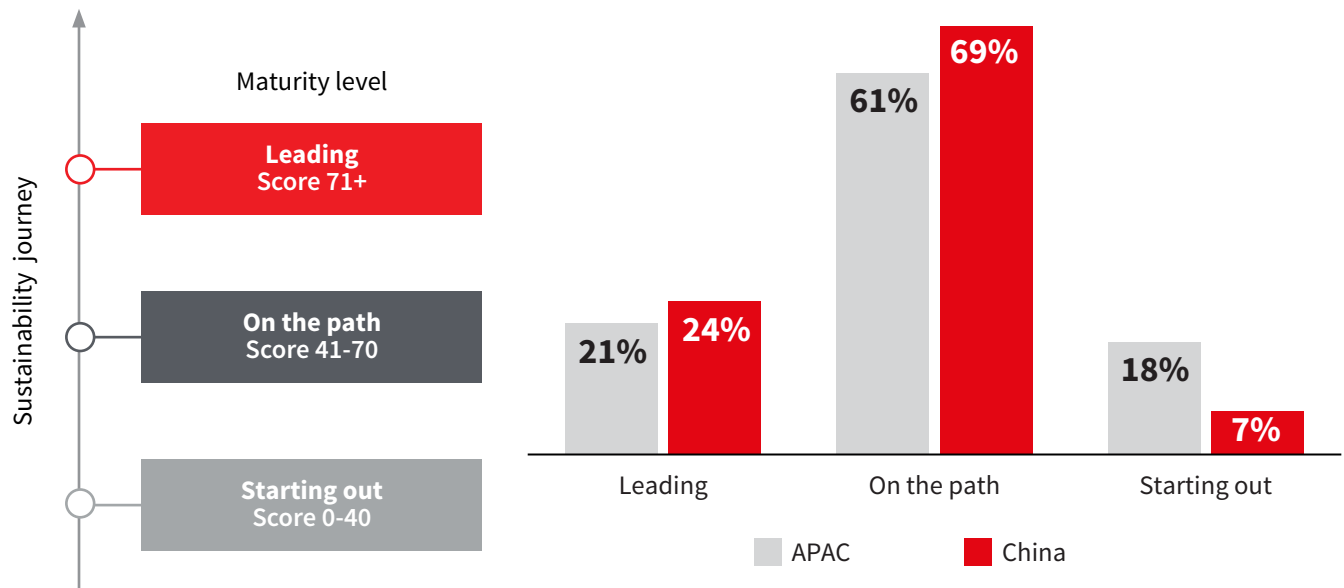
Maturity on the sustainability journey - more Chinese corporates have embarked on the journey

According to the maturity scores (between 0-100) we assign to occupiers and investors, classifying them into three distinct groups to define their position on the sustainability maturity journey, 93% of Chinese corporates are either “on the path” or “leading”, compared to 82% in Asia Pacific, suggesting the Chinese private sector has taken the cue early on. The biggest difference is the “on the path” group of respondents. While 61% of the APAC respondents are categorised as “on the path”, Chinese corporates have a significantly higher representation in this group. Being in the planning stages, they are increasingly taking on more strategic approaches to limit or reduce carbon emissions instead of handling the issue in an ad hoc and relatively uncoordinated manner.





Figure 2
Maturity on sustainability journey



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

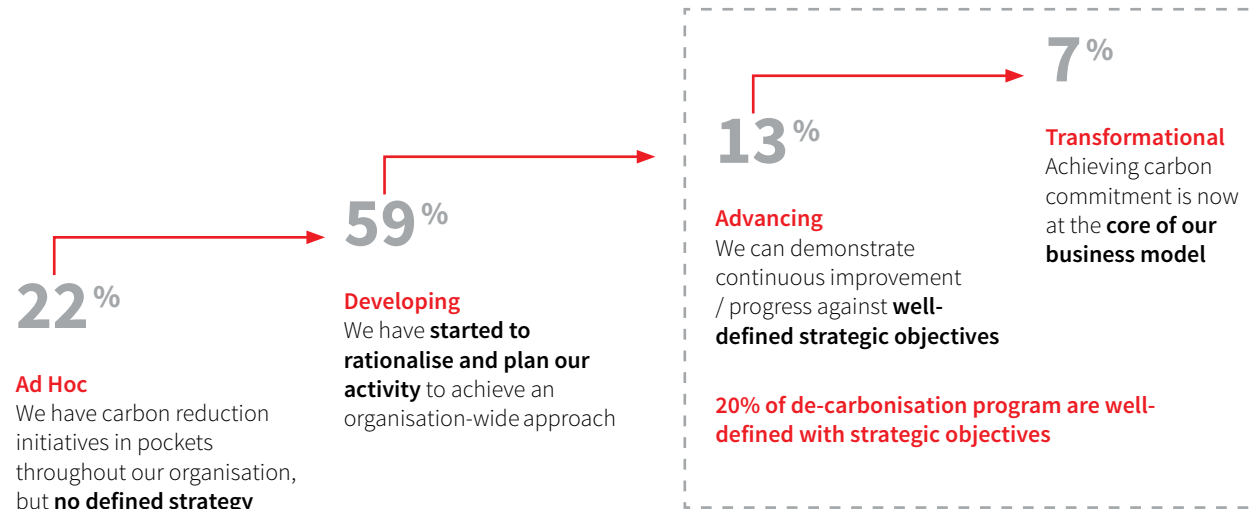
Starting out

- 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

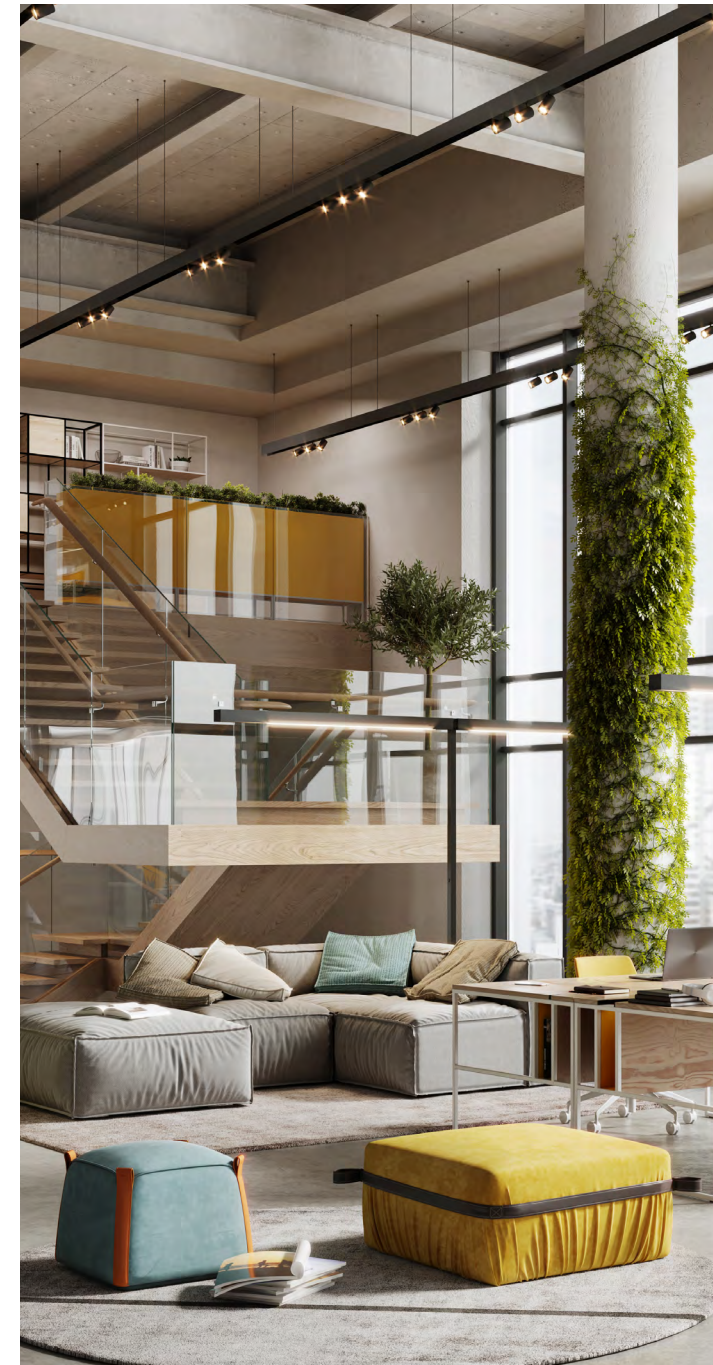
How do Chinese corporates fare in translating green intent into carbon emissions reductions?

Despite their embarking on the sustainability journey, when asked about how well the de-carbonisation programs are being formulated, 80% of Chinese respondents have carbon emissions reduction as part of their sustainability strategy, and only 20% have well-defined de-carbonisation programs with strategic objectives to display continuous progress. In contrast, about one-third of APAC respondents have devised strategic plans for de-carbonisation. Being a laggard, it is important that Chinese corporates abandon their tentative approach to cutting down carbon emissions.

Figure 3
State of occupier de-carbonisation program in China



* Total does not add up to 100% due to rounding

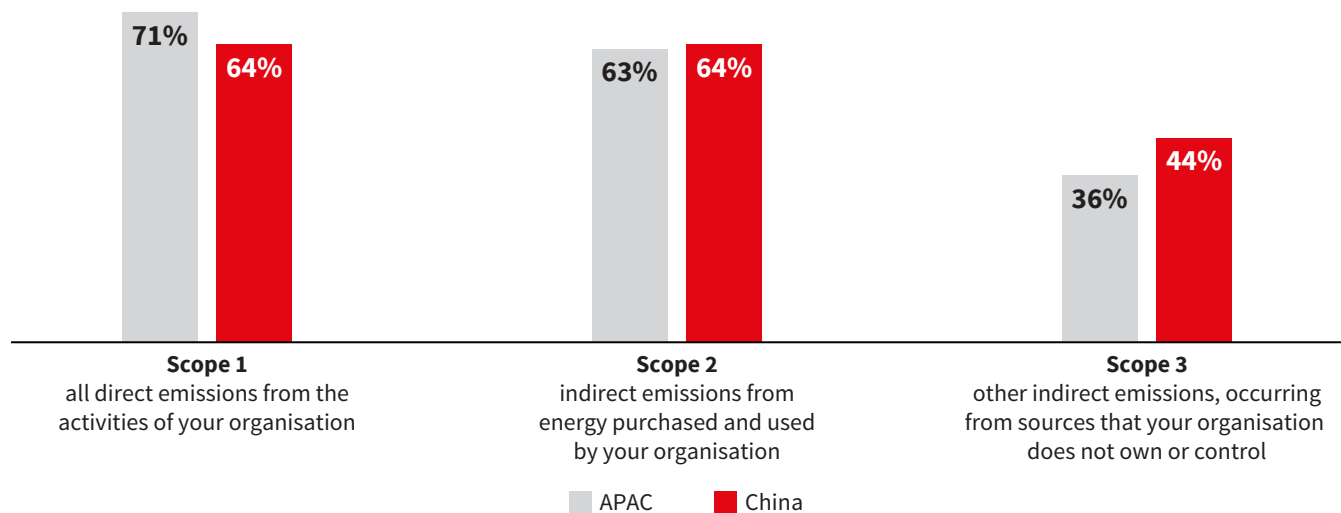




When it comes to the rigor of implementing meaningful actions, Chinese corporates are generally in line with their APAC peers. It is pleasing that 44% of them are paying attention to carbon emissions beyond their own operations (Scope 3), ahead of the APAC respondents (36%). However, more companies need to proactively join this rank. Only when companies look at the full impact of the products and services, hence creating a feedback loop to their business partners, will the goal to reduce emission be truly attainable.

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

Figure 4
Adoption of carbon emissions scope among occupiers



*Carbon emissions are divided into Scope 1, 2 and 3, as per the definition of GHG Protocol. It establishes comprehensive global standardized frameworks to measure and manage greenhouse gas (GHG) emissions.

Are Chinese corporates leveraging real estate to deliver on net zero carbon goals?

It is interesting to note that compared to the APAC respondents, not many Chinese respondents consider real estate is a game changer in achieving the net zero carbon agenda (90% vs 78%). However, Chinese respondents are slightly more focused on leveraging real estate to deliver their sustainability goals. 66% of Chinese respondents have carbon emissions reduction being specifically part of their real estate strategy, compared with 61% among the APAC respondents. A vast majority of occupiers (96%) agree that they will proactively prioritise locations that help them reduce carbon emissions in the future. This invariably validates the perception that occupiers will more likely gravitate towards sustainability-certified premises, hence driving higher occupancy and tenant retention and giving stronger support to rents and values of the assets.





Chinese corporates seek partnership in attaining sustainable real estate goals too...

An overwhelming number of Chinese corporates, just as their regional peers, agree that collaboration between cities, investors, developers and occupiers will be instrumental in achieving the net zero ambitions of the built environment. Green leases that commit the landlord and the tenant to cooperate and communicate have become increasingly prevalent. They cover areas like data sharing and metering, availability of conservation and recycling programs, rights to carry out work and rent reviews that recognise the tenant's contribution to the increased value of the building. Adoption of green leases is on the upswing. 48% of occupiers in China have already adopted green leases and another 35% are planning to adopt by 2025. In the coming years, China's top down net zero drive will likely expedite corporates to conform to high sustainability standards. The recognition of potential synergistic outcomes will further drive corporates to proactively engage with partners in the pursuit of this effort.

Technology to transform and accelerate de-carbonisation of real estate

The majority of respondents to our survey agree that insufficient technological infrastructure is a major barrier to achieving their de-carbonisation goals. There is immense potential for technology to help drive measurement and reporting standards as a means to accelerate reaching the goal of net zero carbon. Presently, the lack of consistent and validated data also poses a huge reporting challenge. Chinese corporates are largely similar to their regional peers with almost two-thirds of them looking to invest in technologies that underpin new solutions with a view to bridge the technology gap.

On top of taking upon actions to improve their own technology infrastructure to drive the de-carbonisation journey, 44% of Chinese corporates expect landlords to actively adopt technology such as digital inspection and HVAC analytics.



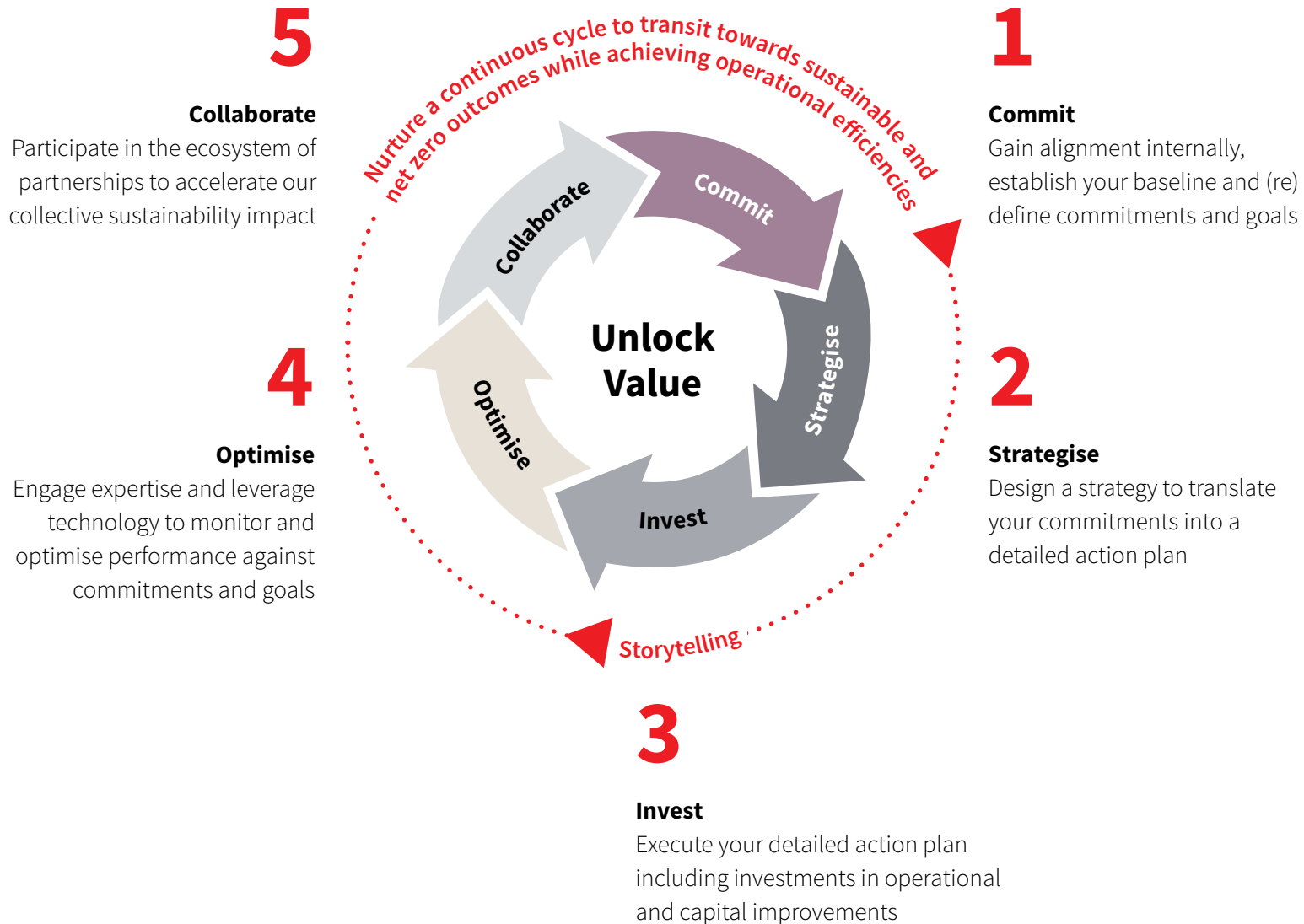


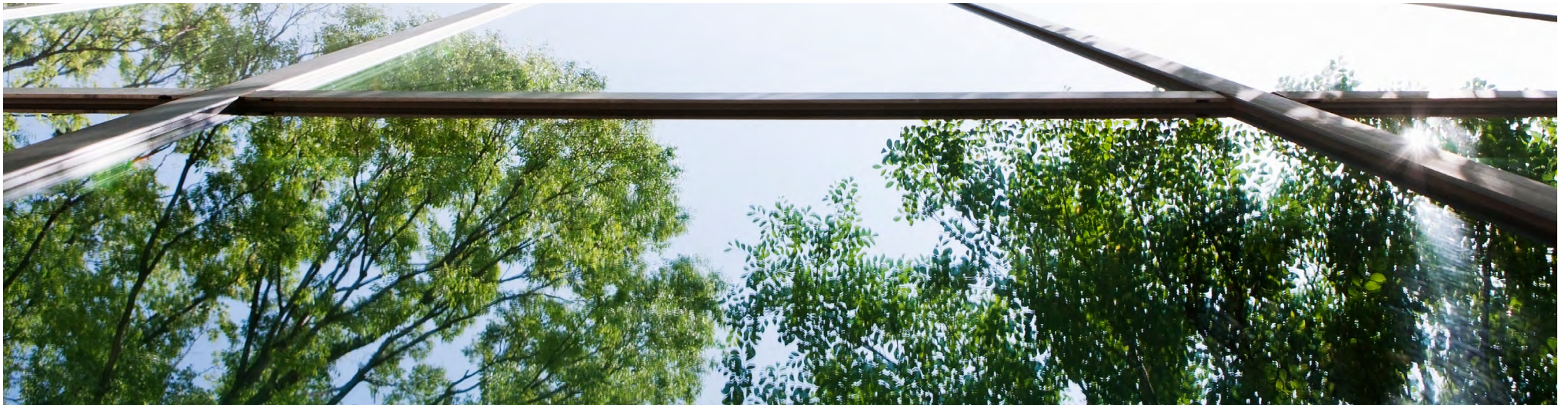
04

Best practices in sustainability: Learnings from the leading occupiers and investors

Figure 5

A roadmap for sustainable real estate





05 Conclusion

From our survey, it is clear that Chinese corporates are well aware of the grave importance of the need to de-carbonise, and indeed many have already embarked on the drive towards net zero. The nation's explicit commitment to a number of set goals adds to the urgency for the private sector to drive the movement forward. It is almost a given that the regulatory regime in China will increasingly demand corporates to advance this cause seriously and expediently. It is to the private sector's benefit to pick up early rather than late, be proactive rather than reactive.

It is generally recognised that throughout this journey, 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. An ecosystem of partnerships will be necessary to accelerate the transformation and deploy a robust roadmap to meet sustainability targets. The drive to de-carbonise the built environment needs to shift beyond traditional boundaries and bring investors, occupiers and cities together to work towards common sustainable targets.

JLL is supporting the High-Level Climate Champions team to galvanise commitment from the built environment sector towards Race to Zero. Alongside Arup, we are appointed as the built 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 meet their commitments and drive action by sharing knowledge and best practices.



Contacts

Mark Cameron

Head of Energy and Sustainability
Asia Pacific
mark.cameron@ap.jll.com

Vickie Chen

Operations Director of Energy and Sustainability
Greater China
vickieyh.chen@ap.jll.com

Kamya Miglani

Director of Work Dynamics
Research, Asia Pacific
kamya.miglani@ap.jll.com

Nelson Wong

Head of Research
Greater China
nelson.wong@ap.jll.com

Daniel Yao

Head of Research
China
daniel.yao@ap.jll.com

Mi Yang

Head of Research
North China
yang.mi@ap.jll.com

Jacky Zhu

Head of Research
West China
jackyjh.zhu@ap.jll.com

Silvia Zeng

Head of Research
South China
silvia.zeng@ap.jll.com



仲量聯行

JLL Offices in Greater China

Beijing

11/F
China World Tower A
1 Jianguomenwai Avenue
Beijing 100004
tel +86 10 5922 1300
fax +86 10 5922 1330

Chengdu

29/F, Tower 1
Chengdu International Finance Square
1 Hongxing Road Section 3
Chengdu 610021, Sichuan
tel +86 28 6680 5000
fax +86 28 6680 5096

Chongqing

45/F, Chongqing World Financial Center
No.188 Minzu Road, Yuzhong District
Chongqing 400010
tel +86 23 6370 8588
fax +86 23 6370 8598

Guangzhou

Room 2801-03
Guangzhou CTF Finance Centre
No.6 Zhujiang East Road
Zhujiang New Town, Tianhe District
Guangzhou 510623
Guangdong
tel +86 20 2338 8088
fax +86 20 2338 8118

Hangzhou

Unit 802
T2, Raffles City Hangzhou
No. 228 Xinye Road
Jiangan District
Hangzhou 310000
Zhejiang
tel +86 571 8196 5988
fax +86 571 8196 5966

Nanjing

Room 2201
Deji Plaza Office Tower
18 Zhongshan Road
Nanjing 210018
tel +86 25 8966 0660
fax +86 25 8966 0663

Qingdao

Unit 2308
Tower A, COSCO Plaza
61 Hong Kong Middle Road
Shinan District, Qingdao 266071
Shandong
tel +86 532 8579 5800
fax +86 532 8579 5801

Shanghai

22/F
HKRI Centre One, HKRI Taikoo Hui
No.288 Shimen Yi Road, Jingan District
Shanghai 200041
tel +86 21 6393 3333
fax +86 21 6393 3080

Shenyang

Room 1762
Fortune Plaza Tower A
No.61 Beizhan Road, Shenhe District
Shenyang 110013
Liaoning
tel +86 024 3105 4699

Shenzhen

19/F
Tower Three, Kerry Plaza
1 Zhongxinsi Road, Futian District
Shenzhen 518048
Guangdong
tel +86 755 8826 6608
fax +86 755 2263 8966

Tianjin

Unit 3408
The Exchange Tower 2
189 Nanjing Road, Heping District
Tianjin 300051
tel +86 22 5901 1999

Wuhan

Unit 3202-03
Ping An Finance Center
1628 Zhongshan Avenue, Jiang'an
District
Wuhan 430014, Hubei
tel +86 27 5959 2100
fax +86 27 5959 2144

Xi'an

Unit 2202-03
CapitaMall Office
No.64 West Section of
South 2nd Ring Road
Yanta District, Xi'an 710065
Shaanxi
tel +86 29 8932 9800
fax +86 29 8932 9801

Hong Kong

7/F
One Taikoo Place
979 King's Road
Quarry Bay
Hong Kong
tel +852 2846 5000
fax +852 2845 9117
www.jll.com.hk

Macau

Unit H, 16/F
Finance and IT Center of Macau
Nam Van Lake Quarteirao 5 Lote A
Macau
tel +853 2871 8822
fax +853 2871 8800
www.jll.com.mo

Taipei

20/F-1
Taipei 101 Tower
No 7 Xinyi Road Section 5
Taipei 11049
Taiwan
tel +886 2 8758 9898
fax +886 2 8758 9899
www.jll.com.tw

joneslanglasalle.com.cn

Jones Lang LaSalle

©2021 Jones Lang LaSalle IP, Inc. All rights reserved. All information contained herein is from sources deemed reliable; however, no representation or warranty is made to the accuracy thereof.

JLL Wechat



JLL Mini Program

