

Sustainability-Linked Bond Bumper Week

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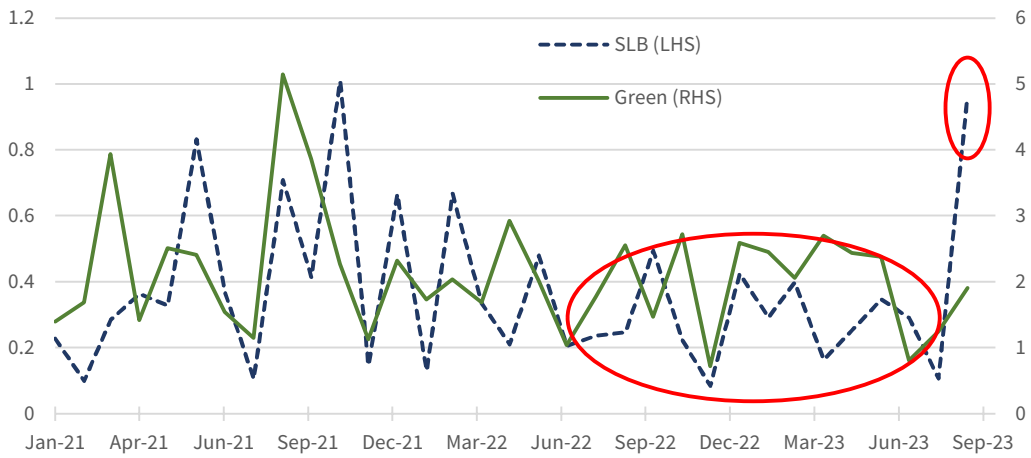
The bond market woke up in the first week of September, with at least 40 corporates tapping the high-grade debt markets on the 5th, making it the busiest session in US this year.[1] In the first five trading days of the month, eleven Sustainability-Linked Bonds (SLB) were priced, totalling $4.8bn of issuance. This daily average brings volumes back to the peak of 2021 (see Figure 1).

Here we review this bumper week of issuance. Using AFII methods and models, we analyse the impact and pricing of bonds, and look for trends in the structuring of SLBs.

This leads us to the following conclusions:

- **The sectors are broad**, with the majority of these issuances coming from outside the industries that most frequently use SLBs.
- **The eleven bonds include diverse structures**, with a hybrid, a convertible bond, and securities buying offsets included in this group. This shows that the SLB structure is being adopted more widely by fixed income market users.
- **Four of the five EUR SLBs include Scope 3 emissions, increasing the potential for impact by covering the full footprint of an issuer.** To achieve attractive pricing for issuers this must be combined with ambitious targets. The inaugural Ferrovial SLB has one target that seems easy to achieve, and one that has already been achieved, which reduces its option value.
- **Structures do not yet offer the minimum level of materiality,** to be classified as a "Greenback SLB", More material structures could encourage more investors into the asset class, and further tighten spreads for issuers.

Figure 1. Average daily issuance ($bn) for SLB and green bonds from 1 Jan 2021 to 7 Sep 2023. Source: Bloomberg, accessed 8 Sep 2023.



[1] "September Flurry of Corporate Debt Sweeps Global Markets", Bloomberg, 5 Sep 2023.

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Introduction

Volumes of sustainable debt have fallen since peaking in 2021.[2] Rate volatility was extreme in 2022 reducing broader fixed income issuance, however some market observers postulated that this drop was due to a lack of climate ambition shown by the companies issuing ESG-labelled bonds.[3]

Figure 1 shows average business day issuance volumes for SLB and green bonds, compared to the first five business days of Sep 2023. Even comparing to the busiest months in 2021, the total issuance so far this month has been impressive in the SLB market, almost reaching the peak.

In this note we look at the eleven new bonds which have been priced in this five day period. Such increased volume will have brought the SLB product to new investors and, with many deals entering the market at once, important new trends in structuring may have emerged.

Bond details

Eleven SLBs have been issued in these five business days, totalling $4.8bn. Ten different issuers have brought bonds, six of them issuing SLBs for the first time. Full details are in Table 1.

Table 1. SLB issuance from 1 Sep 2023 to 7 Sep 2023. Source: Bloomberg, accessed 8 Sep 2023.

Issuer	Ticker	ISIN	Pricing Date	Sector	First SLB	Currency	Size	Maturity
SINOHYDRO 11 BURE CO	SINOHY		01-Sep-23	Industrial	Y	CNY	700,000,000	Perp
DAIWA HOUSE IND CO LTD	DAIWAH	JP350500BP93	01-Sep-23	Consumer, Cyclical	Y	JPY	19,000,000,000	07-Sep-33
DAIWA HOUSE IND CO LTD	DAIWAH	JP350500CP92	01-Sep-23	Consumer, Cyclical	Y	JPY	41,000,000,000	07-Sep-28
GUANGXI ENERGY GRP CO	GXGTEN		01-Sep-23	Utilities	N	CNY	300,000,000	01-Sep-26
ORANGE SA	ORAFP	FR001400KKM2	04-Sep-23	Communications	Y	EUR	500,000,000	11-Sep-35
TELUS CORP	TCN	CA87971MCC51	05-Sep-23	Communications	N	CAD	850,000,000	08-Sep-33
NSK LIMITED	NIPSEI	JP372080AP96	05-Sep-23	Industrial	Y	JPY	15,000,000,000	11-Sep-28
REXEL SA	RXLFP	XS2655993033	06-Sep-23	Consumer, Cyclical	N	EUR	400,000,000	15-Sep-30
REWE INT FINANCE	REWEEG	XS2679898184	06-Sep-23	Consumer, Cyclical	Y	EUR	900,000,000	13-Sep-30
FERROVIAL SE	FERSM	XS2680945479	06-Sep-23	Industrial	Y	EUR	500,000,000	13-Sep-30
ENI SPA	ENIIM	XS2637952610	07-Sep-23	Energy	N	EUR	1,000,000,000	14-Sep-30

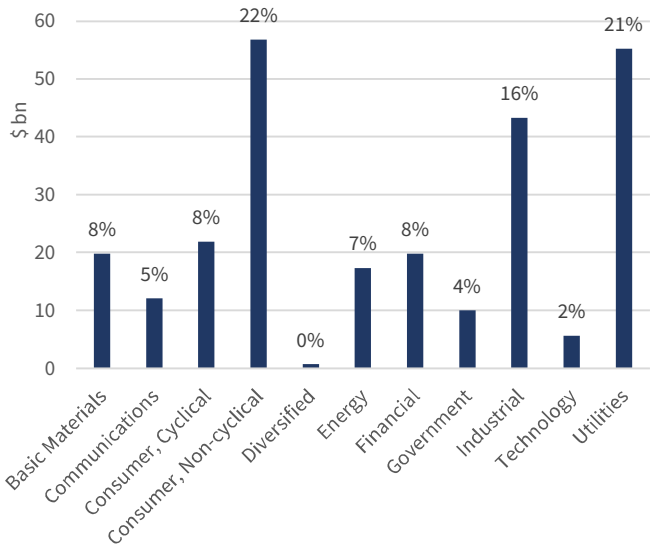
[2] "Sustainable Bond Issuance Will Return To Growth In 2023", S&P Global, 7 Feb 2023.
[3] For a response to some of this critique see "SLBs: complementary, my dear Investor", AFII, 13 Apr 2023.

Sector coverage

We have already written on the complementary sector-distribution of Sustainability-Linked Bonds compared to Use-of-Proceeds (UoP) debt.[3] The recent issuance continues to show that SLBs are being used broadly.

Figure 2 shows the sector breakdown of SLB issuance. The recent bonds include two from Communications (previously 5% of issuance), four from Consumer, Cyclical (previously 8%) and one from Energy (previously 7%). In fact, only four bonds, or 23% of issuance volume in this period, came from the three highest sectors combined that historically contribute nearly 60%.

Figure 2. Total SLB issuance by sector. Source: Bloomberg, accessed 8 Sep 2023.



This population of deals suggests SLB usage continues to broaden.

Hybrids

The CNY700mm bond from Chinese energy company SINOHY is a perpetual hybrid and, we believe, the largest issued so far. There have been 20 hybrid SLBs issued to date; 17 in CNY from Chinese issuers, and three in EUR from European entities, the latter all small in size.[4]

There have historically been concerns around securing equity treatment for a security with a step-up coupon,[5] such as a SLB, which may have deterred issuance of this kind. The Japan Credit Rating Agency (JCR) has issued some guidance suggesting that they will not interpret step-up coupons as influencing early-redemption probabilities,[6] and this note suggests that hybrid Sustainability-Linked Loan (SLL) issuance has been contemplated in Japan, but it cannot be confirmed due to the private nature of such deals.

In the SINOHY example, the step-up looks to be 30bp compared to a base coupon of 3.4%, i.e. a 10% increase, with its observation date equal to the first call. It does not seem reasonable that step-up coupons of this size would meaningfully change the call dynamics of perpetual debt, and so we would hope the hybrid market continues to get more comfortable with sustainability-linked structures.

[4] €150mm from Vossloh AG ISIN DE000A3H2VA6, €150mm from UBM Development AG ISIN XS2355161956 and €25mm from Eltel AB ISIN SE0019914250.
[5] "Sustainable Finance: Equity Content And Sustainability-Linked Hybrids", S&P, 10 Feb 2020.
[6] "Requirements for Equity Content for Sustainability-Linked Hybrid Financing", JCR, 5 Sep 2022

Convertible bonds

Eni's €1bn SLB (ISIN XS2637952610) is a convertible SLB, only the fourth with such a structure according to our analysis,[7] and a first for the energy company that has issued traditional SLBs before.

A convertible SLB is an interesting structure; if a strong sustainability performance is correlated with strong business performance, one would expect the convertibility to offer an offsetting hedge to the coupon step-up. If sustainability performance is poor, the investor receives the step-up as a hedge to protect against losses driven by associated spread widening. If sustainability performance is strong, the investor does not receive the step-up but, on an equity rally, they will be able to convert their security into shares to benefit from the company improvement.[8] See Figure 1 for all scenarios.

Figure 3. Performance scenarios for Convertible SLB.

	Poor Sustainability Performance	Strong Sustainability Performance
Poor Equity Performance	Step-up coupon acts as hedge against potential spread widening. Loss on convertibility option as equity correlated to sustainability.	Loss on SLB option hedge but benefit from potential spread tightening. Loss on convertibility option as equity not correlated to sustainability.
Strong Equity Performance	Step-up coupon acts as hedge against potential spread widening. Bond converts to equity, on rally where equity not correlated to sustainability.	Loss on SLB option hedge but benefit from potential spread tightening. Bond converts to equity on rally where equity correlated to sustainability.

This is a very new product but could offer very interesting risk management options to investors. We will analyse such structures further in forthcoming research.

Alternative steps

The three Japanese SLBs, two from DAIWAH and one from NIPSEI, all use alternative step structures, where rather than paying a step-up coupon to the investors, the issuer will purchase emission offsets or make a charitable donation. These three bonds seem to allow either.

We have previously analysed these structures,[9] and concluded that they will never maximise the funding benefit for investors given an offset purchase or charitable donation will be less valuable to investors who could always use their coupon step-up to buy the offsets themselves. However, there are scenarios where it could widen the investor base, and that makes them an interesting development. We do see them used most frequently in Japan, perhaps driven by investor preference.

[7] €400mm from SPIE SA ISIN FR001400F2K3, €650mm from Schneider Electric ISIN FR0014000OG2 and €400mm from Edenred ISIN FR0014003YP6.
[8] We cover risk management of non-convertible SLBs in "Understanding dynamics between sustainable and traditional debt", AFII, 26 Jan 2023.
[9] For full details please see "Sustainability-Linked Bonds: alternative steps", AFII, 23 May 2023.

KPI emissions metrics

Full KPI details are often not immediately available, and here we have analysed only the EUR bonds, for which we could find full details, a summary of which is shown in Table 2.

Table 2. KPI details for EUR SLBs. Source: Bloomberg, bond prospectuses.

Issuer	ISIN	Number of KPIs	KPI description
ORANGE SA	FR001400KKM2	2	Absolute Scope 1 + 2 + 3 emissions & digital training
REXEL SA	XS2655993033	2	Absolute Scope 1 + 2 emissions & Scope 3 emissions intensity
REWE INT FINANCE	XS2679898184	3	Absolute Scope 1 + 2 + 3 emissions
FERROVIAL SE	XS2680945479	2	Absolute Scope 1 + 2 + 3 emissions
ENI SPA	XS2637952610	2	Absolute Scope 1 + 2 emissions & renewables capacity

All SLBs in this population have emissions referenced in their KPIs. Only telecoms provider Orange includes a non-environmental target, which is to offer digital support and training.

It is encouraging to see that four of the five bonds include Scope 3 emissions. This is a growing trend,[10] addressing a historic criticism of the structure. Unfortunately, Eni, an oil & gas producer, has omitted Scope 3 emissions despite having a Scope 3 reduction target in its financing framework. This does undermine the impact of its structure.[11]

Materiality

When analysing SLBs, there are two inputs into the value of the option. There is understandably focus on the ambition level, and the achievability of the Sustainability Performance Target (SPT). However, the payoff will always be limited by the size of the coupon step-up and the length of time it would be paid for, which combine to create the materiality of the SLB structure.

We have proposed a minimum materiality in which, based on an illustrative 50% probability of the step-up being paid, the discounted value of the step-up is greater than 1%. This we call a "Greenback SLB".[12]

Table 3. SLB, coupon step-ups, and Greenback SLB status for the G7 step-up SLBs. Source: AFII, Bloomberg, bond prospectuses.

Issuer	ISIN	Coupon	Maturity	KPI observation date	Step-up accrual start date	Annual step-up coupon	Total cumulative step-up	Greenback
ORANGE SA	FR001400KKM2	3.875%	11-Sep-35	31-Dec-30	12-Sep-32	0.25%	0.75%	No
TELUS CORP	CA87971MCC51	5.750%	08-Sep-33	31-Dec-30	09-Mar-31	0.60%	1.50%	No
REWE INT FINANCE	XS2679898184	4.875%	13-Sep-30	31-Dec-29	14-Sep-29	0.85%	0.85%	No
FERROVIAL SE	XS2680945479	4.375%	13-Sep-30	31-Dec-28	14-Sep-29	0.75%	0.75%	No
REXEL SA	XS2655993033	5.250%	15-Sep-30	31-Dec-25	16-Sep-26	0.25%	1.00%	No
ENI SPA	XS2637952610	2.950%	14-Sep-30	31-Dec-25		0.50%	0.50%	No

In Table 3, we show the structures for the SLBs denominated in G7 currencies that pay a pure step-up coupon (i.e. excluding the deals buying emissions credits or making donations). None of these

[10] "Scope 3 targets add impact to SLBs", IFR, 5 May 2023.
[11] "SLB bond radar: Eni (potentially) coming to market", AFII, 19 Jun 2022.
[12] "Greenback SLBs: an impact standardisation proposal", AFII, 10 May 2023.

recent SLBs achieve Greenback status. The closest is Telus, with a non-discounted cumulative step-up of 1.5%, however this is also the bond with the highest coupon of 5.75%, and so likely the shortest duration compared to maturity. The step-up is still a very low proportion of the total bond yield, and it will be discounted at a higher rate given the wider spread of the bond, to have a lower present value.[12]

While there are encouraging trends from this bumper week of issuance, there is still progress to be made in terms of increasing the materiality of SLB structures.

Conclusions

The SLB market has returned from the summer break with a bang. Issuance volumes in the first five business days of September have nigh on reached the peak of 2021, with new issuers coming to market.

We find many reasons to be positive but also areas where more improvement could further maximise sustainability impact and lower the cost of capital for ambitious issuers:

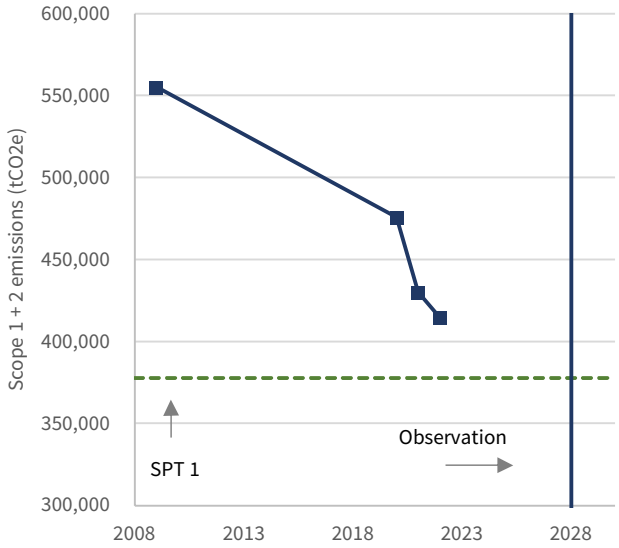
- More sectors are issuing SLBs, which confirms that they can be effective transition finance tools for industries that may struggle to access other forms of sustainable debt.
- SLB structures are diversifying, with hybrids, convertible bonds, and securities paying alternative steps included in this selection of bonds.
- Inclusion of Scope 3 emissions is on the up, which improves the impact of SLBs. As investors have more SLBs to choose between, ambitious structures should continue to offer the most attractive pricing for issuers.
- Materiality of structures however does not yet seem to be increasing. None of these structures offered the minimum level of step-up coupon to be considered a “Greenback SLB”.

Ferrovial – deep dive

Ferrovial, a Spanish infrastructure and toll road operator, was one of the issuers bringing its inaugural SLB to market last week. Logistics and transport are challenging sectors to transition[13] and so we present a deep dive analysis on the pricing and impact of this bond.

KPI1

Figure 4. Ferrovial KPI1 historic levels and target. Source: Company data.

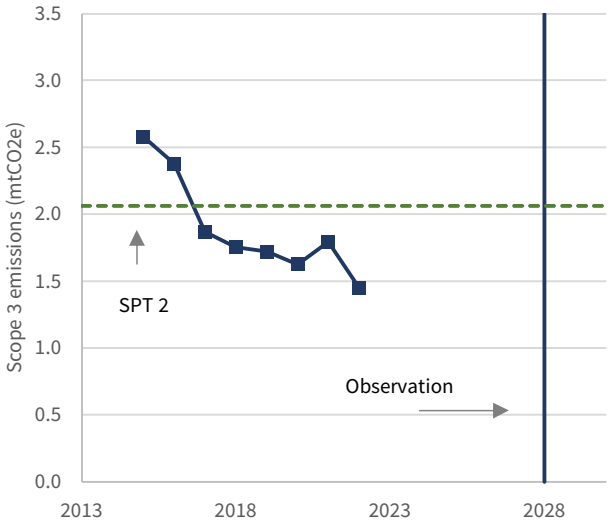


The first KPI for Ferrovial's SLB is a reduction in the absolute level of Scope 1+2 emissions by 31.9% from 2009 as a base year. This is equivalent to reducing Scope 1+2 emissions by 8.82% compared with its 2022 Scope 1+2 emissions levels, a required annual average linear reduction of 1.10%. Given the historic annual reduction rate of 1.95% between 2009 and 2022, this target seems relatively easily achievable.

The actions noted by Ferrovial for the achievement of this SPT are the 100% consumption of electricity from renewable sources in 2025 (making up the bulk of the contribution towards the target), reducing fleet emissions, and implementing energy efficiency measures in the asphalt plants and other works machinery.

KPI2

Figure 5. Ferrovial KPI2 historic levels and target. Source: Company data.



The second KPI used by Ferrovial relates to its Scope 3 emissions, which is a positive hallmark for SLBs. The SPT is to reduce absolute Scope 3 emissions by 20% in 2028 from a 2015 base year. Although this target has been endorsed by SBTi, we note that Ferrovial's Scope 3 emissions are already below the target, and indeed have been since 2017, which is clearly disclosed in its financing framework. The framework also notes that ongoing business growth is expected to lead to an increase in Scope 3 emissions, and so retaining an absolute target demonstrates its commitment to

[13] We have previously analysed the Airport sector in "Airport Sustainability-Lined Bonds: clear for takeoff", AFII, 25 Jul 2023.

reducing emissions.[14] The SPO does not mention that the target is already achieved, but merely reports that targets have been calibrated to higher reductions than required by SBTi.[15]

Considering the historic levels, despite anticipated revenue growth, it seems virtually certain this target will be achieved.

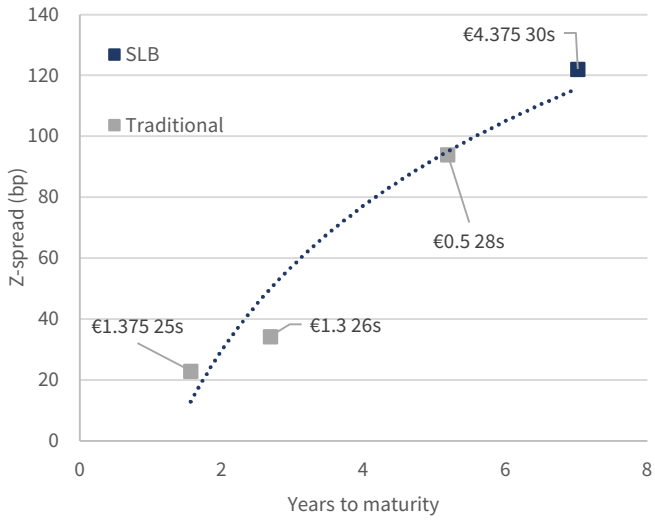
Bond pricing

Using the AFII option pricing framework,[16] the value of the SLB option coupon is the expected present value of receiving the step-up coupon. This value should represent the discount an investor would accept in yield compared to an equivalent vanilla bond.

Given both KPIs seem extremely likely to be achieved, we estimate the option value to be 0; we would expect to see no tighter spread for this SLB compared to vanilla debt.

Figure 6 shows current spreads of Ferrovial bonds, suggesting that the new SLB is pricing flat to slightly wide of the existing debt, which could confirm our analysis.

Figure 6. Ferrovial bond spreads. Source: Bloomberg, accessed 8 Sep 2023.



REWE Group - deep dive

REWE Group, a privately-owned German retail and tourism group, is not a frequent issuer in the bond market. It issued €2bn in 2018 and €1.6bn in 2019 of Schuldshein format, which has all been prepaid. A €0.1bn 5y issuance from 2020 is still outstanding. The recent SLB represents its first foray into public debt markets.

REWE Group is the parent company of REWE, the second largest supermarket chain in Germany, plus other supermarket chains across Europe. Agriculture is a key sector for nature loss concerns; hence this bond presents a chance for investors to engage with a privately-owned company in an environmentally sensitive sector.[17]

KPI1

REWE Group's first KPI focuses on Scope 1+2 GHG emissions, with the target of reducing these emissions by 32% by 2029. As indicated in the SPO, to meet the target would require an annual average linear reduction of 4.02%, falling short of the rate required by the SBTi's absolute contraction approach (4.2%). This means that whilst REWE and its brand discount store operator

[14] "Ferrovial's sustainability-linked financing framework", Ferrovial, accessed 8 Sep 2023.
[15] "Second Party Opinion", DNV, accessed 8 Sep 2023.
[16] For full details please see "An option pricing approach for sustainability-linked bonds", AFII, 8 Nov 2022.
[17] For another example please see "Cargill: EUR bond, EU deforestation regulation", AFII, 14 Apr 2023.

Penny will be aligned with 1.5° by 2030, the target included in this SLB will not necessitate alignment by 2029. It is, however, aligned with the 'well below 2°' scenario, demonstrating that the climate targets integrated into REWE Group's strategy are aligned with the Paris agreement, which aims to keep global temperatures this century well below 2° whilst pursuing efforts to limit the temperature increase to 1.5°.[18]

Historic data for this KPI is unavailable as it focuses on the REWE and Penny parts of the group, which together constitute the largest portion of the group's emissions. If we consider the entire groups emissions reduction rate as a proxy, the target looks achievable, with REWE Group's Scope 1+2 emissions falling at an annual average linear reduction of 5.72% between 2019 and 2021.

KPI2

REWE Group's second KPI relates to its non-Forest, Land, and Agriculture (FLAG) Scope 3 emissions. REWE Group has committed to the ambition of reducing these emissions by 32% by 2029 (in line with KPI1), using 2021 as a baseline. The SPO for the framework gives the annual average linear reductions for this target as 4.0% (2029), which again means that although the target of a 32% reduction is aligned with SBTi's 'well-below 2°' scenario, requiring an average annual reduction of 2.5%, it is not aligned with the 1.5° scenario.[19] Given the unique scope of emissions targeted by the KPI, historic data isn't available, however considering the total Scope 3 emissions of the REWE Group from the 2021 sustainability report as a proxy gives an annual average linear reduction of 3.32% between 2019 and 2021. This indicates that this target will require further action.

In order to achieve the targets associated with KPI2, REWE Group states that extensive measures will need to be implemented, as well as requiring expected behavioural and regulatory changes. Some of the active measures mentioned by REWE in its framework include agreeing climate targets in line with SBTi for 100% of strategic suppliers by the end of 2024, increasing regional and seasonal sourcing, and changing product ranges.[20]

KPI3

The third and final KPI from REWE Group targets its FLAG scope 3 emissions, therefore integrating deforestation and land change into the SLB. The FLAG guidance covers land-based emissions which were not well accounted for before the guidance was produced and, crucially, as part of this, companies are required to submit a no-deforestation commitment with a target date no later than 2025.

REWE Group highlights that the additional conversion-free supply chains required to meet this target go beyond the new EU Deforestation Regulation (EUDR) for example by considering a wider range of natural ecosystems. The SPT associated with this KPI targets a reduction of these emissions of 23.0% by 2029.

There isn't any suitable data in the most recent sustainability report to use as a proxy in assessing the achievability of these targets. The FLAG sector approach requires an annual reduction of 3.03%, and the SPO for the framework indicates that the annual average linear reduction required

[18] "Key aspects of the Paris Agreement", UNFCCC, accessed 11 Sep 2023.
[19] "Second Party Opinion on REWE Sustainability-Linked Financing Framework", Sustainalytics, 21 Aug 2023.
[20] "Sustainability-Linked Bond Framework", REWE Group, August 2023.

to meet the 2029 SPT is just shy at 2.88%. The SPO still views this target as being in alignment with the 1.5° scenario, however it is unclear how, given the figures cited.

Summary

The lack of historical KPI data makes pricing the probability of achieving the SPTs hard. However, given there are no traditional bonds with which to compare pricing, there is no relative SLB pricing to observe.

Including all Scope 3 emissions on an absolute basis is a strong structure. Separating FLAG emissions gives good transparency to land change concerns, although we note the relative reduction for these emissions is lower than for the non-FLAG Scope 3 emissions.

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