

# Navigating sustainability in the Singapore Property Sector

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## An Overview

**Property is a major contributor to emissions:** Buildings and construction sector accounted for 39% of carbon dioxide emissions globally in 2018, according to the International Energy Agency, mainly due to building materials and energy generated to power buildings. Due to the sector's outsized impact, regulators, investors, tenants and even homebuyers have begun to react, which results in a shifting landscape for the property development sector.

**Stakeholders are taking actions, including regulators, ...:** Regulations globally have been increasingly updated to align the property sector with the 2050 net zero global emissions goal. In Singapore, the Singapore Green Building Masterplan was introduced as part of the Singapore Green Plan 2030, with "80-80-80" key targets to be achieved by 2030. These include (1) greening 80% of buildings (by gross floor area), (2) attaining Super Low Energy (SLE) rating for 80% of new developments and (3) improving energy efficiency for best-in-class green buildings by 80% (over 2005 levels). According to Building and Construction Authority ("BCA"), 49% of Singapore's buildings have been greened as of Dec 2021, which is still a distance from the stated targets. In any case, all new buildings and major retrofitting of existing buildings with more than 5,000 sqm of gross floor area must adhere to a minimum environmental sustainability standard.

**... issuers, lenders and investors, ...:** Low-Carbon Buildings accounted for 30% of the use of proceeds of green investment in 2021 according to Climate Bonds Market Intelligence. Relevant green projects include construction of new buildings that meets energy efficient targets and enhancements to existing buildings to improve energy efficiency. While issuances have dipped in 2022 due to rising interest rates, we believe there is room for green bond issuances to grow given its increasing focus.

**... as well as tenants and homebuyers:** According to CBRE's 2021 Global Investor Intentions Survey, 60% of respondents have included ESG considerations as part of their investment strategies and we think this may grow with ESG being an increasing focus. Meanwhile, tenants and homebuyers are willing to pay a premium for rental or purchase of green units. According to JLL, green certified offices in Singapore can fetch a rental premium of 4% to 9%.

**Beyond environmental considerations are the social aspects...:** Aside from environment, we observe that property developers increasingly emphasize social aspects. Beyond health and safety, and building communities, companies are embracing diversity. More than 70% of millennials prefer working in a company with a strong sustainability agenda, according to a Fast Company survey as reported by JLL. This agenda may include employee diversity and inclusion. Empowered with organisational purpose, we believe that companies (including property developers) will be better positioned against their counterparts.

**... as well as the governance aspects:** On the governance front, the Code of Corporate Governance applies to SGX-listed companies. There will be more requirements for listed real estate companies to disclose with climate-related disclosures becoming mandatory from FY2024. On average, listed real estate companies and developers score higher than most industries, including utilities, health care, industrials, consumer staples according to Singapore Governance and Transparency Index ("SGTI") 2022. That said, the range of outcomes are wide, with the larger developers scoring better.

**Companies increasingly compelled to act:** We believe that companies will increasingly adopt sustainability practices. At the minimum, companies will have to meet regulatory requirements including mandatory reporting for listed companies. Finance is also a tool which may compel companies to act as financiers set stricter levels of emission targets. With society becoming more

aware, sustainability practices should be adopted to maintain competitive advantage and stay relevant with today’s and tomorrow’s employees, homeowners and tenants.

**Adhering to BCA Green Mark**

**BCA as the leading authority in setting green building standards:** In Singapore, the Green Mark certification scheme launched by BCA provides sustainability guidelines for property developers. The ratings are aimed at recognising efforts which go beyond mandatory regulation standards. This includes higher standards on energy efficiency, indoor air quality, greenery provision, active mobility considerations, materials and waste management and water efficiency. The certification process involves BCA assessing and verifying the buildings based on a given set of criteria. Over time, BCA has progressively set higher standards, with the latest updated Green Mark 2021 scheme (“GM:2021”) raising the requirements for energy efficiency standards. A Super Low Energy (“SLE”) category was also added, which ranks higher than the categories of Platinum, Gold<sup>PLUS</sup> and Gold.

**Regulatory ratings downgrade risks in the horizon:** According to Colliers, following the updates under GM:2021, 73% of the large office buildings could see a downgrade in ratings, with nearly two-thirds of the office buildings potentially failing to qualify for any rating (while Colliers mentioned that previously more than 60% achieved Platinum rating which was the highest level of certification).

**Economics of transitioning:** Beyond certification and branding purposes, transitioning towards sustainability can be economical. To assist, BCA has issued various grants to property developers, which target to lower the upfront costs of energy efficiency retrofits and encourage building owners to reduce emissions through retrofitting. BCA has also undertaken a consultancy study of the life cycle costing analysis of Green Mark versus non-Green Mark projects, which found net positive savings due to energy savings outweighing upfront investment costs. That said, this study was likely done prior to the latest revised GM:2021, which has more stringent requirements. In another study conducted by Dodge Construction Network in 2021, Singapore green renovations/retrofits result in reduction of operating costs in the first 12 months by 10.7% (2-6Y cost reduction = 16.3%) while new green buildings see a reduction of 10.8% in costs in the first 12 months (2-6Y cost reduction = 14.6%).

Figure 1: Green Mark Residential Buildings

GM Certification	Green Cost Premium (%) <sup>1</sup>	Simple Pay Back (yrs)	NPV per GFA (median \$/m <sup>2</sup> )
Gold	0.23-1.71	Not applicable for residential projects, with savings enjoyed by households	39
Gold <sup>PLUS</sup>	0.64-3.76		54
Platinum	0.79-4.15		140

Source: BCA

Figure 2: Green Mark Non-Residential Buildings

GM Certification	Green Cost Premium (%)	Simple Pay Back (yrs)	NPV per GFA (median \$/m <sup>2</sup> )
Gold	0.12-1.89	0.81 – 2.45	48
Gold <sup>PLUS</sup>	0.70-1.87	1.89 – 3.56	117
Platinum	1.00-4.40	2.30 – 5.80	225

Source: BCA

**Green buildings command green premium**

**Residential sales premium:** In a Frost & Sullivan study commissioned by BCA in 2016, 54% of homeowners were willing to pay 3% to 4% more for a Green Mark building. More than 90% of homeowners agree that green buildings provide utilities cost savings, reduced impact to the environment and/or health benefits. While it is difficult for us to further conclude that such willingness would translate into actual purchases at higher prices, the willingness to pay a premium should increase amidst higher electricity prices.

<sup>1</sup> Difference between conventional and green building design features

**Tenants willing to pay more for green buildings:** According to the same Frost & Sullivan survey, office tenants are willing to pay an average of 3.5% more for leasing an office in a Green Mark certified building. Similar to homeowners, office tenants perceive benefits through cost savings from utilities, health benefits for employees, higher productivity and increase in job applications. In addition, we understand that certain tenants (including multinational companies) desire a Green Mark certified building which helps their sustainability credentials. According to CapitaLand Investment Ltd, institutional tenants have begun to avoid buildings that do not meet their minimum green standards. This may result in demand for green buildings outstripping supply. According to JLL, in Hong Kong where only 29% of Grade A offices are green certified, the rental premium for LEED Platinum buildings is 28%, in comparison to 4% to 9% in Singapore where 90% of Grade A offices are green certified. Outside of Asia, in the UK, there are similar findings of rental premium for green buildings. According to a study by Knight Frank in 2021, prime Central London office rents with BREEAM certifications enjoy rental premiums ranging from 3.7% (Very GOOD certification) to 4.7% (Excellent certification) to 12.3% (Outstanding certification).

**Green Financing Solutions**

**Growth of green financing:** Real estate green financing is becoming mainstream in Singapore. This involves developers taking up green loans, sustainability linked loans (“SLL”), issuing green and/or sustainability bonds, with the use of proceeds slated for green/sustainable/sustainability-linked projects. Examples of significant borrowers/issuance include Frasers Property Ltd (SGD9.11bn total financing from FY2018 to FY2022), City Developments Ltd (more than SGD3bn as of 31 Dec 2021) and GuocoLand Ltd (SGD730mn from a project green loan). The size of the green financing market is already sizeable, with one local bank having already achieved SGD34bn of loans in its sustainable finance portfolio as of 2021, ahead of its target of reaching SGD25bn sustainable finance portfolio by 2025.

**Alignment with sustainability to improve access to financing:** In general, financial institutions and certain investors are already active in sustainable finance. Several local and certain foreign banks have introduced green and sustainability-linked loans to support the financing towards a low-carbon economy including renewable energy as well as transition financing. Three local banks have joined the Net-Zero Banking Alliance, targeting reduced emissions by 2030 and a much further reduction by 2050 for several sectors including real estate. Many banks have also become signatories to the Equator Principles which require signatory banks to identify, assess and manage environmental and social risks when financing projects. We think real estate companies who are reliant on funding, may in time to come, could be compelled to comply with the required sustainability practices, or they may face reduced funding opportunities.

**Differentiated pricing for being sustainable?:** Global credit rating agencies have begun to differentiate credits, with corporates scoring higher in ESG potentially enjoying higher credit ratings, which in turn should improve the cost of funding. In the SGD credit market, although we have yet to observe greenium (e.g. advantageous pricing to the issuer for green issuances), the market has been developing and maturing. There are about SGD11bn green, sustainability, social and sustainability-linked (“GSSSL”) credit issuances outstanding in the SGD market, of which developer and housing related entities (Frasers Property Ltd, Housing & Development Board) account for SGD4.1bn of the issuances.

Figure 3: Sustainability financing in the SGD credit market

Organisation	Amount (SGD million)	Type of financing	Issue date
Frasers Property Ltd	300	Sustainability bond	Sep-21
Housing & Development Board	1,000	Green bond	Mar-22
Housing & Development Board	1,100	Green bond	Jul-22
Frasers Property Ltd	500	Green bond	Sep-22
Housing & Development Board	1,200	Green bond	Oct-22

Source: Company, OCBC

**Regulatory landscape to favour further growth of sustainability finance:** Regulators are also supporting the rollout of sustainability finance. The government announced through Singapore Budget 2022 that up to SGD35bn of green bonds would be issued by the government and statutory boards by 2030. The Singapore Green Bond Framework which will be used as a reference for such issuance was structured to align with the core components and key recommendations of the International Capital Market Association (“ICMA”) Green Bond Principles 2021 and ASEAN Green Bond Standards 2018. According to Ministry of Finance, proceeds will be used in eight categories of projects, with green buildings as one of the categories. Issuances by the government will support Singapore’s decarbonisation efforts and deepen the green financing market by serving as a reference for the corporate green bond market and deepen market liquidity for green bonds by attracting issuers, capital and investors. Separately, the Green and Sustainability-Linked Loans Grant Scheme was launched by Monetary Authority of Singapore (“MAS”) to defray expenses for validation of green loan credentials. The loans must be aligned with internationally recognised standards.

#### **Selected strategies adopted by real estate companies**

To tackle their carbon footprint, real estate companies have several approaches, including retrofitting buildings and improving energy efficiency, on-site renewables and carbon offsets and renewable energy certificates.

**Retrofitting buildings and improving energy efficiency:** We believe retrofitting is a quick win for aged buildings. Primarily, this delivers positive net present value with short-term payback, according to findings from URA described in the earlier part of this publication. Such retrofits may include replacing aged chiller systems with modern ones which are energy efficient, usage of energy-efficient light bulbs, installations which filter out heat. Retrofitting can also provide other benefits such as lengthening the lifespan of the building and enhancing value, as well as producing a more conducive environment for the tenants. In addition, there can be investments in technology to increase energy efficiency, which can yield 8-15% operational return on investments, according to CapitaLand Investment Ltd (“CLI”). Based on our attendance at CLI’s investor day, we think this could involve the use of sensors to monitor and optimise temperatures and energy usage on a real-time basis.

**On-site renewables:** With steep declines in the cost of production in solar energy and soaring prices of electricity, on-site renewables such as rooftop solar panels can partly or more than fully offset energy usage. For example, Keppel Infrastructure @ Changi building was awarded the Green Mark Platinum Positive Energy certification, with the building fitted with 4,000 sqm of solar panels producing more than double the energy it consumes. NZEB@SDE, which is a purpose-built zero energy building commissioned by National University of Singapore, is designed to consume only as much energy as it produces, with 1,200 solar panels installed. While these are examples of positive or zero energy buildings, in practice we think it is a challenge for higher density buildings to reach net-zero energy with just on-site renewables. After all, these buildings are the exceptions but not the norm. According to Solar Energy Research Institute of Singapore, Singapore’s potential to deploy 8.6 Gigawatt-peak of solar energy by 2050 would only satisfy 10% of the projected energy demand. For off-site renewables (e.g. solar and wind farms), options within Singapore are limited currently.

**Carbon offsets and renewable energy certificates (“REC”):** For carbon emissions that cannot be reduced (e.g. retrofitting buildings, use of technology) or replaced (e.g. on-site and off-site renewables), renewable energy certificates and carbon offsets can be purchased. Examples include CapitaLand purchasing REC from CapitaLand Ascendas REIT which has installed solar panels on its industrial properties, as well as City Developments Ltd (“CDL”) purchasing REC on SP Group’s blockchain platform for its electricity consumed at its headquarters and part of its commercial buildings operations to offset 734 tonnes of carbon emissions. CDL has also purchased high-quality carbon credits to offset its emissions through Climate Impact X (a global carbon credit exchange). The credits are expected to offset 6% to 7% of CDL’s emissions over 3 years (based on Scope 1, Scope 2 and Scope 3 emissions from CDL’s operations in Singapore in 2019).

### Sustainability-related disclosures

**Increasing disclosure requirements amidst gaps:** Concurrent to the developments on environment/emissions front, disclosure requirements and expectations of companies (including property developers) to do more have increased. According to International Organization of Securities Commissions (“IOSCO”), investor demand for sustainability-related information is currently not being met by companies’ sustainability-related disclosures. Existing gaps include incomplete, inconsistent, and incomparable sustainability-related disclosures by companies. In turn, this leads to potential risks of information that can be misleading to investors.

**Singapore Exchange (“SGX”) to step up disclosures by listed companies:** The SGX already requires sustainability reports to be issued for SGX-listed companies. This includes the disclosures on material ESG factors, policies, practices, performance and targets in relation to the material ESG factors. Further to this, climate-related reporting based on Task Force on Climate-related Financial Disclosures (“TCFD”) from FY2024 for the real estate industry will be required, along with disclosures on board diversity. The SGX does not prescribe the specific sustainability framework to use though listed companies have to explain its choice for the framework that is chosen.

**Relevant frameworks to provide transparency and standardisation:** Specific to the real estate industry, Global Real Estate Sustainability Benchmark (“GRESB”) is an industry-led organisation that provides standardised and validated ESG data to financial markets. Other frameworks include Global Reporting Initiative (“GRI”), Sustainability Accounting Standards Board (“SASB”), International Integrated Reporting Council (“IIRC”), TCFD, CDP Global (“CDP”) and Climate Disclosure Standards Board (“CDSB”). With the adoption of one or more of such frameworks, a standardised approach should mitigate concerns on greenwashing while potentially providing information on financially material sustainability factors which helps to inform investors on the relevant risks and opportunities.

**Explanation of Issuer Profile Rating / Issuer Profile Score**

**Positive (“Pos”)** – The issuer’s credit profile is either strong on an absolute basis or expected to improve to a strong position over the next six months.

**Neutral (“N”)** – The issuer’s credit profile is fair on an absolute basis or expected to improve / deteriorate to a fair level over the next six months.

**Negative (“Neg”)** – The issuer’s credit profile is either weaker or highly geared on an absolute basis or expected to deteriorate to a weak or highly geared position over the next six months.

To better differentiate relative credit quality of the issuers under our coverage, we have further sub-divided our Issuer Profile Ratings into a 7-point Issuer Profile Score scale.

IPR	Positive		Neutral			Negative	
IPS	1	2	3	4	5	6	7

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**Explanation of Bond Recommendation**

**Overweight (“OW”)** – The bond represents **better relative value** compared to other bonds from the same issuer, or bonds of other issuers with similar tenor and comparable risk profile.

**Neutral (“N”)** – The represents **fair relative value** compared to other bonds from the same issuer, or bonds of other issuers with similar tenor and comparable risk profile.

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**Other**

**Suspension** – We may suspend our issuer rating and bond level recommendation on specific issuers from time to time when OCBC is engaged in other business activities with the issuer. Examples of such activities include acting as a joint lead manager or book runner in a new issue or as an agent in a consent solicitation exercise. We will resume our coverage once these activities are completed.

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