

December 2021

As we close out 2021, we'd like to reflect back on the year and what we see going forward. Every month, as part of these reports, we include a snapshot of ESG-themed IG debt issuance by issuers in the United States. This report expands on that monthly snapshot for the year and includes commentary on:

- US Investment Grade & High Yield ESG-themed debt issuance
- ESG loan financing
- Structured Products
- Challenges & Looking Ahead to 2022

Before starting...Thank you

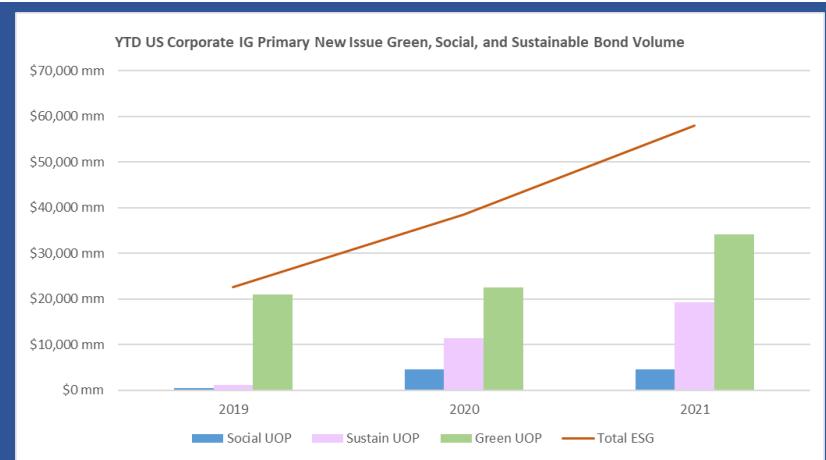
We'd like to take a moment before diving into 2021's sustainable finance activity report to thank all of our readers, clients, and stakeholders. As a team of military veterans and financial service professionals, we appreciate your support and look forward to the opportunity that lies ahead in the new year. Our team is always at your disposal.

US Investment Grade & High Yield ESG-Themed Debt

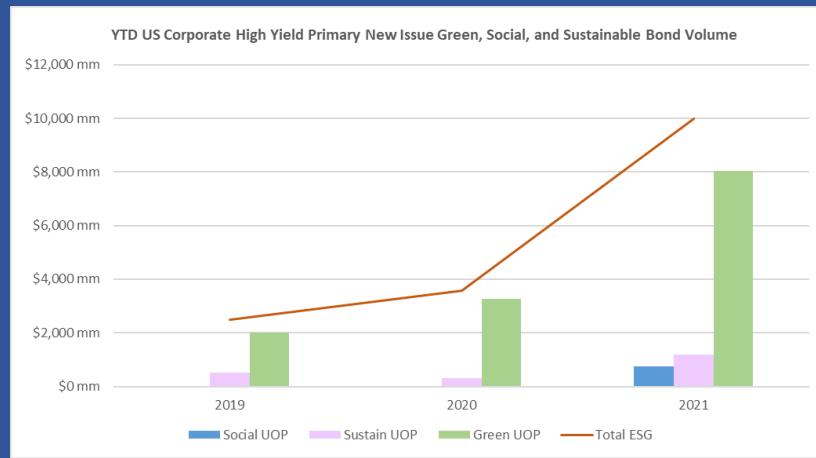
Specifically in the US Investment Grade space, 2021 experienced a 50% increase in notional volume of ESG IG-themed debt. Of the \$57bn+ ESG-themed debt that priced this year, 49% was earmarked for "green" projects or investments, 19% for "social", and 32% for "sustainable" (which is a combination of green and social investments/projects).

While there continued to be a greater diversification of issuers, certain trends remain. For instance, real estate, utilities, and financials still comprise most of the new issue green labeled debt (~75%). Financials also make up a significant portion of sustainable debt issuers and almost completely dominated social debt issuance in 2021 (95%). However, there were some fractures in the trend, specifically with sustainable-labeled debt where there were several healthcare (biopharma) and communication services issuers which represented 29% of 2021's sustainable debt new issuance.

In addition to increased IG volume, we also saw a substantial uptick in HY ESG-themed issuance (+150% YoY). One of the key drivers behind this was Ford Motor Company's \$2.5bn green bond, which surpassed BofA's \$2.25bn green bond which was printed in May 2018 and was one of the largest green bonds printed by a corporation in the United States. One theme that we see going into 2022 is further use of ESG-themed debt by high-yield issuers, which is part of our broader thesis that there are several other ESG/sustainable investments to consider outside of the traditional "values" based screens.



Investment Grade: Over \$57bn in IG US ESG issuance priced this year. Largest transactions included green, sustainable, and social bonds from BofA, Walmart, NextEra, JP Morgan, and Truist.



High Yield: This year high-yield issuers came to market with a number of primarily green labeled debt. Ford's \$2.5bn green bond helped push total HY ESG issuance higher—which is 3 years behind the IG space (in 2018 ESG bonds printed by US IG issuers totaled ~\$8bn).

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Sustainable linked bonds were another area where we saw continued issuance. Approximately \$7bn in bonds whose coupons are linked to KPIs related to sustainability were printed in 2021. Unlike in the traditional IG space, there is a much more diverse pool of issuers.

Performance-wise, as was recently reported by Bloomberg, ESG debt has lagged. An index of only green bonds underperformed, losing 7.2% in comparison to a 4.4% drop for the Bloomberg Global Aggregate Index. Rising interest rates and the tendency for longer-dated maturities are some of the key drivers behind the underperformance.

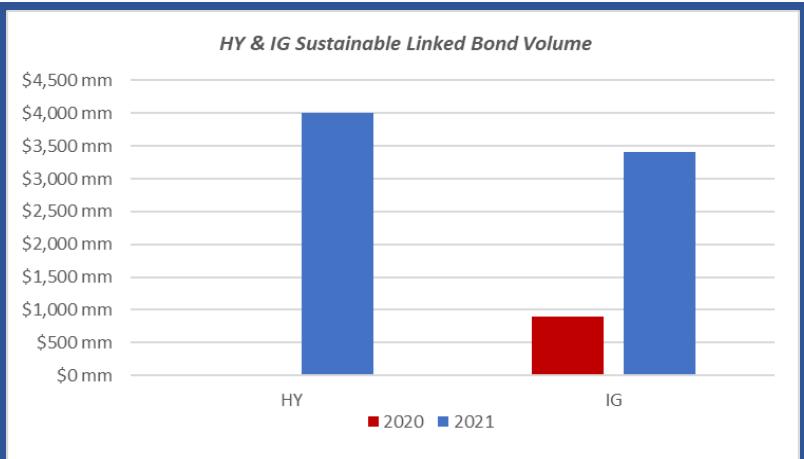
Loan Financing

Sustainable Linked Loans were another area of growth. Instead of (or in-addition to) printing bonds, some issuers entered into or renewed their revolvers and term loans with rates linked to KPIs (in many cases GHG emissions). This year, loans linked to sustainable performance totaled \$36bn (a ~200% increase YoY). Utilities, technology, and materials made up a growing portion of the borrowers. One of the benefits of the loans is that they often don't require the same level of yearly reporting requirements (as a standard green bond) for use of proceeds. However, if KPI's are not met, there is a step-up in the rate. There has also been some critique as to the rigor of the KPIs and lack of teeth in the step-up provision.

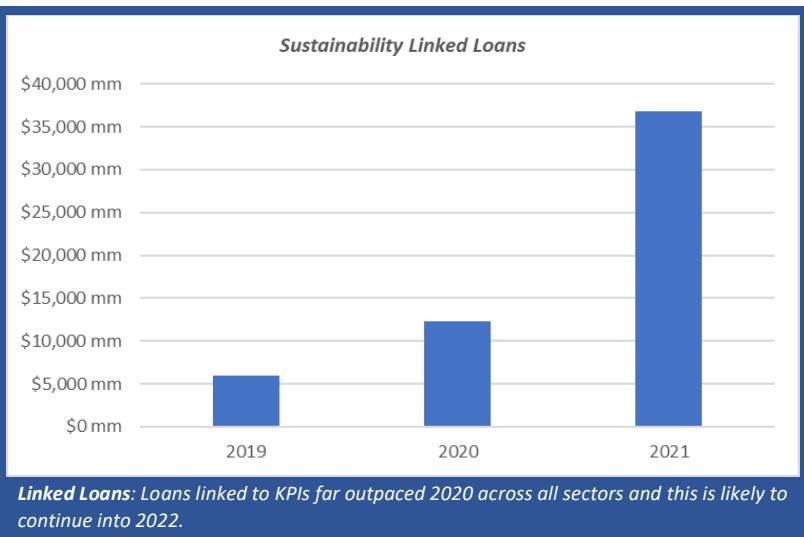
Structured Products

Another interesting development that occurred this year was the pace of issuance of structured products to finance ESG initiatives. One large milestone was made by Fannie Mae, which has now printed over \$100bn in Green Mortgage-Backed Securities. Fannie Mae's program has been in existence for over 10 years, and they are one of the largest green bond issuers in the United States.

Asset Backed Securities also saw an uptick. This year there were seven issuers here in the US which printed over \$6bn in ESG ABS. Rail companies, automotive & aircraft, as well as data centers were the chief issuers. ABS in some ways provides a direct correlation between the asset and ESG related activity, and the structure of the deals already has regular reporting



Linked Bonds: IG and HY issuers continue linking key performance indicators to bond coupons. This year high-yield issuers were some of the primary users of this structure.



Linked Loans: Loans linked to KPIs far outpaced 2020 across all sectors and this is likely to continue into 2022.

Pricing Date	Issuer	Amount	Additional Commentary
23-Nov	FLEXENTIAL	\$2bn	Framework & SPO (Sustainalytics)
11-Aug	Aligned	\$1.35bn	Framework & SPO (Sustainalytics)
22-Jun	TRINITYRAIL	\$325mm	Framework & SPO (Sustainalytics)
8-Jun	TOYOTA TMCC DIRECT CREDIT CORPORATION	\$1.6bn	Framework & SPO (Sustainalytics)
25-May	TRINITYRAIL	\$560mm	Issued Under Triumph Rail Sub
7-May	HILLMAN FINANCE CORPORATION	\$336mm	Reference In Prospectus
4-May	TRINITYRAIL	\$355mm	Framework & SPO (Sustainalytics)

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requirements making them conducive to the integration of KPI and ESG data/metrics.

Challenges

Challenges going forward will include concerns around green washing and heightened scrutiny (from both investors and regulators), as well as the costs associated with implementing the reporting, data collection, ratings, analysis, and disclosure. Rising interest rates also pose risks and challenges for investors as much of the ESG-themed debt is issued at the longer end of the curve.

Going into 2022

- Continued use of capital markets financing as organizations aim to align their capital with climate scenarios and other themes related to sustainability.
- More high yield issuers in 2022, along with greater incorporation of structured products.
- Greater scrutiny from investors and regulators on disclosure resulting in increased costs for obtaining resources related to sustainability/ESG.

Further Resources

ESG Bond Performance: (<https://www.bloomberg.com/news/articles/2021-12-17/esg-bond-buyers-swallow-short-term-losses-to-gain-ethical-kudos>).

Greenwashing: (<https://www.wsj.com/articles/bond-investors-challenge-wall-street-greenwashing-11635850800>).

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