# A Changing Business Case:

## Transforming Asia Pacific's Property Market Through Sustainable Buildings: Insights from Singapore and Hong Kong

WORLD GREEN BUILDING COUNCIL
Asia Pacific

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# About WorldGBC

At the World Green Building Council (WorldGBC) our role is to help property and construction markets around the planet reach tipping points towards decarbonisation and regeneration.

That means building the right policy environments, the right financing environments and the right social and cultural environments to deliver more resilient and sustainable built environments.

Our unique local–regional–global network helps us catalyse waves of change that ripple across cities, countries, companies and communities. Amplifying the leadership of our members and partners; building on success; and scaling local action into global impact.

Today, buildings and related activities are responsible for 34% of all carbon emissions. With our network, we believe we have the scale and shared ambition to target the total decarbonisation of the sector by 2050.

Together, we're building the momentum to create a better future for all.

"This report makes one thing clear: the business case for sustainable buildings in Asia Pacific is accelerating, and reshaping market norms. From Singapore to Hong Kong, sustainability is proving to be a driver of resilience, profitability, and leadership. At WorldGBC, we are proud to support this momentum, helping to align policy, finance and ambition across the region to create a future where sustainable buildings are not the exception, but the standard."

**Cristina Gamboa**
**CEO, World Green Building Council**

# Introduction

**Asia Pacific is at a defining moment. As the world's fastest-growing economic region, it will soon host many of the planet's future megacities, presenting extraordinary opportunities alongside significant climate risks.**

The region is warming faster than the global average, with climate-related disasters increasing in frequency and severity. Transforming the built environment is not just necessary — it is a strategic advantage.

Buildings sit at the heart of this transformation. Across Asia Pacific, sustainable buildings are delivering clear environmental, social, and financial value. Evidence shows they attract higher rents, maintain stronger occupancy rates, operate more efficiently, and offer greater resilience to climate risks. What was once a future projection has become a defining feature of market performance today.

This report builds on WorldGBC's *Beyond the Business Case* (2021), applying its global insights to the Asia Pacific context. It draws on examples from Singapore and Hong Kong to demonstrate how aligning regulation, capital, and corporate ambition accelerates market transformation. These case studies show how sustainable buildings can deliver lasting outcomes.

Structured for practical application, this report:

- Connects regional insights to WorldGBC's seven drivers of value.
- Presents Asia Pacific data quantifying the business case for sustainable buildings.
- Offers in-depth profiles of Singapore and Hong Kong as examples of success.
- Provides clear, actionable pathways for investors, occupiers, and policymakers.

This analysis aligns with WorldGBC's Strategic Plan 2025–2027, which focuses on climate action, health and wellbeing, and resource circularity. In Asia Pacific, these priorities are shaping investment, policy, and market direction. From operational decarbonisation to enhanced resilience and healthy environments, the region is demonstrating what integrated, outcome-driven approaches can achieve.

Finance and policy are key enablers. Effective frameworks reduce investment risk, accelerate adoption, and create long-term value. As demonstrated in this report, sustainable buildings thrive where these conditions exist.

In Asia Pacific, sustainability is now the foundation of building performance. Leadership is no longer optional. Those who act with clarity and urgency will define the next era of real estate success.

> "In Asia Pacific, sustainability is now the foundation of building performance. Leadership is no longer optional."

# Global context: Seven drivers of value

The business case for sustainable buildings is grounded in seven interconnected drivers of value identified in WorldGBC's *Beyond the Business Case* (2021):

1. **Enhanced asset value**
2. **Reduced risk exposure**
3. **Stronger investment returns**
4. **Lower operating costs**
5. **Improved access to finance**
6. **Improved occupant outcomes**
7. **Social and environmental benefits**

These drivers reflect a holistic view of value creation, aligning commercial success with sustainability leadership and resilience.

Real estate accounts for around 68% of global wealth, making it the world's largest asset class. Buildings account for 32% of global energy use and are responsible for 34% of energy-related $CO_2$ emissions worldwide, underscoring their critical role in climate action.

According to McKinsey & Company (2024), achieving net zero emissions in the building sector requires an average annual investment of USD 1.7 trillion between 2020 and 2050 — less than 2% of global investment flows. The challenge is not a lack of capital but redirecting capital towards sustainable outcomes.

**~68%**

**proportion of real estate in global wealth**

**Our buildings contribution to global energy use:**

**32%**

**34%**

**of energy-related $CO_2$ emissions worldwide relate to buildings**

Financial markets are increasingly recognising climate risk as financial risk, reshaping capital flows into real estate:

- Banks are implementing climate risk assessments.
- Insurers are repricing based on resilience.
- Bond markets are providing preferential terms for green buildings.

This shift signals that sustainable buildings are becoming the only financially viable option for long-term value creation.

Properties that secure green financing, such as sustainability-linked loans (SLLs), often benefit from interest rate reductions of around 5 basis points. In Asia Pacific:

- **Ayala Land Inc. (Philippines)** secured a ₱14.5 billion (USD 260 million) SLL from IFC, with rate increases for unmet performance targets.
- **Swire Pacific (Hong Kong)** converted a HK$2 billion (USD 255 million) facility into an SLL with DBS Bank, linking rates to ESG performance.

Meanwhile, green bonds are driving investment, with USD 587.6 billion in green bond issuance in 2023—a 15% increase from the previous year, comprising 67.5% of all sustainable debt issuance (Climate Bonds Initiative, 2023).

# Quantified Value in Asia Pacific

## Green-certified buildings in Asia Pacific consistently outperform conventional assets, delivering higher rental and occupancy rates, lower operating costs, and improved access to capital.

With over half of commercial office space in the region achieving green certification, investor confidence in sustainable real estate is underpinned by measurable returns and operational efficiencies.

The business case for sustainable buildings in Asia Pacific is real, quantifiable and strengthening each year.

## Better Market Performance

Certified green buildings attract rental premiums driven by tenant demand for efficient, ESG-aligned spaces. Grade A offices (premium assets in prime locations with high-spec amenities) are leading this trend.

- **JLL (2024)** reports:
  - 74% of corporate real estate leaders are willing to pay a premium for green-certified spaces.
  - 87% of occupiers aim for fully green-certified portfolios by 2030.
- **CBRE 2025** highlights green certification as the most sought-after ESG feature for occupiers across Asia Pacific.

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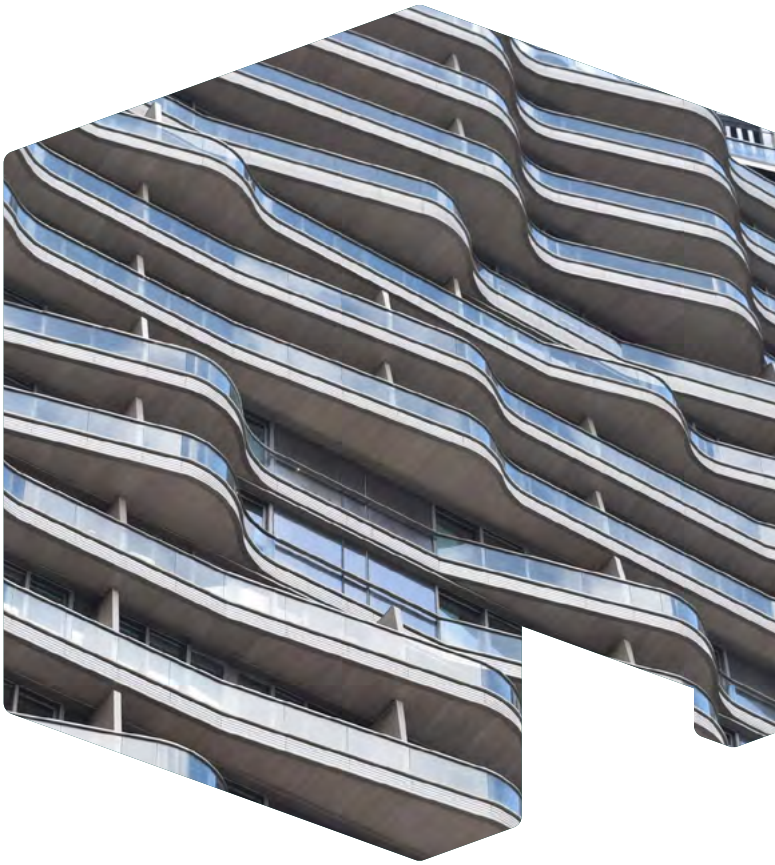


## Regional Trends:

- **Singapore:** ~90% of Grade A offices certified, premiums range 4–9%; non-certified buildings face a "brown discount".
- **Australia:** 100% of new A-grade supply rated 5–6 stars under Green Star; premiums lower as green features are baseline.
- **Hong Kong:** ~50% adoption with ~3.5% rental premium.
- **Bangkok and Manila:** 4–11% premiums for scarce certified spaces, driven by limited supply.

Certified green buildings also exhibit stronger leasing performance:

- CBRE reports a 2% occupancy advantage (83% vs. 81% for uncertified peers).
- Green buildings help attract and retain institutional investors and anchor tenants, reducing ESG misalignment risks.

## Operational Efficiency

Green buildings deliver significant operational savings:

- **In Singapore**, Green Mark Platinum buildings achieve >50% energy savings vs. 2005 baselines.
- **In India**, IGBC-certified buildings demonstrate 20–30% energy savings and 30–50% water savings.

These efficiencies help tenants meet their ESG commitments while reducing operational costs.

Operational benefits also include:

- Reduced waste and maintenance costs.
- Enhanced resilience against resource constraints and rising utility prices.

These advantages apply across new developments and retrofits, supporting investor confidence and enhancing asset value.

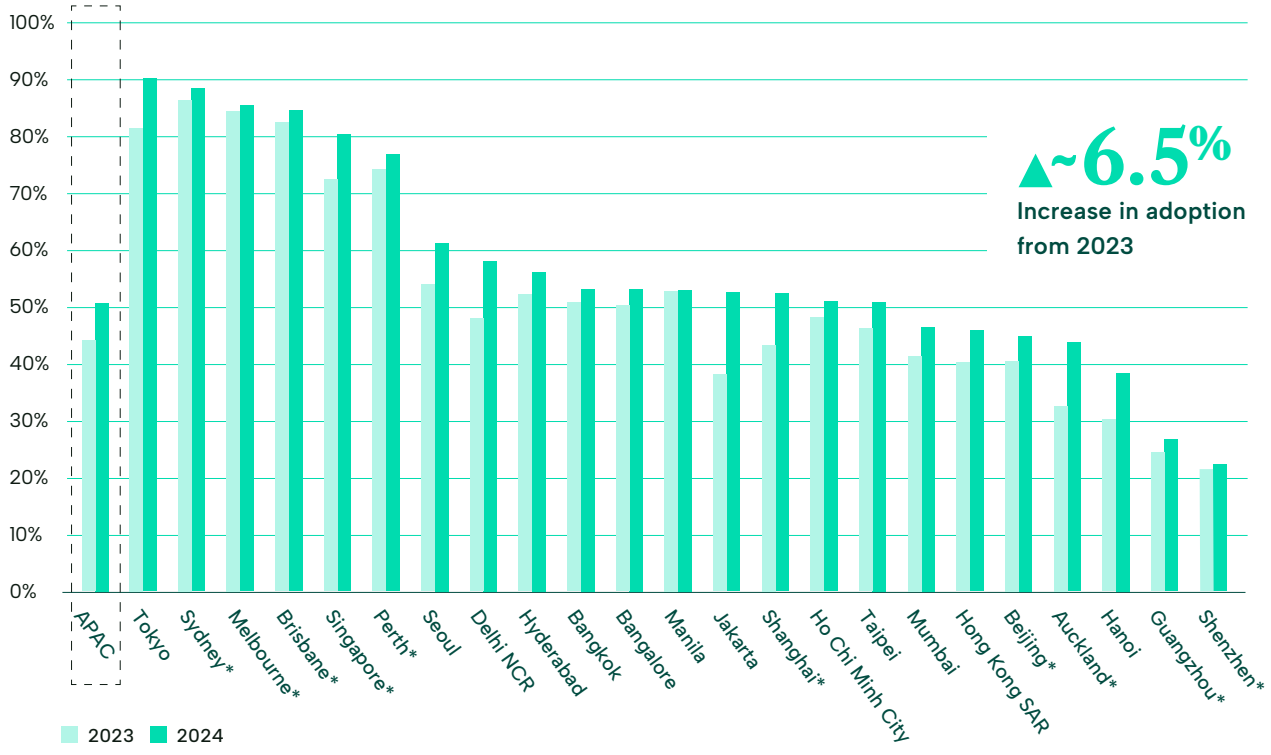



Fig. 1. 50.5% of office space in Asia Pacific is now green-certified, up 6.5% year-on-year.

Source: CBRE Research, March 2025

Notes:

*Data for Singapore, Auckland, Australia and mainland China cities refers to All Grade.

**In Australia Green-Certified includes Green Star ratings of 4 stars or above and NABERS Energy ratings of 4.5 stars or above.

## Green Adoption and Estimated Overall Green Rental Premium


Fig. 2. Green Adoption and Estimated Overall Green Rental Premium

**Note:** Data for Singapore and Australia cities covers All Grade buildings. Data for other markets covers Grade A buildings.
**Source:** CBRE Research, March 2025

The consistent market outperformance of certified green buildings builds a compelling foundation for the growth of green finance and sustainable investment trends in Asia Pacific, which are explored in the next section.

## Investment Trends

Green finance is expanding rapidly across Asia Pacific, creating new opportunities to fund sustainable projects. Companies committed to decarbonisation are increasingly turning to green loans and green bonds to access capital and support their transition.

The Climate Bonds Initiative (2025) reports that the global market for green, social, and sustainability (GSS) bonds and sustainability-linked loans (SLLs) reached USD 6.9 trillion by the end of 2024. Of this, green bonds accounted for USD 3.5 trillion, with Asia ranking as the second-largest market for new issuances, just behind Europe. In 2024 alone, USD 671.7 billion in green bonds were issued globally, marking a 9.4% year-on-year increase.

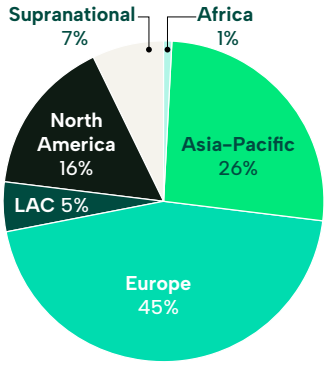



**Fig. 3. Asia Pacific was the second largest source of 2024 GSS volume.**

Source: Climate Bonds Initiative (2025), Sustainable Debt Global State of the Market 2024

The Climate Policy Initiative (CPI) estimates that USD 250–300 billion annually in global climate finance flows into buildings, primarily supporting energy efficiency, new construction, and retrofits. This accounts for around 15–20% of all tracked climate finance flows.

**The global market of green, social and sustainability bonds and sustainability linked loans at the end of 2024 reached**

**$6.9 trillion**

**$ 250-300 billion**

**per year in global climate finance is directed toward buildings**

## Key Market Drivers:

- China, India, Australia, Singapore, and South Korea are increasing investments through public incentives, mandatory standards, and rising institutional investor demand.
- ASEAN green bonds are increasingly directed toward real estate and infrastructure.
- JLL estimates 9% of total real estate debt issuance in Asia Pacific is labelled as sustainable debt.

## Retrofit Demand Rising

With most buildings that will exist in 2050 already built, there is a significant need to retrofit existing stock, driving demand for sustainable finance to reduce emissions at scale. Retrofit markets are expanding quickly in dense urban centres such as Tokyo, Seoul, and Hong Kong, where limited new-build space and tightening ESG compliance are accelerating the shift.

## Examples of Green Finance in Action

- **Singapore:** Issued USD 4.5 billion in green bonds tied to real estate projects in 2023, supported by SGD 63 million (USD 47 million) in incentives under the Green Mark Incentive Scheme and related building sustainability programmes. *(See Annex 1 for details.)*
- **Hong Kong:** The Green and Sustainable Finance Grant Scheme has supported over USD 150 billion in green and sustainable debt instruments, with USD 3.4 billion captured by the real estate sector (8% of green bond issuance in 2024). *(See Annex 2 for details.)*

## Returns on Investment

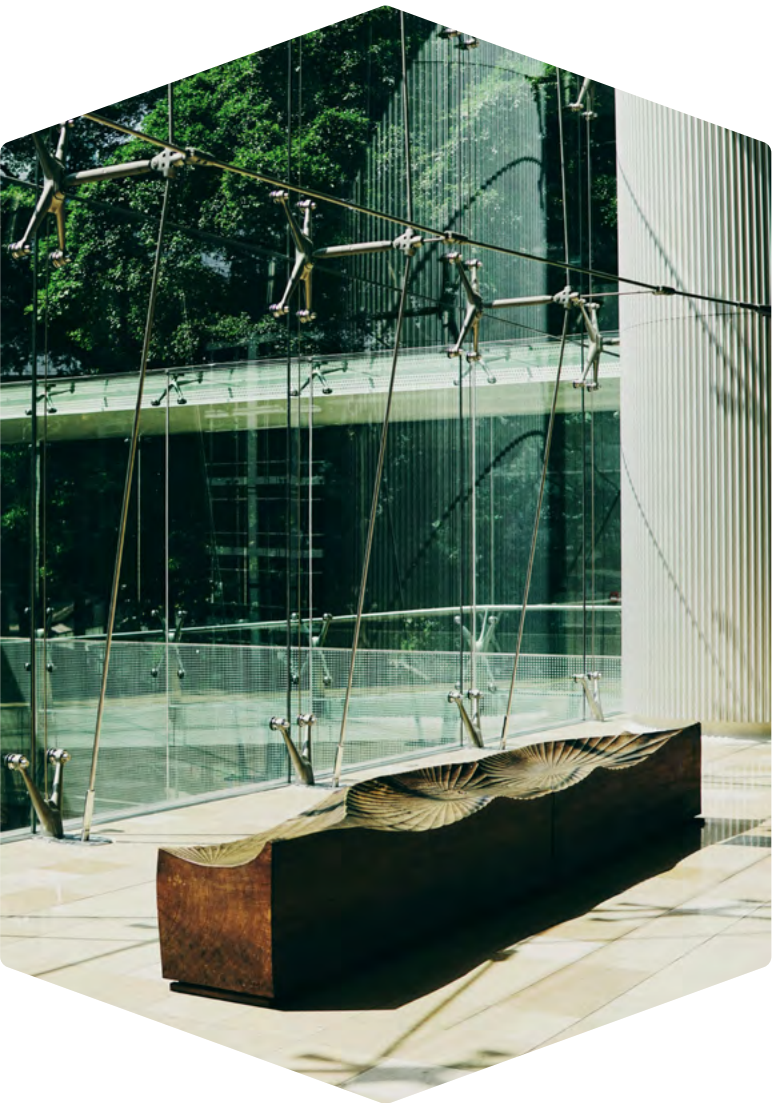
Projects accessing green financing often achieve higher internal rates of return (IRRs) than conventional property improvements. The Asian Development Bank (ADB) applies a 12% financial IRR benchmark for green retrofit projects, indicating that initiatives supported by concessional or blended finance typically meet or exceed this threshold for viability.

## Green Finance Strengthens the Business Case

The growth of green finance for buildings in Asia Pacific reinforces the business case for sustainable buildings while creating a virtuous cycle of investment and performance. Beyond immediate benefits, there is a risk management perspective: green performance strengthens long-term value preservation by reducing financial, operational, and reputational risks.

## Better Risk Management

Green buildings help reduce exposure to physical and transitional risks as climate impacts intensify and regulatory expectations tighten across Asia Pacific.



## Physical Climate Risks

Asia Pacific's vulnerability to climate change creates urgent risks for conventional buildings while presenting significant opportunities for resilient assets.

- The World Meteorological Organization (2024) reports that people in Asia Pacific are six times more likely to experience climate disasters than those in other regions.
- S&P Global projects that by the 2050s, over 90% of the world's largest companies will have at least one real estate asset financially exposed to climate risks.
- JLL identifies Hong Kong, Manila, Shanghai, Seoul, and Singapore as among the cities with the highest global climate risk exposure.

## How Green Buildings Respond

Green buildings provide enhanced protection against climate risks through:

- Improved building envelope performance, reducing vulnerability to extreme temperatures and weather events.
- Enhanced structural integrity, protecting against storm and flood damage.
- Efficient systems that minimise operational disruption during infrastructure stress.
- Water conservation and storage systems that maintain functionality during supply interruptions.

During extreme events, resilient buildings experience less downtime, maintain higher value, and often benefit from insurance advantages. As severe weather events become more frequent, these operational advantages translate into measurable financial outperformance.

## Transitional Risks

As governments across Asia Pacific tighten building codes and set ambitious climate targets, green buildings that meet recognised standards are better positioned to comply with emerging regulations, reducing the risk of:

- non-compliance penalties
- costly future retrofits
- market obsolescence

Examples include:

- Singapore's Green Mark scheme and mandatory energy performance reporting in Tokyo and Seoul, which ensure that certified buildings are aligned with policy expectations.
- Increasing adoption of carbon pricing mechanisms in key markets, which will penalise inefficient, high-emission assets while rewarding high-performing buildings.

## Avoiding Stranded Asset Risk

As Asia Pacific progresses toward net zero, assets that fail to demonstrate sustainability performance risk becoming "stranded". Green buildings mitigate this risk through:

- strong environmental performance
- easier emissions reporting
- readiness for evolving regulatory frameworks

By integrating advanced sustainability standards, green buildings offer a strategic advantage in a market reshaped by climate commitments and investor priorities.

## Market-Level Insights

Understanding how the business case for sustainable buildings manifests in specific markets provides crucial lessons for Asia Pacific stakeholders:

- **Annex 1:** Singapore demonstrates a policy-driven pathway to market transformation.
- **Annex 2:** Hong Kong showcases how financial mechanisms drive widespread adoption of sustainable buildings.

Both case studies illustrate that scale and impact are achievable when policy, finance, and market demand align.

**The evidence is clear: sustainable, certified buildings reduce climate and regulatory risks while delivering enhanced market performance, reinforcing the strategic importance of green buildings for investors, occupiers, and policymakers across Asia Pacific.**

## Call to Action

The evidence is unequivocal: sustainable buildings outperform across all key indicators. From improved rental yields and occupancy rates to lower operating costs and enhanced asset resilience, certified green buildings are setting the benchmark for real estate across Asia Pacific.

What was once an emerging business case is now the baseline for market competitiveness.

## Acting Early Delivers Advantage

In markets like Singapore and Hong Kong, green buildings are no longer the exception but the norm. This transition has been driven by policy leadership, financial innovation, and rising tenant demand.

Market forces are accelerating:

- carbon pricing mechanisms
- enhanced disclosure requirements
- ESG-driven investor mandates

These shifts mean that buildings failing to align with sustainability standards will face growing financial and regulatory risks, including asset obsolescence and devaluation.

## Benefits of Action

Green buildings provide a clear pathway to:

- **mitigate risk exposure**
- **enhance financial, social, and environmental outcomes**
- **support resilience and productivity**
- **access capital through green finance**

The tools, knowledge, and capital needed to support this transition are now widely accessible across the region.

# Strategic Recommendations by Stakeholder

## Investors and Owners

- Prioritise retrofitting existing assets; green retrofits in Singapore have achieved IRRs up to 30%.
- Utilise sustainability-linked loans and bonds to access reduced borrowing costs while enhancing post-certification valuations.
- Integrate robust ESG frameworks into asset management to attract and retain tenants, lower insurance premiums, and mitigate future regulatory risks.

## Occupiers

- Focus on total cost of occupancy to capture savings from reduced utilities, lower maintenance costs, and improved occupant wellbeing.
- Secure space in certified green buildings to ensure access to high-quality assets and reinforce your organisation's ESG commitments.
- Early action ensures best space availability as demand continues to outpace supply in many markets.

## Policymakers

- Establish clear and ambitious building performance standards to drive market transformation, as demonstrated in Singapore and Hong Kong.
- Implement targeted incentives, including grants, tax rebates, and green finance facilitation, to accelerate adoption.
- Mandate standardised data disclosure and reporting to reduce market friction and increase investor confidence.
- Invest in public sector retrofitting to deliver broad socio-economic benefits including employment generation and public health improvements.

## Join Us

The transition to sustainable buildings does not have to be navigated alone:

- Local Green Building Councils (GBCs) offer certification frameworks, technical guidance, and capacity building tailored to national contexts.
  - Find your local GBC here.
- WorldGBC's Asia Pacific Network offers opportunities for:
  - knowledge sharing
  - coordinated action
  - regional alignment to scale impact
- Find out more about the APN here.

## The Time to Act is Now

The future of real estate in Asia Pacific will be defined by the choices made today. Sustainable buildings deliver superior returns, lower risk, and a stronger foundation for resilience in a rapidly changing world.

Sustainability is no longer the next frontier; it is the current standard. Those who delay will fall behind. Those who lead will thrive.

# Annex 1:

## Singapore – Policy-Driven Market Leadership

Singapore demonstrates how integrated policy frameworks transform markets while delivering measurable economic benefits. Its approach combines regulation, financial incentives, and innovation support, making sustainability both commercially advantageous and operationally necessary.

### Regulatory Foundation

Singapore's Green Building Masterplan underpins its transition, with the "80-80-80 by 2030" vision:

- Green 80% of buildings.
- Ensure 80% of new developments achieve Super Low Energy status.
- Deliver 80% improvement in energy efficiency over 2005 levels.

Mandatory minimum sustainability standards under the Building Control Act ensure all new builds and major retrofits meet Green Mark Certified standards, transforming sustainability from an option to a market necessity.

### Financial Framework and Carbon Pricing

Singapore combines incentives with carbon pricing:

- Carbon tax: From S$5 per tonne $CO_2e$ in 2019, rising to S$25 by 2024 and S$50–80 by 2030.
- Programmes like the Green Mark Incentive Scheme for Existing Buildings (GMIS-EB), BREEF, and the Super Low Energy Challenge provide enhanced financial support for efficiency improvements.

### Innovation and Infrastructure

Singapore's Green Buildings Innovation Cluster supports emerging technologies, while district cooling systems and precinct-scale frameworks like Green Mark for Districts drive systemic change. The HDB Green Towns Programme applies sustainability across public housing estates.

### Climate Resilience

Measures include:

- Minimum platform levels for flood protection.
- Enhanced structural requirements for weather resilience.
- The S$5 billion Coastal and Flood Protection Fund.
- These policies align with S&P Global findings that 90% of large companies will face climate risk exposure in real estate by the 2050s.

### Market Results

- 90% of Grade A offices in Singapore are now green-certified.
- Super Low Energy buildings achieve 60%+ energy savings.
- Independent assessments confirm positive lifecycle NPV for Green Mark buildings, with operational savings outweighing upfront costs.

# Annex 2:

## Hong Kong – Market Transformation Through Finance

Hong Kong's approach emphasises financial mechanisms and market-based incentives, reflecting its status as a global financial hub.

### Policy and Voluntary Framework

Under its Climate Action Plan 2050, Hong Kong targets:

- carbon neutrality by 2050
- 65–70% carbon intensity reduction by 2030 (vs. 2005)

The Buildings Energy Efficiency Ordinance (BEEO) and Building Energy Code (BEC) establish mandatory efficiency standards, complemented by voluntary BEAM Plus certification supported by financial incentives.

### Financial Incentives

The Gross Floor Area concession scheme ties green performance to economic benefits, encouraging BEAM Plus adoption. Over 2,500 projects are BEAM Plus-registered, covering ~35% of commercial floor space.

### Green Finance Ecosystem

The Green and Sustainable Finance Grant Scheme has supported over USD 150 billion in green debt instruments, with USD 3.4 billion directed to real estate in 2024 (8% of issuance), demonstrating market confidence in sustainable investments.

### Climate Resilience

Hong Kong addresses risks from typhoons, flooding, and heat through:

- Stormwater Drainage Manual
- Urban Climatic Map studies
- Updates to the Building Energy Code (2024), improving efficiency by 20% over 2015 standards

### Market Outcomes

- BEAM Plus buildings deliver 20–30% energy savings over baseline code.
- Water-efficient fixtures deliver 38–45% indoor water savings.
- Buildings with resilience measures experience operational advantages during extreme weather and may qualify for insurance benefits.

### Future Trajectory

Hong Kong's path toward carbon neutrality includes:

- updates to MEELS, BEEO, and BEC
- increased focus on low-carbon construction, green materials, and circular economy principles

Early adopters of high sustainability standards will gain a competitive edge as the market evolves.

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