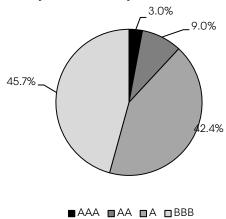
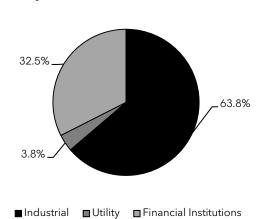
Bloomberg Barclays MSCI US Corporate Sustainability SRI Index

The Bloomberg Barclays MSCI US Corporate Sustainability SRI Index is an investment-grade, US dollar-denominated benchmark that negatively screens out issuers with substantial revenue derived from sources such as adult entertainment, alcohol, gambling, tobacco, controversial military weapons, civilian firearms, nuclear power, and genetically modified organisms (GMOs), while only including issuers with at least a BBB ESG rating. The index follows the same general criteria as the Bloomberg Barclays US Corporate Index and was launched in December 2019, with history backfilled to January 2008.

Composition by Credit Quality (MV %) - November 29, 2019 Composition by Sector (MV %) - November 29, 2019





Rules for Inclusion

Sector Corporate (industrial, utility and financial institutions) issuers only.

| Business Involvement Screening | Adult Entertainment | Excludes all issuers classified as adult entertainment producers that earn more than 5% in revenue, or more than \$500 million in revenue, from adult entertainment materials. |
|-----------------------------------|------------------------|---|
| | Alcohol | Excludes all issuers classified as alcohol producers that earn more than 5% in revenue, or more than \$500 million in revenue, from alcohol-related products. |
| | Gambling | Excludes all issuers classified as involved in gambling operations or support that earn more than 5% in revenue, or more than \$500 million in revenue, from gambling-related activities. |
| | Tobacco | Excludes all issuers classified as tobacco producers or distributors, retailers, or suppliers that derive 15% or more of their revenue from tobacco-related products. |
| | Military Weapons | Excludes all issuers classified as involved in manufacturing of nuclear weapons, nuclear weapons components, chemical and biological weapons components, or depleted uranium weapons. |
| | | Excludes all issuers that earn more than 5% in revenue, or more than \$500 million, from manufacturing conventional weapons, conventional weapons components, or conventional weapons support systems and services. |
| | Civilian Firearms | Excludes all issuers classified as civilian firearms producers or retailers that derive 5% or more of their revenue, or more than \$20 million in revenue, from civilian firearms–related products. |







Rules for Inclusion

| Dusings Invaluent | Nuclear Power | Excludes all issuers classified as nuclear utilities or involved in uranium mining, designing nuclear reactors, or enrichment of fuel for nuclear reactors. | | | | | | |
|-----------------------------------|--|--|--|--|--|--|--|--|
| Business Involvement Screening | | Excludes all issuers that earn 15% or more revenues as a supplier to the nuclear power industry. | | | | | | |
| | Genetically Modified Organisms | Companies that derive any revenue from activities like genetically modifying plants, such as seeds and crops, and other organisms intended for agricultural use or human consumption. | | | | | | |
| | | Companies that are only involved in GMO Research & Development activities are not excluded. | | | | | | |
| ESG Rating | Only issuers with Es | SG Ratings greater than or equal to BBB are included. | | | | | | |
| ESG Controversy | Excludes all issuers | involved in one or more very severe ESG Controversies (MSCI ESG Controversy Score= 0). | | | | | | |
| Eligible Currencies | Principal and coup | on must be denominated in USD. | | | | | | |
| Quality | and Fitch; when a r bond, that rating is | rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P rating from only two agencies is available, the lower is used; when only one agency rates a used. In cases w here explicit bond level ratings may not be available, other sources may be urities by credit quality: | | | | | | |
| | | treasury and hard currency sovereign issues are classified using the middle issuer-level local ard currency debt ratings from each agency for all outstanding bonds, even if bond-level ratings | | | | | | |
| | • Expected ratings at issuance may be used to ensure timely index inclusion or to properly classify split-rated is | | | | | | | |
| | | ies may use an issuer rating for index classification purposes if available. Unrated subordinated acluded if a subordinated issuer rating is available. | | | | | | |
| Amount Outstanding | USD 300mn minim | um par amount outstanding. | | | | | | |
| Coupon | Fixed-rate coup | pon. | | | | | | |
| | Original zero coupon bonds are included. | | | | | | | |
| | Callable fixed-to-floating rate bonds are eligible during their fixed-rate term only. | | | | | | | |
| | Bonds with a st | ep-up coupon that changes according to a predetermined schedule are eligible. | | | | | | |
| Maturity | At least one year | ar until final maturity, regardless of optionality. | | | | | | |
| | | vert from fixed to floating rate, including fixed-to-float perpetual, will exit the index one year sion to floating-rate. Fixed-rate perpetual bonds are not included. | | | | | | |
| | | used on maturity are inclusive of lower bounds. Intermediate maturity bands include bonds with to 9.999 years. Long maturity bands include maturities of 10 years or greater. | | | | | | |
| Taxability | Only fully taxab | ole issues are eligible. | | | | | | |
| | Dividend Recei | ved Deduction (DRD) and Qualified Dividend Income (QDI) eligible securities are excluded. | | | | | | |
| Market of Issue | with registration is treated as o | I securities, bonds exempt from registration at the time of issuance and SEC Rule 144A securities in rights are eligible. A security with both SEC Regulation–S (Reg–S) and SEC Rule 144A tranches ne security for index purposes. The 144A tranche is used to prevent double–counting and combined amount outstanding of the 144A and Reg–S tranches. | | | | | | |
| | Global bonds a | re included. | | | | | | |
| | Bonds that were remain index el | e previously SEC-registered or 144A with registration rights but later deregistered by the issuer ligible. | | | | | | |
| Seniority of Debt | Senior and Subordi | inated issuers are included. | | | | | | |

Rules for Inclusion

Security Types

Included

- Bullet, putable, sinkable/amortizing and callable bonds
- Original issue zero coupon
- Underwritten MTN programs
- Enhanced equipment trust certificates (EETC)
- Certificates of deposit
- Fixed-rate and fixed-to-float (including fixed-to-variable) capital securities

Excluded

- Contingent capital securities, including traditional CoCos and contingent write-down securities, with explicit capital ratio or solvency/balance sheet-based triggers
- Bonds with equity type features (e.g., warrants, convertibles, preferreds, DRD/QDI-eligible issues)
- Inflation-linked bonds, floating-rate issues
- Fixed-rate perpetuals
- Private placements, retail bonds
- Structured notes, pass-through certificates
- Illiquid securities with no available internal or thirdparty pricing source

Rebalancing Rules

Frequency

For each index, Bloomberg maintains two universes of securities: the Returns (Backward) and the Projected (Forward) Universes. The composition of the Returns Universe is rebalanced at each month-end and represents the fixed set of bonds on which index returns are calculated for the next month. The Projected Universe is a forward-looking projection that changes daily to reflect issues dropping out of and entering the index but is not used for return calculations. On the last business day of the month (the rebalancing date), the composition of the latest Projected Universe becomes the Returns Universe for the following month.

Index Changes

During the month, indicative changes to securities (credit rating change, sector reclassification, amount outstanding changes, corporate actions, and ticker changes) are reflected daily in the Projected and Returns Universe of the index. These changes may cause bonds to enter or fall out of the Projected Universe of the index on a daily basis, but will affect the composition of the Returns Universe at month-end only, when the index is next rebalanced.

Reinvestment of Cash Flows

Intra-month cash flows from interest and principal payments contribute to monthly index returns but are not reinvested at a short-term reinvestment rate between rebalance dates. At each rebalancing, cash is effectively reinvested into the Returns Universe for the following month so that index results over two or more months reflect monthly compounding.

New Issues

Qualifying securities issued, but not necessarily settled on or before the month-end rebalancing date, qualify for inclusion in the following month's index if the required security reference information and pricing are readily available.

Pricing and Related Issues

Sources & Frequency

Index eligible bonds are priced on a daily basis by Bloomberg's evaluated pricing service, BVAL.

Pricing Quotes

Bonds can be quoted in a variety of ways, including nominal spreads over benchmark securities/treasuries, spreads over swap curves, or direct price quotes as a percentage of par. For securities quoted on a spread basis, daily security price changes will result from movements in the underlying curve (swap or treasury) and/or changes in the quoted spread.

Timing

- 3pm (New York time).
- On early market closes, prices are taken as of 1pm (New York time), unless otherwise noted.
- If the last business day of the month is a public holiday, prices from the previous business day are used.

Bid or Offer Side

Bonds in the index are priced on the bid side.

Settlement Assumptions

T+1 calendar day settlement basis for all bonds except MBS, which use same-day settlement. At month-end, settlement is assumed to be the first calendar day of the following month, even if the last business day is not the

Pricing and Related Issues

| | last day of the month, to allow for one full month of accrued interest to be calculated. |
|------------------|--|
| Verification | Daily price moves for each security are analyzed by the index pricing team to identify outliers. Index users may also challenge price levels, which are then reviewed and updated as needed using input from various sources. |
| Currency Hedging | Returns hedged to various currencies are published for the US Corporate Sustainability SRI Index. The indices' FX hedging methodology takes rolling one-month forward contracts that are reset at the end of each month and hedges each non-reporting currency-denominated bond in the index into the reporting currency terms. No adjustment is made to the hedge during the month to account for price movements of constituent securities in the Returns Universe of the index. |
| Calendar | The US Corporate Sustainability SRI Index follows the US bond market calendar. |

Monthly Returns in USD, 2008-2019(%)

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2008 | 0.94 | 0.00 | -1.43 | 1.10 | -1.02 | -0.70 | -0.74 | 0.58 | -8.94 | -6.28 | 3.93 | 7.31 | -6.04 |
| 2009 | 1.20 | -1.69 | -0.43 | 3.74 | 3.47 | 2.69 | 4.32 | 1.75 | 1.66 | 0.55 | 1.51 | -0.93 | 19.13 |
| 2010 | 1.57 | 0.31 | 0.24 | 1.68 | -0.44 | 2.21 | 1.83 | 1.97 | 0.66 | 0.18 | -0.85 | -1.05 | 8.56 |
| 2011 | 0.13 | 0.65 | -0.07 | 1.68 | 1.47 | -0.86 | 2.59 | 0.25 | 0.58 | 1.49 | -1.43 | 2.10 | 8.83 |
| 2012 | 1.71 | 0.63 | -1.13 | 1.32 | 0.87 | 0.16 | 2.67 | 0.11 | 0.62 | 1.20 | -0.31 | -0.08 | 7.99 |
| 2013 | -0.99 | 0.53 | 0.03 | 1.75 | -2.13 | -2.54 | 0.64 | -0.75 | 0.72 | 1.39 | -0.23 | -0.14 | -1.79 |
| 2014 | 1.83 | 1.03 | 0.07 | 1.16 | 1.35 | 0.01 | -0.04 | 1.42 | -1.30 | 0.94 | 0.69 | 0.08 | 7.44 |
| 2015 | 3.00 | -1.10 | 0.44 | -0.73 | -0.56 | -1.69 | 0.68 | -0.48 | 0.80 | 0.31 | -0.10 | -0.57 | -0.06 |
| 2016 | 0.47 | 0.54 | 2.43 | 1.28 | -0.06 | 2.02 | 1.23 | 0.22 | -0.20 | -0.72 | -2.57 | 0.64 | 5.32 |
| 2017 | 0.31 | 1.08 | -0.15 | 1.06 | 1.05 | 0.23 | 0.73 | 0.74 | -0.21 | 0.43 | -0.14 | 0.83 | 6.11 |
| 2018 | -0.99 | -1.49 | 0.28 | -0.87 | 0.54 | -0.53 | 0.79 | 0.50 | -0.32 | -1.35 | 0.00 | 1.46 | -2.01 |
| 2019 | 2.27 | 0.16 | 2.44 | 0.46 | 1.43 | 2.25 | 0.47 | 3.00 | -0.59 | 0.64 | 0.22 | _ | 13.45 |

Accessing Index Data

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|-------|------|------|---------|---|

Bloomberg benchmarks are the global standard for capital markets investors.

- INDEX<Go> The Bloomberg Indices landing page is a dashboard for index-related information on the terminal. Find daily and monthly index returns for key indices from each index family as well as index publications including methodologies, factsheets, monthly reports, updates and alerts.
- IN<Go> The Bloomberg Index Browser displays the latest performance results and statistics for the indices
 as well as history. IN presents the indices that make up Bloomberg's global, multi-asset class index families
 into a hierarchical view, facilitating navigation and comparisons. The "My Indices" tab allows a user to focus
 on a set of favorite indices.
- PORT<Go> Bloomberg's Portfolio & Risk Analytics solution includes tools to analyze the risk, return, and current structure of indices. Analyze the performance of a portfolio versus a benchmark or use models for performance attribution, tracking error analysis, value-at-risk, scenario analysis, and optimization.
- DES<Go> The index description page provides transparency into an individual index including membership information, aggregated characteristics and returns, and historical performance.

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- Current performance numbers for select indices

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- Automatic delivery of files via email or SFTP following the completion of the index production process after market close
- Clients may receive standard files or may customize file contents
- Index data is also available via authorized redistributors

Bloomberg Total Return Index Value Tickers: US Corporate Sustainability SRI Index and Related Indices

Ticker (CAD Unhedged)IndexTicker (CAD Unhedged)IndexI35347USUS Corporate Sustainability SRI IndexRUCMTRUUUS Corporate SRI IndexLUACTRUUUS Corporate IndexLBUSTRUUUS Aggregate

Total Return Index Values are available in other currencies and on a hedged basis. Attributes such as yield and duration, are also available. Please refer to Accessing Bloomberg Barclays Index Data Using Bloomberg Tickers for a full list of tickers and attributes that are available.

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