

Deforestation Debt Universe: 2025 Issuance Review

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AFII has created the Deforestation Debt Universe to support fixed income investors in monitoring their deforestation exposure.[1] The latest update contains 119 issuers, which have collectively issued over USD1.6trn of hard-currency debt. In this note, we review debt issuance activity from this universe in 2025.

We analyse the new securities to understand how deforestation-exposed entities are accessing the bond market, and how benchmarked investors' exposure is changing. We also highlight the most notable transactions.

We present a table of the syndication fees from those transactions, to see which banks are supporting capital market access for these entities. Where banks are facilitating these activities due to weak or insufficient deforestation policies, that insight can inform investor engagement, and potentially decisions to shift business toward other financial institutions.[2]

To conclude, we present AFII's Bond Horizon tool which can predict issuance in this universe and thus help focus engagement on anticipated primary market activity.[3]

The summary focus points for investor engagement are:

- **In 2025 over USD191bn of bonds were issued by companies in this universe. USD-denominated issuance was higher than EUR on a relative basis, which may help investors target their engagement strategies.**
- **Banks generated an estimated USD1.08bn in fees for bond and loan issuance within this universe. Bank deforestation policies vary in comprehensiveness, but none of the top five cover the full value chain, which would exclude retailers such as McDonald's or Amazon. Investors can engage directly with banks on these issues.**
- **Primary market activity is a key point of leverage for investors to time their engagement. AFII's 'Bond Horizon' tool can predict issuance likelihood to support investors in prioritizing engagement. Nestle, CK Hutchinson Holdings, and Marubeni have been identified as most likely to issue in the next three months.**

[1] "Deforestation Debt Universe: update", AFII, 29 Jan 2026.
[2] This thinking underpins our tool which is described in "The Box: a tool for bank influence", AFII, 20 Dec 2023.
[3] "Bond Horizon", AFII, accessed 25 Feb 2026.

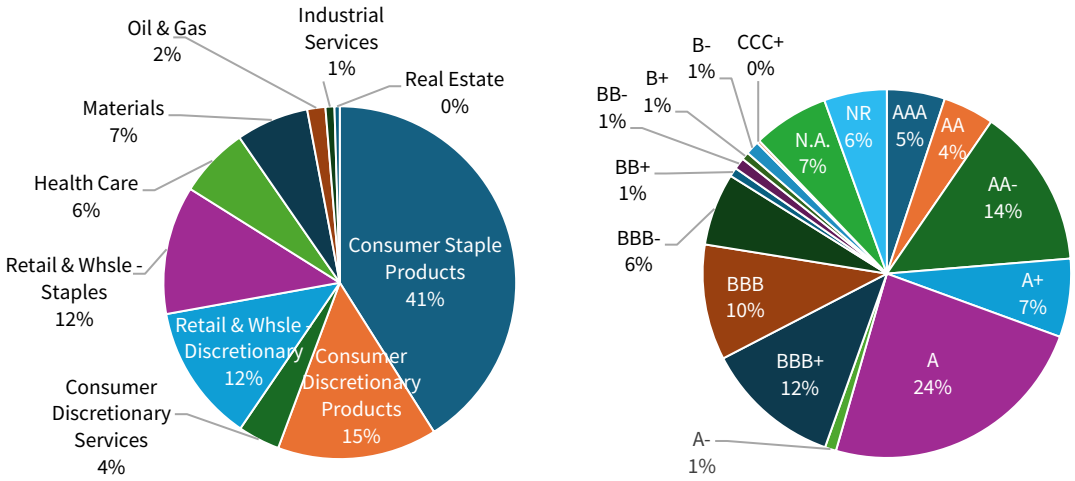
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2025 Issuance

2025 saw just over USD191bn equivalent issued by companies in the Deforestation Debt Universe.[4] This came across 316 securities, with a weighted average maturity of around nine years. The largest volume months were March and November.

In Figure 1 below, we show the sector and rating split of this issuance. From a sector perspective, supply from consumer industries dominates, as a number of deforestation-linked commodities are often used in consumer products, including palm oil and pulp & paper. In terms of rating, the majority of transactions came from companies further up the credit spectrum, with c.55% of deals rated A- or higher. Very little supply from the universe was rated sub-investment-grade.

Figure 1. 2025 Deforestation Debt Universe issuance split by sector and rating. Source: Bloomberg Finance L.P., accessed 13 Feb 2026.



Issuance spanned 16 currencies, with USD and EUR providing the largest shares at 65% and 26%, respectively.

Table 1 highlights the 10 largest issuers from the universe in 2025, and their issuance as a proportion of the total. The next section will explore notable transactions from these names, as well as from the universe more broadly.

Table 1. Top 10 largest issuers in 2025 from the Deforestation Debt Universe. Source: Bloomberg Finance L.P., accessed 13 Feb 2026.

Company	Credit ticker	2025 Issuance (USDmn equiv.)	% of total 2025 Universe Issuance
Mars Inc	MARS	26,000	13.60%
Amazon.com Inc	AMZN	15,000	7.85%
General Motors Co	GM	12,567	6.57%
Johnson & Johnson	JNJ	9,752	5.10%
PepsiCo Inc	PEP	8,188	4.28%
Mercedes-Benz Group AG	MBGGR	7,189	3.76%
Glencore PLC	GLENLN	5,538	2.90%
JBS S/A	JBS	5,250	2.75%
Lowe's Cos Inc	LOW	5,000	2.62%
McDonald's Corp	MCD	4,838	2.53%

Significant transactions

The top two universe issuers in 2025, Mars and Amazon, printed transactions that were in the top 10 largest USD corporate deals of the year. Mars, third in the list, priced a USD26bn, eight tranche transaction for the acquisition of Kellanova. As covered in earlier AFII research, the deal offered bond investors a chance to engage with Mars to raise standards of supply chain management at Kellanova, which lagged behind Mars on deforestation policy, commitments on land area associated with its value

[4] Our search is based on the credit tickers listed in the Appendix.

chain, and emissions reduction targets.[5] So far, we do not see evidence of improved standards at Kellanova, with many of the company's policies and commitments remaining unchanged. However, both Mars and Kellanova's Forest 500 scores have improved since our last report, to 66.0% and 44.7%, respectively.[6]

Meanwhile, Amazon came to market with its first issuance since December 2022 via a USD15bn, six-part transaction in November 2025. Amazon is exposed to all six relevant commodities in the Deforestation Debt Universe as a retailer, with Forest IQ data indicating either high or very high exposure. The company's deforestation performance reporting is currently ranked as weak.[7]

Amazon is projecting a 50% increase in capital expenditure to USD200bn in 2026 to fund AI-related spending.[8] A significant proportion of this is likely to be supplied by the bond market, as seen by the recent increase in Big Tech 'jumbo' issuance.[9] For deforestation-concerned investors, engaging with Amazon prior to this expected supply offers an opportunity to ensure the topic isn't neglected and to press for better standards.

Two issuers in the top 10, JBS and McDonald's, have critical exposure to beef (per Forest IQ data). In JBS' case, this is as a manufacturer. Put simply, the company actively contributes to deforestation, rather than simply being exposed to it via its supply chain. The company is also critically exposed to soy as a manufacturer. Despite facing numerous deforestation allegations, JBS accessed the bond market twice last year, via USD1.75bn and USD3.5bn deals in January and June, respectively. Our analysis of these transactions, which featured 2055, 2056 and 2066 tranches, highlighted how JBS has been increasing the maturity of its debt issuance and using the proceeds to repay shorter-dated borrowings.[10]

At the opposite end of the supply chain, fast food restaurant chain McDonald's also faces significant end consumer deforestation exposure as a retailer of beef and soy products.[11] Despite the company's commitment to eliminating deforestation from its supply chain by 2030, it has been accused of using JBS as a supplier.[12] However, its latest reporting indicates that 77% of its beef sourced from high-priority regions is now deforestation-free.[13] McDonald's was very active in the bond market last year, printing over USD4.8bn equiv. in six tranches, across four separate transactions and in three different currencies. The company is a frequent issuer, printing nearly USD4bn equiv. on average per year since 2019, and has over USD14bn equiv. due to mature from 2026-2030. This suggests McDonald's is likely to remain active in the market in the years to come, offering investors regular opportunities for engagement.

We also saw transactions from new entities in the universe in 2025. Another issuer in the top 10, Glencore, printed over USD5.5bn equiv. of bonds, accessing the market on five separate occasions. Glencore's deforestation exposure stems from its grain handling subsidiary Viterra. This merged

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[5] "Mars: Raising standards", AFII, 5 Mar 2025.
[6] "Forest 500 Rankings", 24 Feb 2026.
[7] This data is at 7 Jan 2026 and was obtained under license from Global Canopy as part of its proprietary Forest IQ project https://forestiq.com. More up-to-date data may be available from Forest IQ.
[8] "Amazon sees 50% boost to capital spending this year, shares tumble", 5 Feb 2026.
[9] "AI spending spree drives global tech debt issuance to record high", accessed 23 Feb 2026.
[10] "JBS new issuance after US listing", AFII, 1 Jul 2025.
[11] "McDonald's deforestation footprint: We're not lovin' it", AFII, 3 Jan 2024.
[12] "The hidden cost of your McDonald's burger", World Animal Protection, 9 Jul 2025.
[13] Pg 15, "McDonald's Purpose & Impact Report 2024-2025", McDonald's, accessed 23 Feb 2026.

with fellow universe constituent Bunge Global in 2025,[14] with Glencore retaining a 16.4% share in the enlarged company.[15] As a result, Glencore remains exposed to deforestation related to palm oil, soy, and beef.[16]

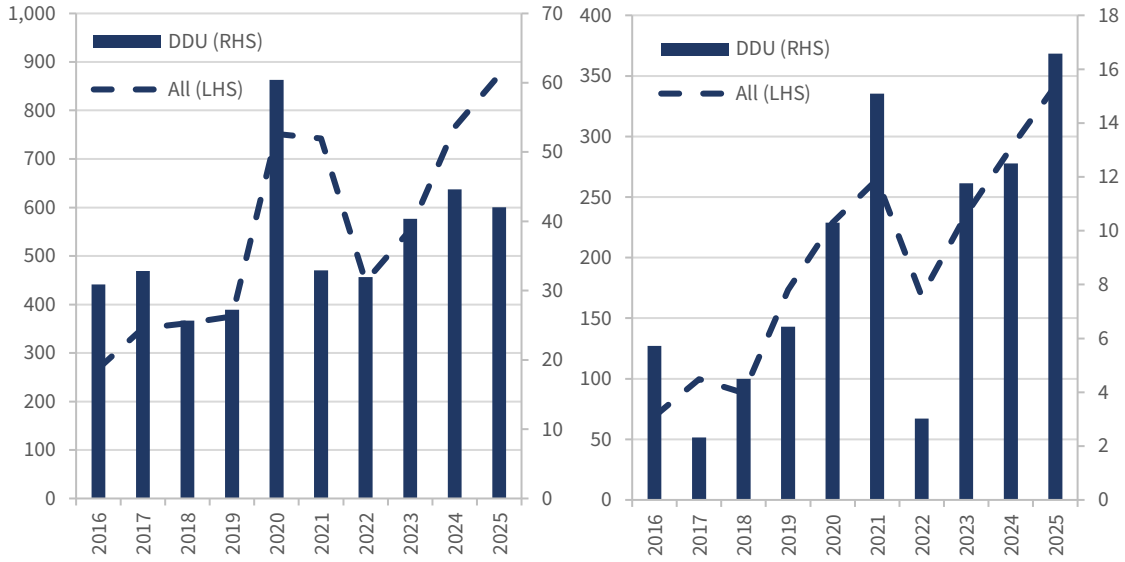
Another new entrant to the universe, Skechers USA, was acquired in 2025 by 3G Capital Partners, using special purpose vehicle (SPV) Beach Acquisition Bidco. Skechers is exposed to deforestation through pulp & paper and leather in its supply chain, and its acquisition was financed through a dual-tranche USD2.2bn payment-in-kind and EUR1bn of senior secured issuance.

Issuance comparison

Figure 2 compares BBB issuance from within the Deforestation Debt Universe to the total market,[17] for USD and EUR denominated bonds.[18]

This analysis suggests that EUR issuance from the Deforestation Debt Universe in particular has been rising over the past four years, a trend aligned with the overall market. For USD issuance, the rise has been more muted within the Deforestation Debt Universe, and has even reduced YoY, against the trend of the broader market. The rise in EUR issuance is noteworthy against the backdrop of delays to the EU's Deforestation Regulation (EUDR), currently scheduled for implementation for large companies at the end of 2026.[19]

Figure 2. BBB issuance in USDbn by pricing date, comparing Deforestation Debt Universe issuance with total market, USD LHS and EUR RHS. Source: Bloomberg Finance L.P., accessed 17 Feb 2026.



In summary, there has been a relatively higher level of issuance in EUR-denominated bonds, suggesting those benchmarked investors may have increased exposure.

[14] "Bunge-Viterra merger: an ESG analysis", AFII, 14 Jun 2023.
[15] Viterra had previously appeared in our 2025 universe, whilst Glencore's minority stake in the newly merged company means it surpasses the threshold to be included in this year's universe.
[16] Glencore is also potentially exposed to deforestation via its energy businesses, but our universe focuses on six commodities: palm oil, soy, beef, leather, timber, and pulp & paper.
[17] Deforestation Debt Universe issuance is defined using the credit tickets included in the Appendix.
[18] One slight complicating factor is due to the static nature of our universe, which is a list of companies as end 2025. Where some of the companies may have had different names, or not existed in the past, then issuance may have been lower, which would not apply to the overall market assessment.
[19] "Deforestation Deregulation implementation", European Commission, accessed 25 Feb 2026.

Syndication fees

For three years, AFII has been calculating league tables of banks based on their syndication fees from fossil and green activities (called 'The Box').[20] This ranking is used by issuers and investors to direct their business to financial institutions that are aligned with their sustainability values.

Here we show the proportion of syndication fees made by banks from issuance linked to companies in the Deforestation Debt Universe. This is calculated using the same methodology for The Box.[21]

It focuses on exposure rather than ranking from best-to-worst. A bank with high exposure may be a constructive or destructive force when it comes to deforestation action, while one with low exposure may be less relevant for driving deforestation engagement.

Syndication fee table

Table 2 shows the ranking by total fees in mn USD equivalent for both bonds and loans, with the total fees for each bank and the share of issuance related to Deforestation Debt Universe-linked entities. Total fees from this activity are estimated to be USD1.08bn.

Table 2. Total bank syndication fees driven by issuance from companies in the Deforestation Debt Universe in 2025 compared to total fees in 2025, for the 15 banks with the highest fees in mn USD equivalent. Source: Bloomberg Finance L.P., AFII.

	Syndication fees driven by issuance linked to companies in the Deforestation Debt Universe:		
Bank	As a % of total syndication fees driven by issuance	In USD mn equivalent	Total bank syndication fees driven by issuance (in USD mn equivalent)
JPMorgan	4.2%	129.1	3,057
BofA Securities	4.5%	105.9	2,370
Citi	3.6%	77.3	2,130
Wells Fargo	3.5%	45.9	1,322
BNP Paribas	2.9%	43.9	1,493
Morgan Stanley	2.1%	38.8	1,827
Goldman Sachs	2.5%	38.5	1,571
Mizuho Financial	3.6%	38.5	1,066
Deutsche Bank	2.7%	37.0	1,365
HSBC	3.0%	35.5	1,188
Societe Generale	4.6%	32.2	696
SMBC	2.6%	28.2	1,087
TD Securities	3.2%	25.6	806
Barclays	1.7%	24.2	1,459
US Bancorp	5.6%	23.7	421

The banks deriving the highest absolute fees linked to companies in the Deforestation Debt Universe are JP Morgan (USD129.1mn), BofA (USD105.9mn) and Citi (USD77.3mn). Note that the table is ordered by relative fees. All three worked on large issuances in Q1, including those of Mars, Johnson & Johnson, GlaxoSmithKline and Hershey, as laid out in our Q1 review.[22]

[20] To interact with the latest data please visit "The Box", AFII, accessed 13 Feb 2026.
[21] Analysis is conducted using deals with the credit tickers assigned to each issuer, as shown in Table 2 in the Appendix. We recognise that there is sometimes not a unique mapping between equity and credit tickers.
[22] "Deforestation Debt: Q1 recap and outlook", AFII, 22 Apr 2025.

As mentioned earlier, another sizeable transaction last year came from Amazon, via its USD15bn deal. While Goldman Sachs, JPMorgan and Morgan Stanley led the transaction, Barclays, BNP, BofA, Citi, Deutsche Bank, HSBC, TD Securities, and Wells Fargo were all also involved.

Among the new entities in the Deforestation Debt Universe, Glencore accessed the market on five separate occasions in 2025. Of the top 15 banks in the above table, Barclays, Citi, TD, Deutsche Bank, and BofA led these deals. Meanwhile, Beach Acquisition Bidco, the SPV behind the acquisition of Skechers, also came to market in June with a EUR1bn and USD2.2bn dual-tranche offering. The transaction was led overall by JPMorgan, but saw numerous banks involved, including the majority of names in the top 15.

McDonald's was a frequent issuer in 2025, printing bonds in February, May, and August. Again, the majority of the top 15 banks received fees for these deals, spanning three currencies.

In terms of labelled issuance, Carrefour was one of the few issuers to print such instruments, via three Sustainability-Linked Bonds (SLBs) over the course of the year (alongside one vanilla deal). The targets tied to these bonds were related to reducing Scope 1, 2, and 3 emissions, and suppliers committing to climate strategies. Notably, the company now includes Forest, Land and Agriculture (FLAG) emissions in its updated SLB framework. [23] European banks BNP, Deutsche Bank, HSBC, Société Générale, alongside US peers BofA and Goldman Sachs, were involved in leading Carrefour's 2025 issuance.

Bank deforestation policies

Below, we consider the deforestation policies of the banks facilitating deals from companies in the universe. We focus on the policies of the top five banks:

- **JPMorgan Chase:** The bank's 2024 Sustainability Report explains that unsustainable agricultural practices are a restricted activity.[24] JPMorgan indicates that clients that are not members of the Roundtable on Sustainable Palm Oil (RSPO), the Roundtable on Responsible Soy (RTRS), the Forestry Stewardship Council (FSC), or equivalent policies/practices, would be considered restricted and therefore assessed on a case-by-case basis. The bank also states that certain client activities are subject to 'enhanced review', including the growing of agricultural crops (palm oil, soy) and timber, the rearing of livestock including cattle, and downstream users of agricultural commodities (i.e., processing/refining and/or trading and distribution).[25] In similar fashion to companies subject to the restricted activities treatment, 'enhanced review' clients are also assessed on a case-by-case basis. This evidences that the bank is not necessarily precluded from working with deforestation-exposed companies.
- **BofA Securities:** BofA's 2025 Sustainability Report describes agricultural commodities as 'areas of heightened sensitivity', which require 'enhanced due diligence on a client-by-client basis'.[26] The commodities covered are beef/cattle, palm oil, soy, timber, and pulp & paper. Like JPMorgan, BofA highlights that companies should have, or be pursuing, RSPO (palm oil), RTRS (soy), FSC (timber, pulp & paper) or equivalent memberships. It includes downstream refiners, processors and traders among this group. BofA palm oil guidelines

[23] "Carrefour Sustainability Linked Bond Framework", Carrefour, accessed 25 Feb 2026.
[24] Pg 61, "JPMorganChase 2024 Sustainability Report", JPMorganChase, 15 Oct 2025.
[25] Ibid., Pg 62.
[26] Pg 60, "Sustainability at Bank of America", Bank of America, 18 Dec 2025.

also note that companies should adopt a No Deforestation, No Peat and No Exploitation (NDPE) Policy. In the case of beef, BofA says clients "*should have or be pursuing 100% deforestation-free operations and primary supply chain, sustainable sourcing policies and full traceability*".[27] While there are significant similarities to JPMorgan, the BofA policy marks a significant evolution from its 2024 iteration, which included very little commentary on deforestation.[28]

- **Citi:** Citi's Environmental and Social Policy Framework outlines 'areas of high caution', which cover the relevant commodities to the Deforestation Debt Universe.[29] The bank's policy contains many similar features to its US peers above, including strong language on client membership of RSPO, RTRS, and FSC. However, the language in Citi's document reads as more comprehensive, referencing annual client reviews and specific time bound action plans. Moreover, Citi is the only US name among the top five that is a member of the RSPO itself. On beef, Citi states it would like clients to demonstrate "*clear commitments to 100% traceability of their supply chain in alignment with the Accountability Framework Initiative*".[30]
- **Wells Fargo:** There is no reference to a deforestation policy in the bank's public disclosures, nor any mention of the issue in the sustainability section of its website.[31] This makes Wells Fargo the only bank in the top five to not have an external policy in place.
- **BNP Paribas:** BNP Paribas is the only European bank in the top five. The bank appears to have the most comprehensive policies on deforestation of the banks reviewed, with separate sector statements for palm oil, wood pulp, and agriculture, covering both upstream and downstream entities.[32] Each statement lays out the scope, rules, and implementation mechanisms for the respective policy. BNP Paribas' policies around beef and soy are particularly strong for the Amazon and the Cerrado in Brazil, with the bank stating it will "*only provide financial products or services to companies with a strategy towards zero deforestation in their production and supply chains by 2025 at the latest*", and also require full traceability of supply chains by 2025.[33]

While the policies of the top banks tend to cover the upstream and parts of the downstream value chain (e.g. refiners and traders), they tend not to include retailers of products using the in-scope commodities (e.g. McDonald's).

For all of the policies noted above, there is potential to expand them to cover the full value chain (i.e. down to the retailer) and thus provide a comprehensive framework for scrutiny. Investors could focus their engagements with these banks on this expansion.

Bondholder engagement

AFII works specifically with public fixed income investors. This is due to the fact that such a broad range of entities are dependent on fixed income markets for capital, which gives those investors

[27] Ibid.
[28] "Deforestation Debt: Q1 recap and outlook", AFII, 22 Apr 2025.
[29] "Citi Environmental and Social Policy Framework", Citi, accessed 23 Feb 2026.
[30] Ibid., Pg 16.
[31] "Sustainability at Wells Fargo", Wells Fargo, accessed 23 Feb 2026.
[32] "BNP Paribas Group positions and sector policies", BNP Paribas, accessed 19 Feb 2026.
[33] "Sector Policy - Agriculture", BNP Paribas, accessed 23 Feb 2026.

the ability to influence relevant actors. It is also due to the fact that in fixed income markets investors have additional levers of influence, often due to the refinancing nature of investments.

AFII has developed a toolkit for effective bondholder engagement, one utilising a scoring framework for understanding investor influence and the feasibility of specific interventions.[34] One of these tools is 'choice of timing'; which encourages investors to align engagement efforts with primary market activity.

In addition, to support investors AFII has developed the 'Bond Horizon' tool, which predicts the issuers most likely to come to market in the next three months.[35] This helps with prioritising relevant engagement efforts.

Bond Horizon

AFII's Bond Horizon tool uses quantitative methods to predict bond issuance. The heatmap is updated quarterly, and available on our website. Each issuer's score combines three elements of analysis. The fundamental rank is derived from accounting statements, the market pricing rank from market returns of issued bonds, and the news rank by an AI model that analyses live news. The latest Bond Horizon analysis is as of 10 December 2025. An extract for issuers in the Deforestation Debt Universe 2025 is shown in Table 3, alongside an indicator for whether the issuer came to market since the tables were published.[36]

Table 3. AFII Bond Horizon rankings for Deforestation Debt Universe 2025 issuers. Source: AFII, data as of 10 Dec 2025.

Rank	Issuer	Sector	Fundamental rank	Market pricing rank	News rank	In the market
1	Nestle SA	Consumer Staples	24	15	112	
2	CK Hutchison Holdings Ltd	Consumer Staples	54	35	8	
3	Marubeni Corp	Consumer Staples	53	39	5	
4	Procter & Gamble Co/The	Consumer Staples	44	29	148	
5	Mondelez International Inc	Consumer Staples	114	32	58	
6	General Mills Inc	Consumer Staples	58	21	199	
7	L'Oreal SA	Consumer Staples	35	85	18	yes
8	Danone SA	Consumer Staples	22	49	199	
9	PepsiCo Inc	Consumer Staples	93	52	115	yes
10	Starbucks Corp	Consumer Discretionary	79	86	14	
11	Unilever PLC	Consumer Staples	140	50	65	
12	Coty Inc	Consumer Staples	97	76	41	
13	Carrefour SA	Consumer Staples	41	66	199	
14	Tesco PLC	Consumer Staples	39	96	87	
15	Cie de Saint-Gobain SA	Materials	37	73	199	
16	UPM-Kymmene Oyj	Materials	163	67	26	
17	Kering SA	Consumer Discretionary	96	75	108	
18	BASF SE	Materials	74	121	31	
19	Colgate-Palmolive Co	Consumer Staples	62	122	54	
20	Home Depot Inc/The	Consumer Discretionary	129	71	199	

[34] "Finding your voice: tools for better bondholder engagement on climate and nature risk", AFII, 5 Dec 2025.
[35] For latest tables please see "Bond Horizon", AFII, accessed 13 Feb 2026.
[36] For the earlier version of the universe please see "Deforestation Debt Universe", AFII, 7 Jan 2025.

As shown in the table, the three issuers considered most likely to issue are Nestle, CK Hutchinson Holdings and Marubeni. L'Oreal and PepsiCo have already accessed the market in the post-December 10 period.

Significant absences from issuance review

There are a few issuers, on which AFII has conducted research in the past, that are notably absent from this 2025 issuance population. Not having issued in 2025 may indicate a higher chance of coming to market in 2026, which could present an engagement opportunity.

1) ADM

Archer Daniels Midland (ticker ADM) is a large food processing and commodity trading company. It has critical exposure to both palm oil and soy, and high exposure to pulp & paper.

The company also recently agreed to pay USD40mn to settle charges from the US Securities and Exchange Commission related to internal governance and accounting controls.[37] This may raise broader concerns for investors around its integrity.[38]

The company has several USD-denominated bonds outstanding, but has not issued since 2023. Roughly USD1bn of its debt is due to mature in 2026.

2) Pertamina

Pertamina Persero PT (ticker PERTIJ) is the state-owned oil & gas company of Indonesia. Its deforestation exposure comes from palm oil, which it uses to produce renewable biofuel. This exposure is rated Very High by Forest IQ. Biofuel features heavily in its sustainability report, as one way to achieve its decarbonisation targets.[39] Ensuring this is produced without deforestation is essential for the long-term sustainability of this plan.

Pertamina itself was a frequent issuer between 2018-2021 but has not issued a bond since. Its subsidiary, Pertamina Hulu Energi (ticker PERHUL) issued a maiden bond in May 2025, and we have proposed a structure linked to methane reduction for this entity.[40]

Conclusions

Ongoing deforestation presents risks for investors, through its links to climate tipping points, local biome destruction, and impacts for supply chains. AFII refreshed its Deforestation Debt Universe in January 2026 to present an updated collection of issuers that all have substantial exposure to deforestation and are relevant for fixed income investors.

2025 saw just over USD191bn equiv. issued by companies in the Deforestation Debt Universe, highlighting just how important fixed income borrowing is for several of these issuers. It also underscores the engagement opportunity for investors. Issuance was focused among investment-grade borrowers, with USD-denominated issuance higher than EUR on a relative basis when comparing to the broader market.

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[37] "Archer Daniels Midland pays $40mn to settle accounting investigation", Financial Times, 28 Jan 2026.
[38] "Archer Daniels Midland: governance questions meet a maturity wall", AFII, 11 Feb 2026.
[39] "2024 Sustainability Report", Pertamina, accessed 13 Feb 2026.
[40] "Pertamina methane abatement: a bond proposal", AFII, 30 May 2025.

With banks generating an estimated USD1.08bn in fees from facilitating bonds and loans for these issuers, it is clear that deforestation-exposed companies are an important source of business, and therefore a vector for investor engagement. The comprehensiveness of bank deforestation policies varies considerably, though no bank in the top five (JPM, BofA, Citi, Wells Fargo, and BNP) appears to have policies that cover the full value chain. This is significant, as a number of the Deforestation Debt Universe issuers are retailers, and so may not be covered — reducing the impact of these policies.

Primary market issuance offers investors a key point of leverage over issuers, and the AFII Bond Horizon tool can support them in identifying upcoming transactions. Specifically, Nestle, CK Hutchinson Holdings, and Marubeni are currently deemed likely to come to market soon.

Appendix: Deforestation Debt Universe constituents

Note, the credit tickers come directly from the relevant Bloomberg field. We have checked and adjusted where needed, to create best fit tickers for monitoring.

Table 4. Deforestation Debt Universe, including commodity exposure and outstanding debt, with best fit credit ticker. Source: Forest IQ, Bloomberg L.P., AFII.

Count	Entity Name	Equity ticker	Credit ticker	Country of Risk	Coverage	Exposed Commodities	Total G7 debt issuer (USD mn)	DDU 2025
1	adidas AG	ADS GR Equity	ADSGR	DE	Forest 500	Pulp & Paper, Leather	2,793	Y
2	Aeon Co Ltd	8267 JP Equity	JUSCO	JP	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Timber	6,581	Y
3	Ajinomoto Co Inc	2802 JP Equity	AJINOM	JP	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	2,821	Y
4	Amazon.com Inc	AMZN US Equity	AMZN	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Timber, Leather	73,604	Y
5	Archer-Daniels-Midland Co	ADM US Equity	ADM	US	Forest 500 & ZSL SPOTT	Palm oil, Soy, Pulp & Paper	9,366	Y
6	Astra International Tbk PT	ASII IJ Equity	ASIIIJ	ID	Forest 500 & ZSL SPOTT	Palm oil, Timber, Leather	5,851	Y
7	Barry Callebaut AG	BARN SW Equity	BARY	CH	Forest 500	Palm oil, Soy, Pulp & Paper	4,044	Y
8	BASF SE	BAS GR Equity	BASGR	DE	Forest 500	Palm oil, Soy, Pulp & Paper	22,370	Y
9	Boustead Plantations Bhd	BPLANT MK Equity	MALAYS	MY	ZSL SPOTT	Palm oil	0	N
10	Builders FirstSource Inc	BLDR US Equity	BLDR	US	Forest 500	Timber	4,300	N
11	Bunge Global SA	BG US Equity	BG	US	Forest 500 & ZSL SPOTT	Palm oil, Soy, Pulp & Paper	22,380	Y
12	Campbell's Company/The	CPB US Equity	CPB	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	7,818	Y
13	Cargill Inc	3091Z US Equity	CARGIL	US	Forest 500 & ZSL SPOTT	Palm oil, Soy, Pulp & Paper, Beef, Leather	20,205	Y
14	Carrefour SA	CA FP Equity	CAFP	FR	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Timber, Leather	16,494	Y
15	Casino Guichard Perrachon SA	CO FP Equity	COFP	FR	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Timber, Leather	5,013	Y
16	Celulosa Arauco y Constitucion	1029Z CI Equity	CELARA	CL	ZSL SPOTT	Pulp & Paper, Timber	3,920	N
17	Cencosud SA	CENCOSUD CI Equity	CENSUD	CL	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Timber, Leather	2,579	Y
18	Charoen Pokphand Foods PCL	CPF TB Equity	CPFTB	TH	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	2,681	Y
19	China Resources Land Ltd	1109 HK Equity	CRHZCH	CN	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	901	Y
20	China State Construction Engin	601668 CH Equity	CHCONS	CN	Forest 500	Pulp & Paper, Timber	4,886	Y
21	CHS Inc	7165Z US Equity	CHSINC	US	Forest 500	Soy	2,788	N

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Count	Entity Name	Equity ticker	Credit ticker	Country of Risk	Coverage	Exposed Commodities	Total G7 debt issuer (USD mn)	DDU 2025
22	Cie de Saint-Gobain SA	SGO FP Equity	SGOFP	FR	Forest 500	Pulp & Paper, Timber	16,574	Y
23	Cie Generale des Etablissement	ML FP Equity	MLFP	FR	Forest 500 & ZSL SPOTT	Timber	5,646	N
24	Clorox Co/The	CLX US Equity	CLX	US	Forest 500	Palm oil, Soy, Pulp & Paper	2,500	Y
25	Coca-Cola Co/The	KO US Equity	KO	US	Forest 500	Palm oil, Soy, Pulp & Paper	43,949	N
26	COFCO Corp	1070Z CH Equity	COFCO	CN	Forest 500 & ZSL SPOTT	Palm oil, Soy, Pulp & Paper, Beef, Timber	2,931	Y
27	Colgate-Palmolive Co	CL US Equity	CL	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	10,902	Y
28	Conagra Brands Inc	CAG US Equity	CAG	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	7,022	Y
29	Costco Wholesale Corp	COST US Equity	COST	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Timber, Leather	5,000	Y
30	Coty Inc	COTY US Equity	COTY	US	Forest 500	Palm oil, Soy, Pulp & Paper	25,163	Y
31	Daiwa House Industry Co Ltd	1925 JP Equity	DAIWAH	JP	Forest 500	Pulp & Paper, Timber	6,544	Y
32	Danone SA	BN FP Equity	BNFP	FR	Forest 500	Palm oil, Soy, Pulp & Paper	16,096	Y
33	DSM BV	DSM NA Equity	DSFIR	NL	Forest 500	Palm oil, Soy, Pulp & Paper	8,069	Y
34	Dunkin' Brands Group Inc	DNKN US Equity	ARGIHC	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	8,034	Y
35	Empresas CMPC SA	CMPC CI Equity	CMPCCI	CL	Forest 500 & ZSL SPOTT	Pulp & Paper, Timber	3,531	Y
36	Empresas Copec SA	COPEC CI Equity	COPEC	CL	Forest 500	Pulp & Paper, Timber	3,920	Y
37	Essity AB	ESSITYA SS Equity	ESSITY	SE	Forest 500	Palm oil, Pulp & Paper	6,543	Y
38	FGV Holdings Bhd	FGV MK Equity	MALAYS	MY	Forest 500 & ZSL SPOTT	Palm oil, Pulp & Paper	0	Y
39	General Mills Inc	GIS US Equity	GIS	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	14,033	Y
40	General Motors Co	GM US Equity	GM	US	Forest 500	Pulp & Paper, Leather	73,139	N
41	Genting Bhd	GENT MK Equity	GENTMK	MY	Forest 500	Palm oil	8,498	Y
42	Glencore PLC	GLEN LN Equity	GLENLN	AU	Forest 500	Palm oil, Soy, Beef	30,109	Y
43	Grupo Bimbo SAB de CV	BIMBOA MM Equity	BIMBOA	MX	Forest 500	Palm oil, Soy, Pulp & Paper	6,977	Y
44	GSK PLC	GSK LN Equity	GSK	US	Forest 500	Palm oil, Soy, Pulp & Paper	20,915	Y
45	H & M Hennes & Mauritz AB	HMB SS Equity	HMBSS	SE	Forest 500	Palm oil, Soy, Pulp & Paper, Timber, Leather	3,856	N
46	Henkel AG & Co KGaA	HEN3 GR Equity	HENKEL	DE	Forest 500	Palm oil, Soy, Pulp & Paper	4,385	Y
47	Hershey Co/The	HSY US Equity	HSY	US	Forest 500	Palm oil, Soy, Pulp & Paper	7,019	Y

FIXED anthropocene INCOME INSTITUTE

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48	Home Depot Inc/The	HD US Equity	HD	US	Forest 500	Pulp & Paper, Beef, Timber, Leather	49,071	Y
49	Hormel Foods Corp	HRL US Equity	HRL	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	2,850	Y
50	Hutchison Whampoa Ltd	1896850D HK Equity	CKHH	GB	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	36,574	Y
51	Indofood Sukses Makmur Tbk PT	INDF IJ Equity	INDFIJ	ID	Forest 500 & ZSL SPOTT	Palm oil, Soy, Pulp & Paper, Beef, Leather	2,745	Y
52	Indomobil Sukses Internasional	IMAS IJ Equity	IMASIJ	ID	Forest 500	Palm oil, Soy, Beef, Leather	2,603	N
53	International Flavors & Fragra	IFF US Equity	IFF	US	Forest 500	Palm oil, Soy, Pulp & Paper	5,629	Y
54	ITOCHU Corp	8001 JP Equity	CITOH	JP	Forest 500 & ZSL SPOTT	Palm oil, Soy, Pulp & Paper, Beef, Timber	17,904	N
55	J M Smucker Co/The	SJM US Equity	SJM	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	7,103	Y
56	JBS S/A	JBSS3 BZ Equity	JBS	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Leather	18,979	Y
57	Johnson & Johnson	JNJ US Equity	JNJ	US	Forest 500	Palm oil, Soy, Pulp & Paper	42,141	Y
58	Kering SA	KER FP Equity	KERFP	FR	Forest 500	Pulp & Paper, Timber, Leather	16,691	Y
59	Kimberly-Clark Corp	KMB US Equity	KMB	US	Forest 500	Palm oil, Pulp & Paper	8,709	N
60	Klabin SA	KLBN4 BZ Equity	KLAB	BR	Forest 500 & ZSL SPOTT	Pulp & Paper, Timber	4,700	Y
61	Koninklijke Ahold Delhaize NV	AD NA Equity	ADNA	NL	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Timber	6,205	Y
62	Kraft Heinz Co/The	KHC US Equity	KHC	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	21,329	Y
63	Kroger Co/The	KR US Equity	KR	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Timber	14,997	Y
64	Lear Corp	LEA US Equity	LEA	US	Forest 500	Pulp & Paper, Leather	2,700	Y
65	L'Oreal SA	OR FP Equity	ORFP	FR	Forest 500	Palm oil, Soy, Pulp & Paper	20,489	Y
66	Louis Dreyfus Co Finance BV	1915897D NA Equity	LOUDRE	NL	Forest 500	Palm oil, Soy	7,724	Y
67	Lowe's Cos Inc	LOW US Equity	LOW	US	Forest 500	Pulp & Paper, Timber, Leather	37,818	Y
68	LVMH Moet Hennessy Louis Vuitt	MC FP Equity	MCFP	FR	Forest 500	Palm oil, Soy, Pulp & Paper, Leather	27,739	Y
69	Mars Inc	4614Z US Equity	MARS	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	44,524	Y
70	Marubeni Corp	8002 JP Equity	MARUB	JP	Forest 500 & ZSL SPOTT	Palm oil, Soy, Pulp & Paper, Beef, Timber	9,921	Y
71	Masco Corp	MAS US Equity	MAS	US	Forest 500	Timber, Leather	2,940	N
72	MBRF Global Foods Co SA	MBRF3 BZ Equity	MRFGBZ	BR	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Leather	3,935	Y
73	McCormick & Co Inc/MD	MKC US Equity	MKC	US	Forest 500	Palm oil, Soy, Pulp & Paper	5,550	N

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Count	Entity Name	Equity ticker	Credit ticker	Country of Risk	Coverage	Exposed Commodities	Total G7 debt issuer (USD mn)	DDU 2025
74	McDonald's Corp	MCD US Equity	MCD	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	42,180	Y
75	Mercedes-Benz Group AG	MBG GR Equity	MBGGR	DE	Forest 500	Pulp & Paper, Timber, Leather	61,233	N
76	Minerva SA/Brazil	BEEF3 BZ Equity	BEEFBZ	BR	Forest 500	Soy, Pulp & Paper, Beef, Leather	2,063	Y
77	Mitsubishi Corp	8058 JP Equity	MITCO	JP	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	18,414	Y
78	Mitsui & Co Ltd	8031 JP Equity	MITSCO	JP	Forest 500	Palm oil, Soy, Pulp & Paper, Timber	9,326	Y
79	Mondelez International Inc	MDLZ US Equity	MDLZ	US	Forest 500	Palm oil, Soy, Pulp & Paper	18,476	Y
80	Mondi PLC	MNDI LN Equity	MNDILN	AT	Forest 500	Pulp & Paper, Timber	3,990	N
81	Neste Oyj	NESTE FH Equity	NESVFH	FI	Forest 500	Palm oil, Soy	4,829	Y
82	Nestle SA	NESN SW Equity	NESNVX	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	71,848	Y
83	NIKE Inc	NKE US Equity	NKE	US	Forest 500	Pulp & Paper, Leather	8,000	Y
84	Nomad Foods Ltd	NOMD US Equity	IGBOND	GB	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	2,575	N
85	Olam International Ltd	OLAM SP Equity	OLGPSP	SG	Forest 500 & ZSL SPOTT	Palm oil, Soy, Pulp & Paper, Timber	1,314	Y
86	Pentland Capital Ltd	1323Q LN Equity	JDLN	GB	Forest 500	Pulp & Paper, Leather	2,542	N
87	PepsiCo Inc	PEP US Equity	PEP	US	Forest 500	Palm oil, Soy, Pulp & Paper	46,349	Y
88	Perkebunan Nusantara III PT	0782985D IJ Equity	PTPNIJ	ID	Forest 500 & ZSL SPOTT	Palm oil	390	N
89	Pertamina Persero PT	PERT IJ Equity	PERTIJ	ID	Forest 500	Palm oil	23,358	Y
90	Procter & Gamble Co/The	PG US Equity	PG	US	Forest 500	Palm oil, Pulp & Paper	32,508	Y
91	Reckitt Benckiser Group PLC	RKT LN Equity	RKTLN	GB	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	11,037	Y
92	Restaurant Brands International	QSR CN Equity	BCULC	CA	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	13,577	Y
93	REWE International Finance BV	0750893D GR Equity	REWEEG	NL	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Timber	4,581	Y
94	SC Johnson & Son Inc	3273Z US Equity	SCJOHN	US	Forest 500	Palm oil, Pulp & Paper	2,500	Y
95	Sekisui House Ltd	1928 JP Equity	SEKIS	JP	Forest 500	Pulp & Paper, Timber	6,561	Y
96	Seven & i Holdings Co Ltd	3382 JP Equity	SEVENI	JP	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Timber	15,796	Y
97	Shell PLC	SHEL LN Equity	RDSALN	US	Forest 500	Palm oil, Soy	54,886	Y
98	Sigma Holdco BV	1577926D NA Equity	SIGHCO	NL	Forest 500	Palm oil, Soy, Pulp & Paper	7,181	Y
99	Skechers USA Inc	SKX US Equity	SKX	US	Forest 500	Pulp & Paper, Leather	8,884	N

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Count	Entity Name	Equity ticker	Credit ticker	Country of Risk	Coverage	Exposed Commodities	Total G7 debt issuer (USD mn)	DDU 2025
100	Staples Inc	2619871D US Equity	SPLS	US	Forest 500	Pulp & Paper, Timber	7,298	Y
101	Starbucks Corp	SBUX US Equity	SBUX	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	16,200	Y
102	Stora Enso Oyj	STERV FH Equity	STERV	FI	Forest 500	Pulp & Paper, Timber	2,668	Y
103	Suzano SA	SUZB3 BZ Equity	SUZANO	BR	Forest 500 & ZSL SPOTT	Pulp & Paper, Timber	12,355	Y
104	Sysco Corp	SYY US Equity	SYY	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	11,082	Y
105	Tapestry Inc	TPR US Equity	TPR	US	Forest 500	Pulp & Paper, Leather	2,397	Y
106	Target Corp	TGT US Equity	TGT	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Timber, Leather	14,501	Y
107	Tesco PLC	TSCO LN Equity	TSCOLN	GB	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Timber, Leather	7,295	Y
108	TJX Cos Inc/The	TJX US Equity	TJX	US	Forest 500	Pulp & Paper, Timber, Leather	2,881	N
109	Tyson Foods Inc	TSN US Equity	TSN	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Leather	8,820	Y
110	Unilever PLC	ULVR LN Equity	UNANA	GB	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	30,890	Y
111	UPM-Kymmene Oyj	UPM FH Equity	UPMFH	FI	Forest 500	Pulp & Paper, Timber	9,012	Y
112	VF Corp	VFC US Equity	VFC	US	Forest 500	Pulp & Paper, Leather	4,634	Y
113	Walgreens Boots Alliance Inc	WBA US Equity	WBA	US	Forest 500	Palm oil, Soy, Pulp & Paper	95	Y
114	Walmart Inc	WMT US Equity	WMT	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Timber, Leather	38,690	Y
115	Weyerhaeuser Co	WY US Equity	WY	US	Forest 500	Timber	5,056	N
116	WH Group Ltd	288 HK Equity	SFD	HK	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	2,583	Y
117	Wilmar International Ltd	WIL SP Equity	WILSP	CN	Forest 500 & ZSL SPOTT	Palm oil, Soy, Pulp & Paper	2,517	Y
118	WM Morrison Supermarkets Ltd	MRW LN Equity	MRWLN	GB	Forest 500	Palm oil, Soy, Pulp & Paper, Beef, Timber, Leather	4,742	Y
119	Yum! Brands Inc	YUM US Equity	YUM	US	Forest 500	Palm oil, Soy, Pulp & Paper, Beef	7,217	Y

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