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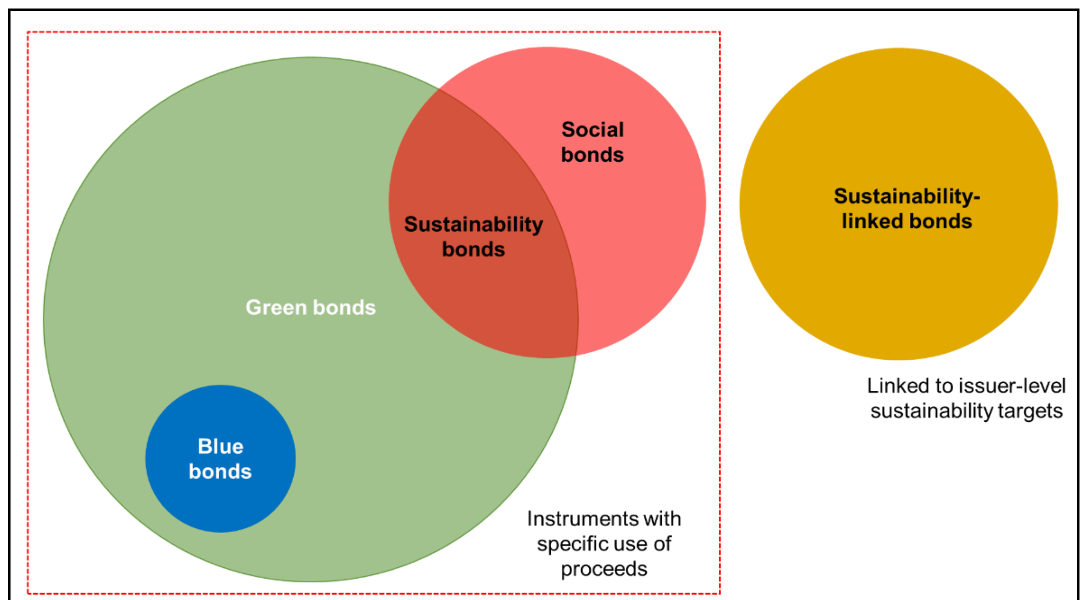
Getting to Know the Sustainable Bond Market and Sustainability Linked Bonds

With companies increasing their focus on Environmental, Social, and Governance issues, as well as aligning themselves with numerous UN Sustainable Development Goals ("SDG"), this evolution has translated to the capital markets. Issuers are seeking innovative debt instruments to ink down their sustainability promises and commit their raised capital to either a specific use-of-proceeds or to reach an ambitious sustainability performance target ("SPT") which is set at the issuer level. As of present, within the ESG fixed income space, there exist four primary forms of sustainable bonds – **Green bonds, Social bonds, Sustainability bonds, and Sustainability-linked bonds**. Collectively, we refer to this group as "GSSSL bonds".

As seen in **Figure 1**, this can be further split into two segments, instruments with a specific use of proceeds – Green bonds, social bonds, and sustainability bonds, and instruments that have no specific use of proceeds, but are tied to the issuer's sustainability targets – Sustainability-linked bonds. It is easy to confuse between sustainability bonds and sustainability-linked bonds due to the similarity in their naming convention. However, it is important to note that these bonds are different in their characteristics.

Figure 1: Classification of GSSSL bonds



Source: OCBC Credit Research

What is a sustainability-linked bond?

Recently, issuers have been increasingly leveraging on a relatively new bond instrument called a sustainability-linked bond ("SLB"), essentially a typical bond with an **adjustment that links their Sustainability Performance Targets ("SPTs") to the issue structure of the bond**. In this section, we will be deep-diving into sustainability-linked bonds and how it can help companies achieve its sustainability targets.

So, what incentivises companies to issue SLBs over green, social, and sustainability ("GSS") bonds? Simply put, not every company has a green or social projects in their pipeline. With GSS bonds requiring use of proceeds to be tied to a green or social project, this would make a large proportion of companies disincentivised to issue GSS debt if these investments are not aligned with the company's strategy. Yet, many companies want to improve their overall sustainability and seek a sustainable debt instrument to drive its sustainability transformation journey. In this instance, a SLB would be suitable for these companies.

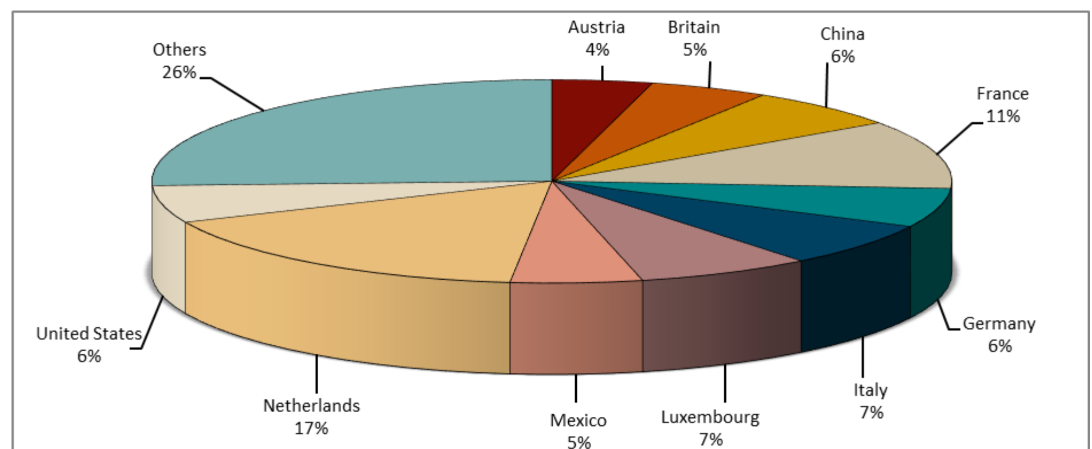
According to Bloomberg, sustainability-linked bonds can be viewed as behaviour-based debt, where the intent is to encourage issuers to modify their corporate behaviour. These bonds are structurally linked to the issuer's achievement of ESG or broader SDG targets, such as linking the coupon of a bond to a pre-determined key performance indicator ("KPI") or SPT. SPTs that are not met then generally results in an increase in the instrument's coupon rate, penalising issuers for not achieving their pre-set targets.

> *"The overarching intention underlying SLBs is the reinforcement of accountability from issuers with regards to their targets through introduction of a tangible stake beyond reputation ("skin in the game") in the achievement of their strategic sustainability objectives." – International Capital Market Association ("ICMA")*

The history for SLBs is a short one, as these bonds did not exist until 2019 when Enel issued a USD1.5 billion 5-year bond with a 2.65% coupon. Since then, the SLB market has grown from strength to strength, as seen from total SLB issuances growing at a CAGR of 350% from 2019 to 2021, with USD103.3bn issued in 2021. Cumulatively, the total amount outstanding for SLBs is USD119.7bn across 170 issuers.

As seen in **Figure 2**, Europe-based issuers dominated the SLB market in 2021, with the largest issuers coming from the Netherlands (17%), France (11%), Luxembourg and Italy (tied at 3rd with 7% of total SLB issuances each), and Germany (6%). This is unsurprising given Europe's reputation for being a leader in the sustainability space. Notably, Enel Finance International NV, which is based in the Netherlands, was responsible for USD12.1bn or 11.7% of total SLB issuances in 2021. The two largest economic powers in the world, US and China, is each only responsible for 6% of total SLB issuances. Both the sustainable debt capital markets in these countries tend to lag the European market though is forecasted to grow exponentially in the coming years.

Figure 2: Breakdown of SLB issuers by geography, 2021



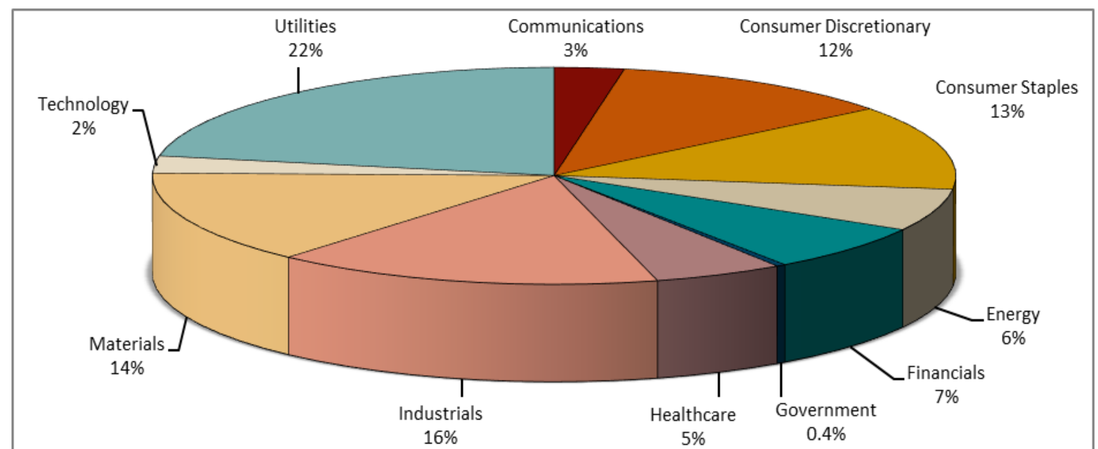
Source: Bloomberg

Remember, green bond issuers are required to use proceeds for green projects, while SLB issuers

are not restricted in how their proceeds are used. For the majority of companies, this limits their ability to issue a green bond as they do not have a green project on hand. Conversely, the flexibility of an SLB allows these companies to use proceeds how they want to while still promising investors that they will become more sustainable in the long-term. Comparing **Figure 3** and **Figure 4**, we can see that the industry split is more spread out in the SLB market, with 5 industries (Utilities, Consumer Discretionary, Consumer Staples, Materials, and Industrial) each taking up more than 10% of the SLB market, as compared to the green bond market where the majority of issuances (84%) is concentrated in the Utilities, Financials, and Government sector.

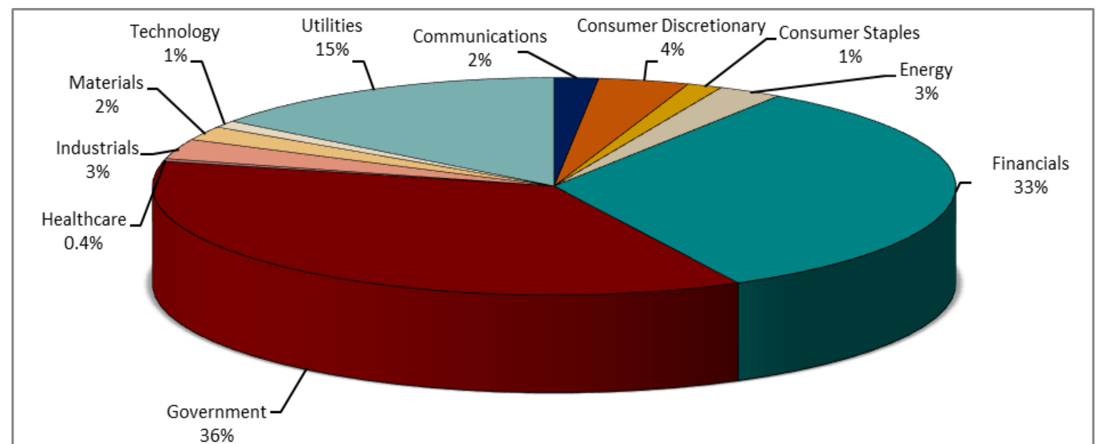
As seen in **Figure 3**, the Materials and Industrials sectors account for 14% and 16% of total SLB issuances. This is significant because an argument made for SLBs is how it allows highly pollutive and transiting industries to showcase their commitment to their sustainability journey. Out of the four main GSSSL instruments, we think SLBs are the most suitable sustainable bond structure for these industries to use. Thus, looking ahead, we can expect these industries to continue to take up a good chunk of the total SLB issuances.

Figure 3: Breakdown of SLB issuers by industry[1], 2021



Source: Bloomberg
[1]Refers to BICs Level 1 Classification

Figure 4: Breakdown of Green bond issuers by industry, 2021



Source: Bloomberg

Five Core Principles

Since the SLB market is relatively new and the sustainable finance market in general is still undergoing widespread regulation changes, the guidelines for SLBs are also in its infancy stages and could potentially change in the future. The current framework that companies voluntarily adhere to is the ICMA Sustainability-Linked Bond Principles ("SLBP"), which was published in 2020. The Sustainability-Linked Bond Principles are voluntary guidelines that illustrates the gold standard for companies to follow when issuing a sustainability-linked bond.
To adhere to the SLBP, issuers need to comply with the following five core principles. This is a **simplified and shortened version** of the principles and interested parties can look at the actual documentation for a detailed breakdown.

(1) **Selection of Key Performance Indicators**: The KPIs selected should be material to the company's business operations and strategy, quantifiable on a consistent methodological basis, externally verifiable, and able to be benchmarked.
(2) **Calibration of Sustainability Performance Targets**: Represent a material improvement in the selected KPIs.
(3) **Bond characteristics**: The financial and/or structural characteristics which can change depending on whether the issuer is able to attain its SPTs. For example, the most common structure is for the SLB to have a step-up clause in which the coupon rate increases when the trigger event takes place.
(4) **Reporting**: Companies should keep investors updated at least annually with the performance of the selected KPIs and information that is relevant to the ambitions of the SPTs.
(5) **Verification**: Issuers should seek independent and external verification of their performance level against each SPT or each KPI by a qualified external reviewer with relevant expertise at least once a year. While the pre-issuance external review such as a Second Party Opinion is recommended, post issuance verification is a necessary element of the SLBP.

Case Study: Nanyang Technology University

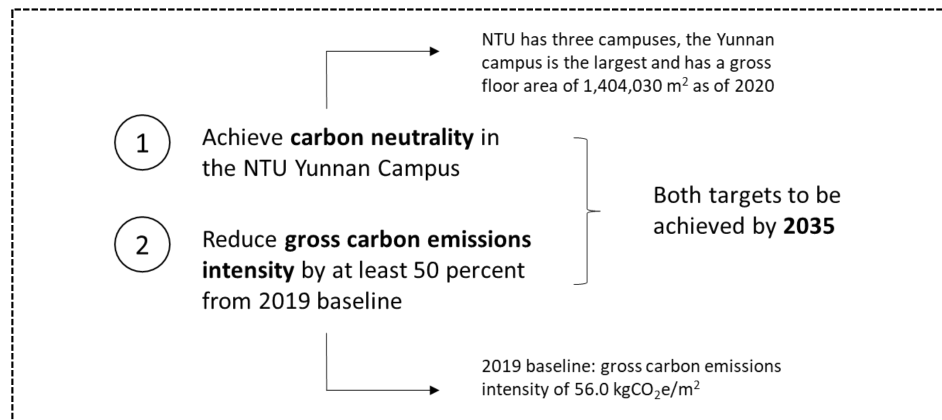
Nanyang Technology University ("NTU") is one of the premier educational institutes in the world, with a vision to become a Smart Campus and to attain the rank of the greenest university campus globally. Per the QS World University Rankings, NTU has been rated as the world's best young university for seven consecutive years and is currently ranked 12th overall. As a testament of its sustainability, NTU has 62 Platinum Green Mark Awards: 60 for building projects, one for the rejuvenated Yunnan Garden and a District Award for the campus. Furthermore, NTU has eight zero energy and two super-low energy buildings.

On 11 October 2021, NTU announced its Sustainability Manifesto alongside its SGD1 billion Medium Term Note ("MTN") program. This paired with its Sustainability Framework, allowing the university to issue SLBs through the debt capital markets. Through its manifesto, the university stated that it plans to achieve carbon neutrality by 2035, together with a 50 percent reduction in its gross carbon emissions intensity by the same date. Amongst others, the manifesto declared that NTU will achieve 100 percent Green Mark Platinum certification for all eligible buildings on the main NTU campus (the Yunnan campus in the west of Singapore) and NTU's net energy utilisation, water usage, and waste generation will reduce by 50 percent by March 2026 (compared to the baseline levels of 2011).

In a drawdown of its SGD1 billion MTN program, NTU priced a SGD650 million 15-year senior unsecured bond at 2.185%. NTU's SLB is the second of two SLBs outstanding in the SGD market, the other being Sembcorp Industries Ltd SGD675mn 2.66%'32s Sustainability-linked Bond. According to

the bond's pricing supplement, the use of proceeds will be allocated for the refinancing of existing borrowings, general corporate purposes, working capital and capital expenditure requirements (including supporting the Issuer's sustainability research and initiatives, delivery of educational programs and generational upgrade of infrastructure). The Sustainability Performance Target is similar to its commitment in its Sustainability Manifesto and can be generally split into two parts as seen in **Figure 5**.

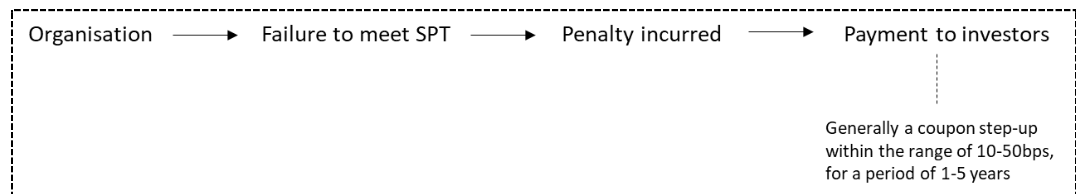
Figure 5: NTU SLB Sustainability Performance Target



Source: Nanyang Technology University

In relation to NTU's sustainability-linked bond, it has certain interesting characteristics that differentiate it from other SLBs in the market. As seen in **Figure 6**, for other SLBs, one of the reasons why it could be more attractive to an investor compared to a plain vanilla bond is due to the penalty incurred being allocated to them.

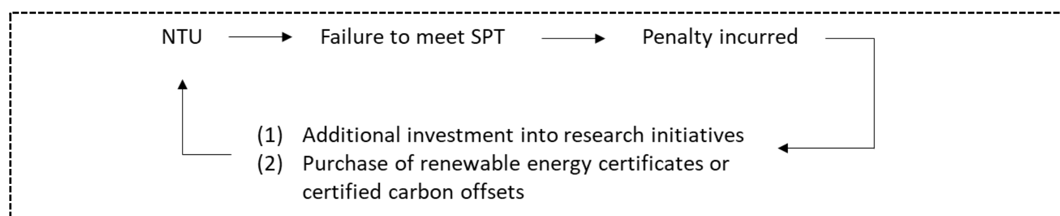
Figure 6: Conventional sustainability-linked bond structure



Source: Nanyang Technology University

While this is generally the case when an organization fails to meet its SPT, NTU's SLB has a unique structure that allocates the penalty "back" to the university. Specifically, as seen in **Figure 7**, an amount equivalent to 50bps of the outstanding principal amount (~SGD3.25mn[1]), will be allocated to investments into research initiatives in the fields of climate research or climate mitigation or adaption technology, or the purchase of renewable energy certificates or certified carbon offsets. According to Capital Monitor, this is the second SLB ever which features this unique structure, the first being All Nippon Airways ("ANA") JPY20 billion 5-year 0.48% sustainability-linked bond. [1] **Estimated penalty**: 0.005% x SGD650,000,000 = SGD3,250,000.

Figure 7: NTU sustainability-linked bond structure



Source: Nanyang Technology University

NTU's sustainability-linked bond shows us another pathway. In the global push for a carbon neutral economy by 2050, one critique of SLBs is that investors should not be benefiting from a company's inability to meet their sustainability targets. Thus, this innovative structure helps to negate a main criticism of SLBs (in that investor benefit from issuers not meeting targets), while staying true to the primary goal of helping a company commit to its sustainability journey.

__Looking ahead__

(1) **Sustainability-linked loans and sustainability-linked bonds:** To understand the true potential of the sustainability-linked bond market, we can look towards its sister instrument – Sustainability-linked loans ("SLL") – for an indication of where the SLB market is headed. Given a two-year head start in 2017, the SLL market is currently much bigger than the SLB market with total issuance volume of USD378.3 billion in 2021 according to data from Bloomberg. Similarly, the SLL market is also much larger than the green loans market, which peaked in 2019 with a total issuance volume of USD94.4bn and only issued USD65.3 billion in 2021. This is mainly attributed to the flexible nature of SLLs, which do not restrict the issuer to solely green or social projects. As mentioned above, this attracts a wider range of issuers, especially in hard-to-abate industries such as transportation and heavy industries. Similarly, with SLBs being much more flexible for issuers than green, social, or sustainability ("GSS") bonds, the potential for SLB issuances to outpace GSS bonds is definitely not a farfetched proposition.

(2) **More firms in the "transition" industries issuing SLBs**: As mentioned above, high carbon emitting firms who want to align themselves with a carbon neutral economy but do not have green projects in the pipeline can issue an SLB. From **Figure 3**, the Materials and Industrials sectors account for 14% and 16% of total SLB issuances. Both sectors are highly pollutive, as the processes involved in the end product generates much carbon emissions as well as other forms of pollution such as water and air pollution. For example, the manufacturing of paper and forest products requires widespread deforestation, the production process of steel requires the highly pollutive baking process of coke, while the manufacturing of equipment generally involves the intense usage of fossil fuels. For these companies, it is hard for them to issue green bonds as the majority of their projects might not qualify as a green project. Thus, an SLB would be the most viable instrument for them to show their commitment to their sustainability journey.

(3) **Innovation of new sustainable debt structures**: As the GSSSL market is still relatively nascent, numerous companies have come up with innovative structures to suit both their corporate needs and to fit their sustainability journey. **Verbund**, an Austria-based electricity company, issued a EUR500 million 20-year green sustainability-linked bond with a 0.90 percent coupon. As a utility company with numerous renewable energy ("RE") projects in the pipeline, its use of proceeds as defined in its Green Financing Framework will be allocated to RE projects. Thus, both the use of proceeds structure and Verbund's

sustainability performance target (increasing its RE capacity) essentially complemented each other. Another interesting concept was from the **Bank of China** ("BOC") who issued the world's first sustainability re-linked bond with a USD300 million 3-year issuance at 1 percent. The bond coupon comprises two parts – a base rate of 1 percent and a coupon adjustment rate, which is determined by reference to the performance of the relevant sustainability performance targets of the underlying Sustainability Linked Loans ("SLLs") portfolio, as designated by Bank of China. Each coupon adjustment is subject to a cap and a floor, which will not be cumulative. Compared to other SLBs which only have a coupon step-up clause, BOC's sustainability re-linked bond also has a step-down mechanism which activates if the underlying loan borrowers manage to exceed their sustainability target.

(4) **Regulation changes as the market is still nascent**: The European Central Bank (ECB) included sustainability-linked bonds (SLBs) as eligible collateral in their asset purchase programme. This meant the market started to recognise SLBs as a viable tool for supporting corporate transition through finance. In a proposed amendment to the EU green bond standard, issuers of sustainability-linked bonds need to develop a transition plan to show investors how they will adhere to a 1.5°C increase scenario and become carbon neutral by 2050, should they wish to adopt the EU label. Generally, as the market slowly matures and more participants are involved, the regulations will also gradually be modified to ensure that greenwashing in the sustainable bond market is minimised.

Challenges

While we have noted the potential strengths of an SLB, there are a few shortcomings that an SLB must overcome to gain broader acceptance amongst market participants.

One is the lack of comparability, both within the SLB issuer's own curve against its more conventional bonds as well as against the SLB's of different issuers. This is because SPTs are unique and specific to the issuer and its circumstances which makes it challenging in comparing SLBs from a relative valuation perspective. Lack of comparability though is more an issue of investment returns rather than sustainability credentials, and while it means that the incentive for SLB growth in the short term will be driven almost entirely by sustainability issues rather than returns, we do not see lack of comparability as a major shortcoming for potential growth. This is given the current significant and growing interest in sustainability. We do believe however that lack of comparability is part of a wider valuation concern as the SLB market grows and matures – other considerations are the valuation of SLB's as they approach their SPT measurement and reporting dates and what it means for an SLB's bond price if they fail to meet their SPTs.

In our view, greenwashing accusations are at the top of the headwinds the SLB market faces given it impacts sustainability credentials. Sustainability funds at large asset managers have a mandate to only invest in assets that adhere to certain criteria. For several fund managers, SLBs do not meet these criteria as most targets and goals are not ambitious enough, especially with claims that these SLBs might actually slow down the sustainability transition of companies. An analysis done by Reuters showed that of 48 SLBs issued by the 18 biggest borrowers in 2021, nearly half, or 23, included a target which lets them improve at a slower rate than they have done previously. Furthermore, Reuters points out how Tesco had pledged to cut its carbon emissions by 60% by 2025 from its 2015 baseline, but the target was already 83% completed before the SLB was even launched.

The solution to overcoming lack of comparability and greenwashing is twofold in our view. Firstly, investors need to perform an in-depth assessment of issuers to ensure that they are undertaking material changes to enhance their sustainability performances. As the GSSSL markets slowly

matures, investors will definitely become more adept at conducting this specialised form of due diligence. Secondly, issuers need to set sustainability performance targets which are ambitious and go beyond a "business as usual" trajectory. Ensuring these two requirements are met will go a long way for the sustainability-linked bond market, enabling it to one day rival or even surpass the ever-expanding green bond market. Understanding these two concepts may also improve the ability to compare SLBs based on both sustainability concepts and hence investment returns. This issue may grow in importance as time goes on and greenwashing concerns possibly lessen and more SLBs approach their SPT reporting dates.

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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

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.

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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.

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