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BANKING ON GREEN OFFICE BUILDINGS IN SINGAPORE

Market St

GREEN OFFICE BUILDINGS ENJOY HIGHER OCCUPANCY AND RENTS

Does sustainability pay? We think it does help performance. We analysed the trends of office buildings within our CBD basket to find out if office buildings with Green Mark ratings enjoy better occupancy and rents. Given that the best office buildings tend to be highly accredited and factors such as location would also affect rents, measuring the actual “green” premium or “brown” discount remains challenging.

Our initial research however suggests that buildings with higher Green Mark ratings in general tend to command higher occupancy and rents. The rental premium can widen in the future as more companies commit to net-zero carbon emissions.

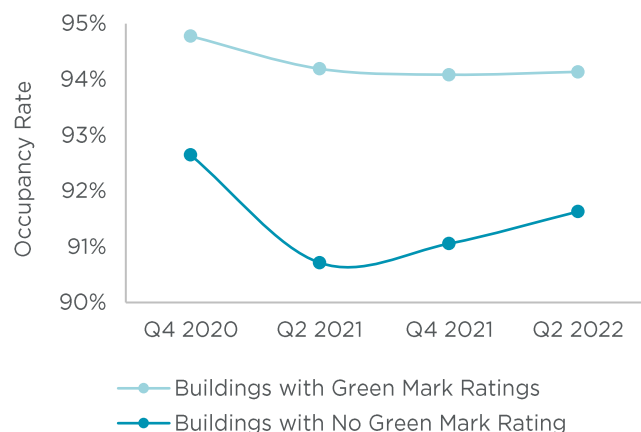
SUSTAINABLE BUILDINGS SHOW HIGHER RESILIENCE

Occupancy rates of office buildings with Green Mark ratings are observed to hold firmer than their non-Green Mark-certified counterparts. Between Q4 2020 and Q2 2022, the average occupancy rate of office buildings in the CBD with Green Mark ratings remained at about 2%-4% higher than the occupancy of

office buildings without Green Mark ratings. Not surprisingly, office buildings with the Green Mark Platinum were able to achieve the highest occupancy over the same period.

As the office market bottomed out mid last year, average occupancy rates of office buildings without Green Mark ratings fell more steeply than the occupancy of office buildings with Green Mark ratings. The resilience in occupancy could be due to the strong tenant profile of sustainable buildings. Green buildings tend to attract occupiers that put a greater emphasis on sustainability and are generally more resilient to crisis. These occupiers likely have managed to sustain their lease and maintained occupancy over the pandemic. Many studies have also pointed to a positive correlation between sustainability and resilience.

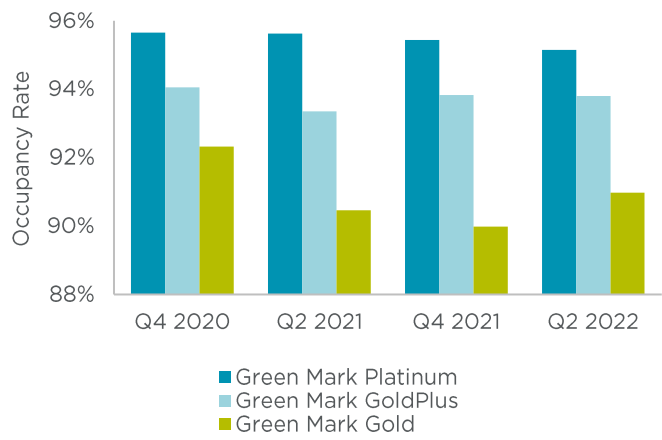
Occupancy of Office Buildings (all grades) in CBD with and without Green Mark Rating



Source: Cushman & Wakefield Research



Occupancy of Office Buildings (all grades)
in CBD With Green Mark Rating



Source: Cushman & Wakefield Research

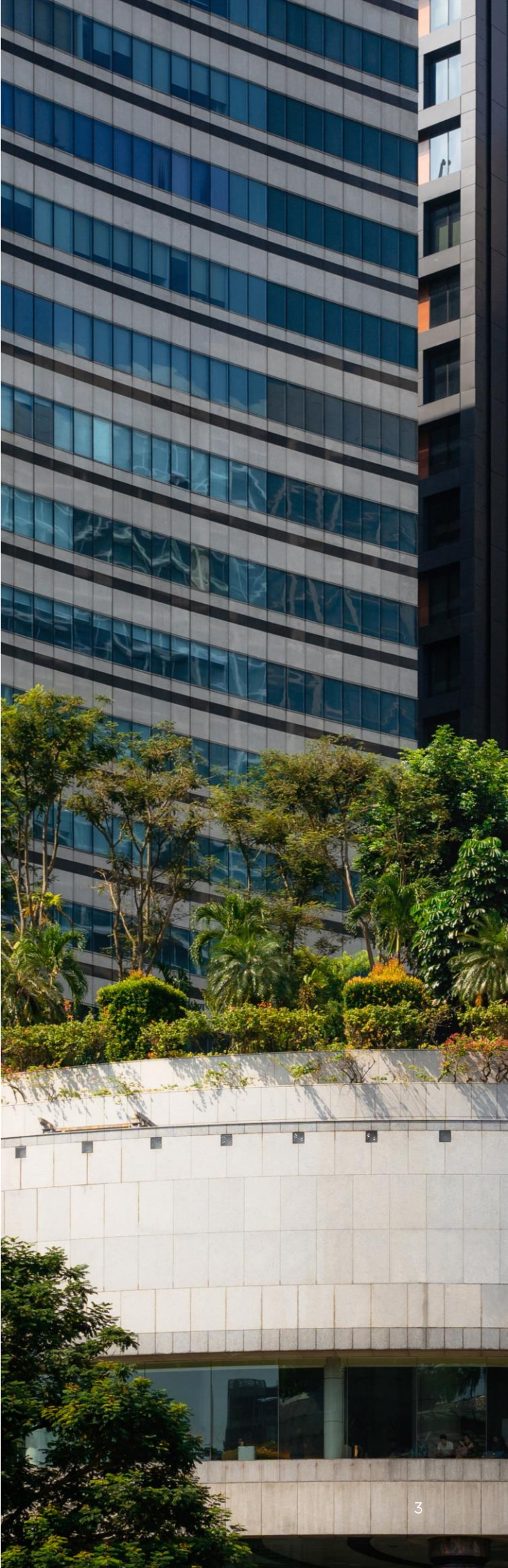
SUSTAINABLE
BUILDINGS COMMAND
HIGHER RENTS

To examine the rental differential between sustainability accredited and non-accredited buildings, rents of Grade B office buildings in the CBD with Green Mark ratings were compared against those without any ratings. Our findings suggest that there is a rental gap (10% as of Q2 2022), and this has also risen over the years.

CBD Grade B Office Rents by Buildings
with and without Green Mark Rating



Source: Cushman & Wakefield Research



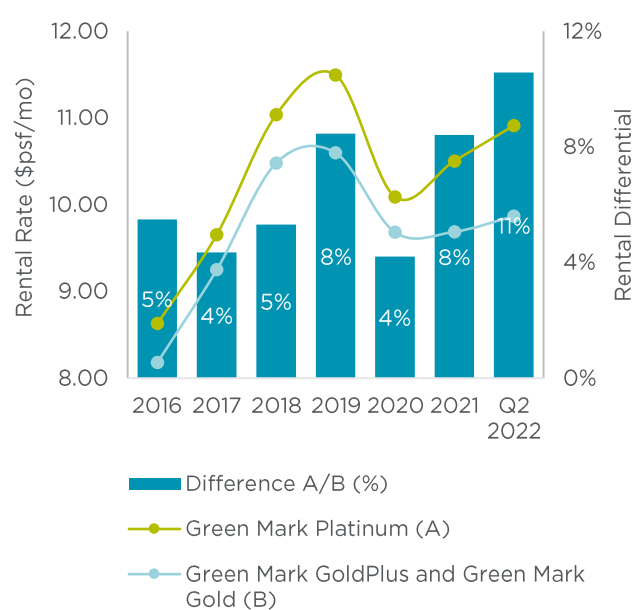
DOES HIGHER SUSTAINABILITY PERFORMANCE ATTRACT HIGHER RENTS?

Within the CBD Grade A office market, Green Mark Platinum accredited office developments are observed to command higher rents over buildings with lower ratings (Green Mark GoldPlus and Gold), on average. The rental gap rose to 11% in first half of this year given a flight to quality.

Notably, this rental gap fell in 2020 as landlords were more flexible on rents due to uncertainty during the early stages of the pandemic. The rental differential between office buildings with and without Green Mark rating has averaged to around 7% from 2016 to H1 2022.

Nonetheless, there are exceptions. OUE Bayfront, a Grade A office building, can command top-of-market rents due to its panoramic view of the CBD skyline and quality building specifications, despite not possessing the Green Mark Platinum rating.

CBD Grade A Office Rents by Green Mark Ratings



Source: Cushman & Wakefield Research

TAKING THE FLIGHT TO SUSTAINABILITY

Our research suggests that sustainable office buildings do command higher rents and occupancy rates and striving for the highest level of green-mark certification seems to have an economic impact. While this is not determinative of a green premium, it aligns with views that sustainability can be a competitive edge for landlords.

Indeed, new office buildings are poised to raise sustainability benchmarks. For example, Keppel Towers redevelopment (target completion in 2024) has been awarded the Green Mark Platinum SLE accreditation, and the redevelopment of Shaw Tower (target completion in 2025) plans to also attain the same Platinum SLE accreditation.

The pressure on greening will only increase. Singapore's Green Building Masterplan aims to green 80% of Singapore's buildings by gross floor area (GFA) by 2030, 80% of new buildings by GFA to be Super Low Energy (SLE) buildings from 2030 and 80% improvement in energy efficiency to best-in-class green buildings by 2030.

With rising public awareness on sustainability and more businesses committing to zero-carbon goals, the future office market landscape will be characterised by a flight to sustainability.

BUILDING OWNERS NEED TO ACT

Building owners and operators should continue to embed sustainability in the building's life cycle, albeit there is no shortage of green office options in Singapore. Based on BCA's Listing of Building Energy Performance Data for 2020, more than three-quarters (81%) of large office buildings islandwide, by GFA, has a Green Mark certification, of which the majority (61%) has achieved the Platinum rating.

Under a refreshed BCA Green Mark 2021 scheme (GM: 2021), buildings must meet higher minimum energy efficiency levels and score sufficient points in the sustainability sections to be certified green.

Energy Efficiency Requirement to Maintain Valid Green Mark Certification

Green Mark Rating	Energy Savings Prerequisite						
	≥ 25%	≥ 30%	≥ 40%	≥ 50%	≥ 55%	≥ 60%	ZE
SLE (incl. ZE, PE)						X [^] O	O
Platinum SLE (incl. ZE, PE)						O	O
Gold Plus SLE (incl. ZE, PE)						O	O
Platinum		X			O		
GoldPlus	X			O			
Gold [#]			O				

Source: BCA, Cushman & Wakefield Research

Key:

- X refers to Green Mark for Non-Residential Buildings 2015 (GM NRB: 2015)
 - ^ Green Mark SLE: 2018 criteria is based on the energy modeling framework set out in GM NRB: 2015, although for SLE/ZE, there is no cap on additional energy saving from passive design features and renewable energy over its reference model
 - # Minimum energy savings requirements were not applicable to buildings targeting Gold rating under GM NRB: 2015
- O refers to Green Mark 2021 (GM: 2021 In Operation)
 - Gold rating is only applicable for GM:2021 In-Operation

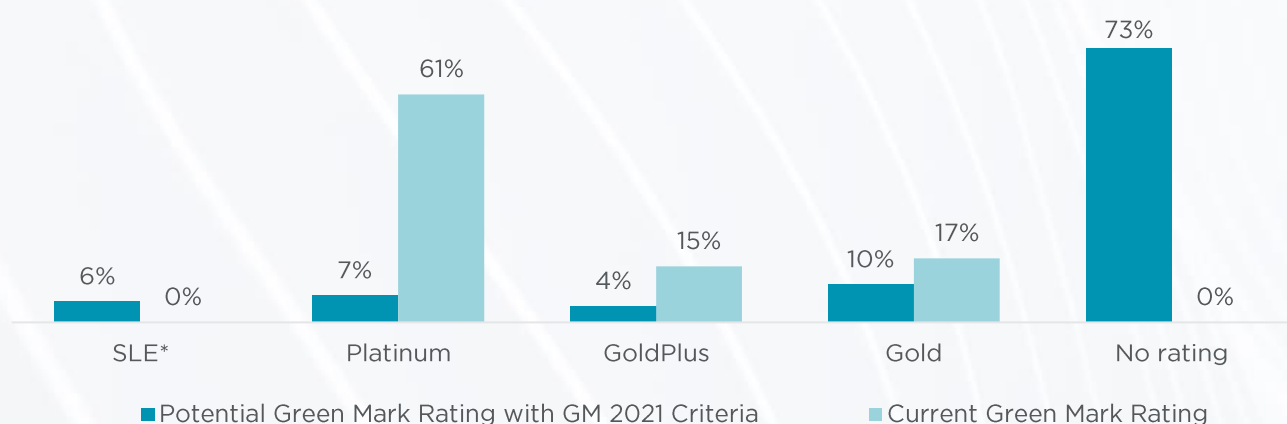
Note:

- Energy Saving Prerequisites refer to energy saving from Business-as-usual (BAU) (2005 Code)
- SLE (Super Low Energy) requires a minimum Gold rating
- PE (Positive Energy) needs the production of 115% of building energy



Due to the more stringent criteria, some office buildings may see a downgrade of or even lose their Green Mark ratings, based on our assumptions.

Breakdown of Green Mark Rating for Office Buildings (by Gross Floor Area)



Source: BCA, Cushman & Wakefield Research

Note:

- Current Green Mark Ratings are based on reported Green Mark rating (as of BCA's Listing of Building Energy Performance Data for 2020)
- Potential Green Mark Ratings are derived from comparing 2019 Energy Use Intensity (EUI) data from BCA's Building Energy Submission System alone against the GM: 2021 Energy Efficiency requirement (buildings with a Green Mark rating, office as their main building function, GFA $\geq 15,000$ m², and minimum average monthly building occupancy rate of 60%) and do not include other criteria such as the provision of past three years EUI data for consistency check.
- Excluding buildings that are Green Mark certified or legislated

* BCA's Listing of Building Energy Performance Data for 2020 does not reflect buildings with Green Mark SLE Rating. Although 6% of the current listed Green Mark-certified buildings may qualify for SLE rating based on GM: 2021 Energy Efficiency requirement alone.

Forge Ahead in The Green Journey

Amidst rising energy costs from inflationary pressures and growing demand for sustainable office buildings that could command higher rents, owners of buildings should consider asset enhancement initiatives that incorporate energy efficiency retrofits to improve the building's performance and refresh its Green Mark ratings.

To help defray upfront costs, building owners can tap into green financing to fund their sustainability initiatives. For example, UIC obtained a \$100 million green loan from UOB and DBS Bank to finance a major upgrading at Singapore Land Tower. There are also grants under the Green Mark Incentive Scheme for existing buildings, which was recently enhanced to \$63 million.

The installation of smart building management systems for instance could beef up the efficiency of ageing equipment, potentially resulting in cost savings and a delay of capital expenditure for equipment replacement. In a case study, C&W Services managed to raise the efficiency of a twelve-year-old chiller by 20% and defer its replacement by five years with the installation of an energy management system.

IoT technologies, data analytics tools and a skilled workforce should work hand in hand to deliver innovative yet cost-effective solutions that promote energy efficiency, elevate tenant experience and push towards the target Green Mark rating.

With more corporates and governments accelerating their climate goals, the flight to sustainability will be an enduring one. And assets that are not refreshed will risk getting "stranded" amidst the global green push.

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