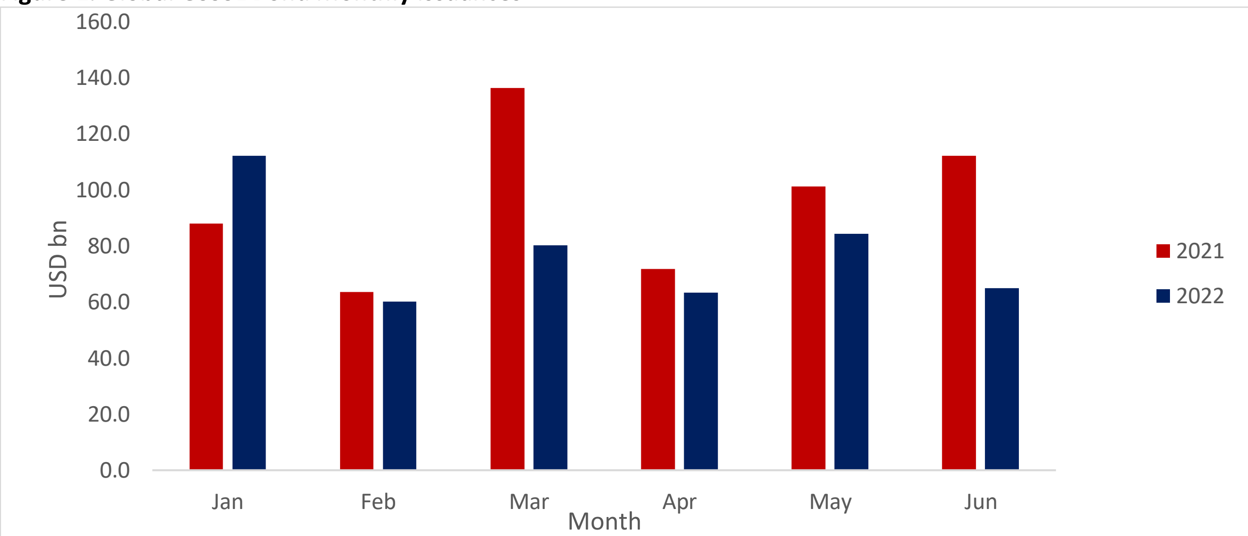
Expanding the Green, Social, Sustainability and Sustainability-linked ("GSSSL") Market

Global Performance of GSSSL: Globally, GSSSL bond sales from governments and corporates total USD440.6bn YTD, down 20.5% y/y from the same period last year. Of this amount, more than half are from green bond sales, per data from Bloomberg. This lower figure may be due to potential headwinds from rates volatility and economic growth slowdown concerns, delaying corporate bond market issuers' decisions in coming to the market. However, we think that demand for bonds linked to environmental, social and governance ("ESG") initiatives may remain strong due to the increased awareness of risk for traditional business models in the path to decarbonisation, asset management firms' investment mandates and investors' preferences and beliefs. A PwC 2021 Global Investor Survey reported that 79% of respondents consider ESG risks to be an important factor in investment decision-making, while 82% think that companies should embed ESG as part of their corporate strategy. As of writing, YTD ESG and green bond investments based on the Bloomberg MSCI Global Aggregate Index returned -14.29% (on a total return basis). Though this is in the negative territory, it stands 0.99% higher than the Bloomberg Global Aggregate Treasuries Bond Index Total Return YTD over the same period.

Do note that for the purposes of this piece, we are using the catch-all term "GSSSL bond", although the information also applies to perpetuals. In the SGD corporate credit market, there is one green perpetual outstanding as of writing.

Figure 1: Global GSSSL Bond Monthly Issuances



Source: Bloomberg

GSSSL and more: For ease of identification of the various bonds, at OCBC Credit Research, we are opting to use the following stand-out icons to label these GSSSL instruments specifically going forward.

Icon	Type of bonds	Definition
	Green bond	Proceeds from these bonds are specifically allocated to financing new and existing projects or activities with positive environmental impacts.
	Social bond	To qualify as a social bond, the proceeds must be used to finance or refinance social projects or activities that achieve positive social outcomes and/or address a social issue.
	Sustainability bond	Sustainability bonds are issues where proceeds are used to finance or re-finance a combination of green and social projects or activities.
	Sustainability-linked bond	These bonds are structurally linked to the issuer's achievement of climate or broader United Nations Sustainable Development Goals ("UN SDG") targets. Sustainable performance target ("SPT")'s that are not met then results in a decrease or increase in the instrument's coupon rate.
	Gender bond	A type of social bond where proceeds are used to support the specific purpose of raising awareness on gender inequality and women empowerment.
	Blue bond	A type of green bond where proceeds are used on projects or strategies leading to a healthy and productive ocean and marine life.

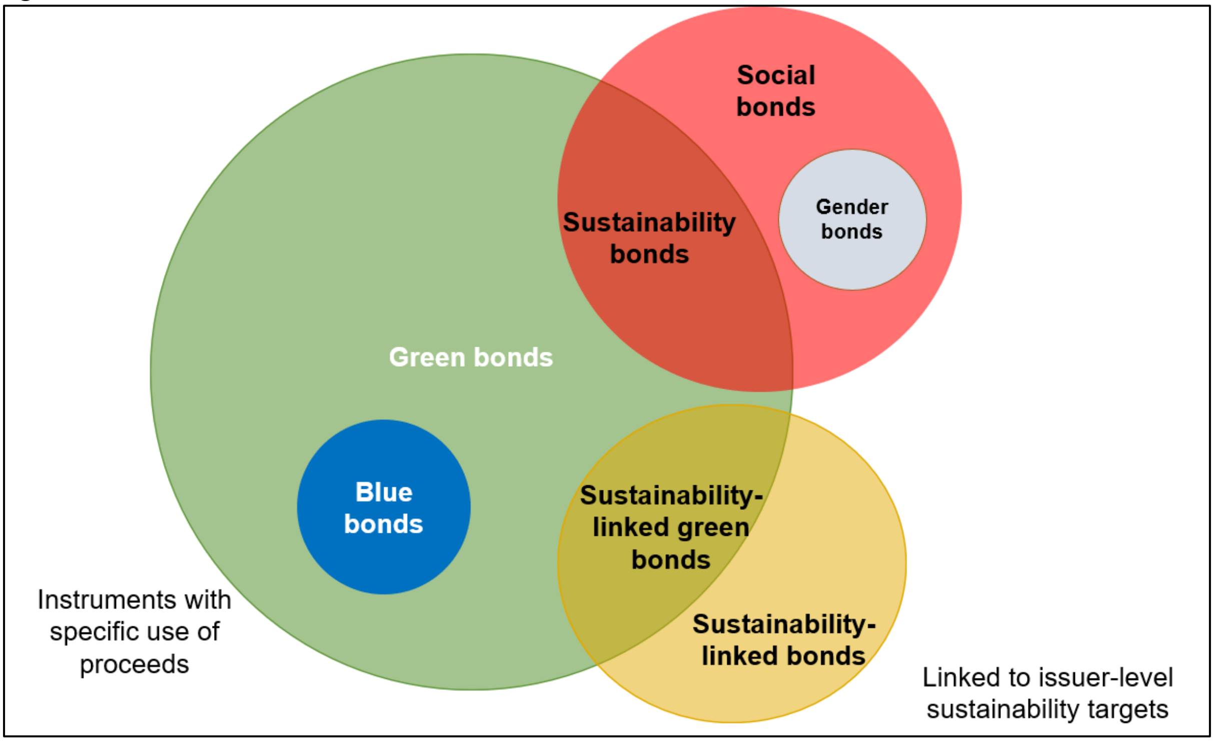
Source: OCBC Credit Research

Apart from GSSSL, we are seeing an increased variation in the type of related bonds, leading us to update Figure 13 below. In the Asia-Pacific region the Asian Development Bank ("ADB") has been issuing gender bonds, with the latest issuance being a 5-year NZD850mn Kauri gender bond in May 2022. The proceeds will be used for eligible projects which promote gender equality and women's empowerment either directly or indirectly through governments or financials or other institutions in private sector projects. Another new issuance in the market was a USD230mn sustainability-linked green bond by Yunnan Energy Investment Overseas Finance Co Ltd. Use of proceeds would be for refinancing existing offshore indebtedness which has been incurred in connection with financing and/ or refinancing of eligible green projects under its sustainable finance framework. Additionally, as a SLB, sustainability performance targets are also tied to this bond – in this case, the targets relate to the company's wind and solar power generating capacities, with a coupon step-up penalty of 15bps per annum and 10bps per annum should the company fail to meet these respective wind and solar power targets.

Going forward, a new category of issuance can be expected too. In Japan where companies are lagging other major economies in terms of the percentage of women in executive positions, its largest real estate developer Mitsubishi Estate Co. ("MEC") is planning to price a novel bond, where it would have both environmental and diversity related goals linked to it. This stands out, as companies typically have separate frameworks for their environmental and social objectives, rather than a combined one. Under this framework, MEC plans to cut emissions, and also increase the proportion of its female managers from 5.8% in FY2020 to 40% by FY2050. If MEC misses these targets, it will purchase international third party accredited voluntary carbon credits or make donations.

In addition, as mentioned in our outlook, the greenium on GSSSL bonds have begun to emerge in some areas, particularly in the automotive sector which currently commands the largest price advantage both in the United States and European corporate debt markets per Bloomberg. Such greenium provides a price advantage for issuers and could encourage more issuances in the GSSSL space going forward. However, such greenium should not be overstated – according to a Federal Reserve paper published in June 2022. The greenium paid on such GSSSL issuances over conventional bonds is not linked to the credibility of the projects they fund, but rather, biased towards issuances from investment-grade European firms.

Figure 2: Classification of GSSSL bonds



Source: OCBC Credit Research
Note: As far as we are aware, there have not been any SGD blue, sustainability-linked green bond or gender bonds yet.

Singapore actively issuing GSSSL bonds: In 1H2022, Singapore issuers have been active in issuing GSSSL bonds. In this piece, we focus on green, social and sustainable bonds ("GSS") in Singapore. To recap, GSS bonds are required to be tied to a specific green or social project, while SLBs are bonds which are not tied to specific use of proceeds but have coupon adjustments linked to SPT. In a later piece, we focus on sustainability-linked bonds ("SLB").

As of 30 June 2022, a total of SGD1.81bn SGD GSSSL bonds were issued in Singapore YTD, with the flurry of GSSSL bonds issuances seen in the month of March and April this year. These consist of two green bonds, one social bond and two SLBs, as compared to just three GSSSL issuances in 1H2021. For 2021, there were a total of ten GSSSL issuances. With the rising rates environment, issuers may play catch up with issuances in 2H2022, before further expected hikes. In view of this and the already higher y/y issuances in 1H2022, we see possibility of 2022 recording a higher number of GSSSL issuances than the ten in 2021.

The largest issuance came from Housing and Development Board ("HDB"), a statutory board under the Ministry of National Development responsible for Singapore's public housing. HDB priced a SGD1.0bn 5-year senior unsecured green bond at 1.845%, with net proceeds to be used exclusively for financing or refinancing its green projects under the project category of green buildings. Notably, this is HDB's first green bond issuance following its green finance framework established on 13 January 2022. Eligible projects under this framework include the development of new residential and non-residential HDB projects which are planned to obtain the Building and Construction Authority ("BCA") Green Mark certification of Gold Plus or above. These projects are expected to yield environmental benefits, including a reduction in energy usage and carbon emissions in line with the UN SDGs and Singapore's 2030 Green Plan.

The other green bond was from Ascendas Real Estate Investment Trust ("AREIT"), a leading Industrial REIT listed in Singapore. AREIT is a well-known issuer in Singapore and in the GSSSL space. Notably, AREIT was the first REIT in Singapore to issue a SGD green bond in August 2020 and subsequently a green perpetual in September 2020. In April 2022, it priced a SGD208mn 7-year green bond at 3.468%, tightening from an initial price target ("IPT") of 3.75% area. As a green bond, similar to the HDB issuance mentioned above, net proceeds are to be used for financing or refinancing projects in line with the company's green finance framework, such as those relating to green buildings, renewable energy, sustainable water management, and clean transportation.

First REIT, also a Singapore listed REIT, though invests primarily in real estate used by healthcare and healthcare-related sectors, priced a SGD100mn 5-year senior unsecured social bond at 3.25%, tightening from an IPT of 3.5% area. This issue was guaranteed by the Credit Guarantee & Investment Facility ("CGIF"), a trust fund of the Asian Development Bank. As a social bond, net proceeds from this issuance will be used to refinance the company's current term loan in line with the eligible projects under its social financing framework. Under this framework, eligible projects include those relating to hospitals that offer essential healthcare services, nursing homes, and healthcare properties with a direct social impact on its target population. For context, First REIT established its Social Finance Framework in Mar 2022 to serve as a platform for the issuance of loans and bonds to attain specific social benefit outcomes and to fulfil one of the many United Nations Sustainable Development Goals ("UN SDGs"), of Good Health and Well-Being. Notably, this is SGD corporate credit market's first social bond to date.

Table 1: SGD Green/ Social Bonds issued in 2022

Type	Issuer	Issue	Amount Outstanding (SGD mn)	Current Ask Price	Current Ask YTM	Bond Recommendation	Issuer Profile
	Housing & Development Board	HDBSP 1.845% '27s	1,000	94.13	3.20%	NA	Unrated
	First Real Estate Investment Trust	FIRTSP 3.25% '27s	100	99.30	3.41%	OW	Neg (6)
	Ascendas Real Estate Investment Trust	AREIT 3.468% '29s	208	99.38	3.57%	UW	N (3)

Indicative prices as at 30 Jun 2022 Source: Bloomberg, OCBC Credit Research

Growing efforts on the government front: In June 2022, the Singapore government published the Singapore Green Bond Framework. This is a governance framework for sovereign green bond issuances under the Significant Infrastructure Government Loan Act 2021 ("SINGA"). The framework detailed the intended use of proceeds from green bonds, the governance structure to evaluate and select eligible projects, operational approach in managing the green bond proceeds and commitment to post-issuance allocation and impact reporting. The Singapore government will be issuing up to SGD35bn of green bonds by 2030 with its inaugural sovereign green bond under the SINGA in the coming months. These issuances will also be known as Green SGS (Infrastructure) bonds and will finance nationally significant infrastructure which meet the green criteria under the Framework. Increasingly, we are seeing more government issuances in the green space. In Greater China, the Hong Kong Monetary Authority ("HKMA") priced its first retail green bond (HKD20bn) on 18 May 2022. The Hong Government is not a new issuer in this sphere. It has previously priced green bonds with the bulk of issuance in 2021 in various currencies like CNY, EUR and USD with a total of approximately USD8.75bn. The 3-year retail green bond has a yield tied to inflation or 2.5%, whichever is higher. Proceeds raised from this bond will be used to back nine types of green projects. HKSAR plans to increase usage of wind and solar power and using waste to generate electricity as it strives to reach carbon neutrality by 2050. In Europe, Austria is also joining the bandwagon in sovereign green bond issuance. Austria issued its inaugural green bond of EUR4bn yielding 1.876% maturing in 2049. Proceeds of the bond will be used to partially or fully finance green projects benefiting environmental and climate-related areas. Austria aims to increase its share of renewable from the current 75% to 100% by 2030.

Classification of activities to be rolled out in short term and others: In May 2022, the Green Finance Industry Taskforce ("GFIT"), a taskforce convened by the Monetary Authority of Singapore ("MAS") comprising of market participants, published the second version of Singapore's green and transition taxonomy for public consultation. The taxonomy classifies economic activity into a traffic light system of green, amber and red, based on how environmentally sustainable (or conversely, harmful) an activity is, focusing on identifying activities which are green. In our view, the eventual roll out of this taxonomy, which is targeted to be finalised in 2023, means less scope for greenwashing to happen as arrangers, issuers and investors alike would have a commonly accepted reference point when assessing an issuer's activities. Issuers who have no green activities per the taxonomy may still be able to access the GSSSL market in our view, so long as they are credibly transitioning. Since SLBs are not tied to specific underlying projects, the quantum of SLBs that could be potentially issued by corporate credit issuers is higher versus instruments with specific use of proceeds in our view. We expect large scale green projects (and hence volume of green bonds) in Singapore to be driven by the public sector going forward.

Categories of Eligible Green Projects:

Renewable Energy	Sustainable Water and Wastewater Management
Energy Efficiency	Pollution Prevention, Control and Circular Economy
Green Building	Climate Change Adaptation
Clean Transportation	Biodiversity Conservation and Sustainable Management of Natural Resources and Land Use

Source: GFIT, MAS

The Singapore Exchange Regulation ("SGX RegCo") and the Accounting and Corporate Regulatory Authority ("ACRA") have jointly set up a Sustainability Reporting Advisory Committee ("SRAC") to serve as an advisor on the suitability of international sustainability reporting standards for implementation in Singapore, and to look into the development of a roadmap for wider implementation of sustainability reporting for Singapore-incorporated companies, beyond those listed on SGX. The incorporation of SRAC comes ahead of several sustainability reporting requirements for companies, including mandatory climate reporting for issuers in the financial, energy, and agriculture, food and forest products industries from 2023, and for listed companies from the materials and buildings, and transportation industries from 2024.

Treasury Research & Strategy

Macro Research

Selena Ling
Head of Research & Strategy
LingSSSelena@ocbc.com

Tommy Xie Dongming
Head of Greater China Research
XieD@ocbc.com

Wellian Wiranto
Malaysia & Indonesia
WellianWiranto@ocbc.com

Howie Lee
Thailand, Korea & Commodities
HowieLee@ocbc.com

Ong Shu Yi
Environmental, Social & Governance (ESG)
ShuyiOng1@ocbc.com

Herbert Wong
Hong Kong & Macau
herberthtwong@ocbcwh.com

FX/Rates Strategy

Frances Cheung
Rates Strategist
FrancesCheung@ocbc.com

Credit Research

Andrew Wong
Credit Research Analyst
WongVKAM@ocbc.com

Ezien Hoo
Credit Research Analyst
EzienHoo@ocbc.com

Wong Hong Wei
Credit Research Analyst
WongHongWei@ocbc.com

Toh Su-N
Credit Research Analyst
TohSN@ocbc.com

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

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.

Underweight ("UW") – The represents **weaker relative value** compared to other bonds from the same issuer, or bonds of other issuers with similar tenor and comparable risk profile.

Please note that Bond Recommendations are dependent on a bond's price, underlying risk-free rates and an implied credit spread that reflects the strength of the issuer's credit profile. Bond Recommendations may not be relied upon if one or more of these factors change.

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. We may also suspend our issuer rating and bond level recommendation in the ordinary course of business if (1) we believe the current issuer profile is incorrect and we have incomplete information to complete a review; or (2) where evolving circumstances and increasingly divergent outcomes for different investors results in less conviction on providing a bond level recommendation.

Withdrawal ("WD") – We may withdraw our issuer rating and bond level recommendation on specific issuers from time to time when corporate actions are announced but the outcome of these actions are highly uncertain. We will resume our coverage once there is sufficient clarity in our view on the impact of the proposed action.

Analyst Declaration
The analyst(s) who wrote this report and/or her or his respective connected persons held financial interests in the following above-mentioned issuers or companies as at the time of the publication of this report: Singapore Airlines Ltd, GuocoLand Ltd, Oxley Holdings Ltd, Frasers Centrepoint Trust, Suntec Real Estate Investment Trust, Mapletree Commercial Trust, Frasers Hospitality Trust, Lendlease Global Commercial REIT, Ascott Residence Trust.