

Bloomberg MSCI Global Aggregate 1-3 Year SRI Carbon ESG-Weighted Index

The Bloomberg MSCI Global Aggregate 1-3 Year SRI Carbon ESG-Weighted Bond Index is a multi-currency benchmark that tracks investment grade treasury, government-related, corporate and securitized debt, and includes issuers with MSCI ESG Ratings of BB or higher. The index also negatively screens issuers that are involved in business activities that are restricted because they are inconsistent with certain values-based business involvement criteria, including activities related to controversial weapons, those issuers with high carbon intensity or with a "red" MSCI ESG Controversy Score. Additionally, bond weights are tilted based on ESG Ratings. The index was created in September 2021, with history backfilled to January 1, 2016.

Rules for Inclusion

Eligible Currencies

- Principal and coupon must be denominated in one of the following eligible currencies:
 - Americas: CAD, CLP, COP, MXN, PEN, USD
 - EMEA: CHF, CZK, DKK, EUR, GBP, HUF, ILS, NOK, PLN, RON, RUB, SEK
 - Asian-Pacific: AUD, CNY, HKD, IDR, JPY, KRW, MYR, NZD, SGD, THB
- Eligible currencies will not necessarily have debt included in the index if no securities satisfy the inclusion rules.

New currency inclusion is reviewed annually through the index governance process. To be considered for inclusion, new currency candidates must be rated investment grade and sufficiently tradable, convertible and hedgeable for international investors.

Quality

Securities must be rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used; when only one agency rates a bond, that rating is used. In cases where explicit bond-level ratings may not be available, other sources may be used to classify securities by credit quality:

- Local currency treasury and hard currency sovereign issues are classified using the middle issuer-level local currency and hard currency debt ratings from each agency for all outstanding bonds, even if bond-level ratings are available.
- Expected ratings at issuance may be used to ensure timely index inclusion or to classify split-rated issuers properly.
- Unrated securities may use an issuer rating for index classification purposes, if available. Unrated subordinated securities are included if a subordinated issuer rating is available.
- German Pfandbriefe are assigned ratings that are one full rating category above the issuer's unsecured debt.
- For the Canadian Dollar market, DBRS is considered in addition to Moody's, S&P and Fitch. When all four ratings agencies are available, the highest and lowest rating are removed and the lower of the two remaining is used.

Amount Outstanding	<p>Fixed minimum issue sizes are set for all local currency markets:</p> <ul style="list-style-type: none"> • 150mn: CAD • 200mn: GBP • 300mn: USD, EUR, CHF, AUD • 500mn: NZD, SGD • 1bn: RON, PEN • 2bn: DKK, NOK, PLN, ILS, HKD, MYR • 2.5bn: SEK • 5bn: CNY* • 10bn: MXN, CZK, THB • 20bn: RUB • 35bn: JPY • 100bn: CLP • 200bn: HUF • 500bn: KRW • 1trn: COP • 2trn: IDR <p>*The minimum amount outstanding required for CNY-denominated treasury and policy bank debt is CNY 5bn. The total amount of index-eligible CNY debt will be phased into the Global Aggregate Index at 5% increments over a 20 month period starting April 1, 2019 until November 2020 when 100% of index-eligible debt will be reflected in the index.</p>
Coupon	<ul style="list-style-type: none"> • Fixed-rate coupon (including zero coupon). • Callable fixed-to-floating rate bonds are eligible during their fixed-rate term only. • Bonds with a step-up coupon that changes according to a predetermined schedule are eligible.
Maturity	<ul style="list-style-type: none"> • Between one and up to, but not including, three years until final maturity, regardless of optionality. • MBS must have a weighted average maturity of between one and up to, but not including, three years. CMBS and ABS must have a remaining average life of between one and up to, but not including, three years. • Bonds that convert from fixed to floating rate, including fixed-to-float perpetuals, will exit the index one year prior to conversion to floating rate. Fixed-rate perpetuals are not included.
Taxability	<ul style="list-style-type: none"> • Only fully taxable issues are eligible. • Build America Bonds (BAB) with the tax credit to the issuer are eligible; those with tax credits issued to investors are considered tax exempt. • Dividend Received Deduction (DRD) and Qualified Dividend Income (QDI) eligible securities are excluded.
Market of Issue	Fully taxable, publicly issued in the global and regional markets.
Seniority of Debt	Senior and subordinated issues are included.

Security Types	Included	Excluded
	<ul style="list-style-type: none"> Bullet, putable, sinkable/amortizing and callable bonds Taxable municipal securities, including Build America Bonds (BAB) Original issue zero coupon bonds Bonds issued through underwritten MTN programs Enhanced equipment trust certificates (EETC) Certificates of deposit Fixed-rate and fixed-to-float (including fixed-to-variable) capital securities Loan participation notes (as of April 1, 2013) US agency CMBS (as of July 1, 2014) Malaysian government Sukuk (as of April 1, 2015) Covered bonds CNY treasury and policy bank debt 9as of April 1, 2019) 	<ul style="list-style-type: none"> 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 (eg, warrants, convertibles, preferreds, DRD/QDI-eligible issues) Tax-exempt municipal securities Inflation-linked bonds, floating-rate issues Fixed-rate perpetuals Private placements, retail bonds Sinkable Russian OFZ bonds issued prior to 2009 USD 25/USD 50 par bonds Structured notes, pass-through certificates Non-ERISA eligible CMBS, US agency MBS hybrid ARMs Illiquid securities where reliable pricing is unavailable Formosa bonds

Environment, Social and Governance (ESG) Rules

MSCI ESG Rating	<ul style="list-style-type: none"> Securities must have an MSCI ESG Rating of BB or higher (for all sectors that have ESG Ratings). ESG Pillar Score for each component (Environment, Social, and Governance) must be at least 2 (for all sectors, except MBS, ABS, CMBS, Treasury and Sovereign). Sovereign ESG Pillar Score for each component (Environment, Social, and Governance) must be at least 2 for Treasury and Sovereign sectors. Unrated issuers from sectors with ratings are excluded. Prior to April 8, 2021, MSCI ESG Ratings, Controversy Scores and Business Involvement data were applied at the ticker level, where every bond within the same ticker would have the same MSCI ESG Rating, with MSCI mapping ESG data from the entity with the largest debt outstanding (by market value) to all companies with the same Bloomberg ticker. From April 9, 2021, MSCI ESG data is applied at the bond level which may result in bonds with the same Bloomberg ticker having different MSCI ESG Ratings. MSCI ESG Ratings are generally updated annually, but may be reviewed more frequently as needed.
Business Involvement Screens	<p>The index excludes issuers involved in the following business lines/activities as per the standard Bloomberg MSCI SRI screen:</p> <ul style="list-style-type: none"> Alcohol Tobacco Gambling

- Adult Entertainment
- Genetically Modified Organisms (GMO)
- Nuclear Power
- Civilian Firearms
- Conventional Weapons
- Nuclear Weapons
- Controversial Weapons
 - Landmine Manufacturing
 - Cluster Bomb Manufacturing
 - Depleted Uranium Weapons
 - Chemical and Biological Weapons Components
- Thermal Coal
- Fossil Fuels

Involvement is defined for each restricted activity and may be based on % of revenue, total revenue, or any tie regardless of revenue (see Figures 7-8 on pages 14-16 for standard screen threshold in [ESG Methodology](#)).

The index also has additional Bloomberg MSCI screens, besides the standard ones outlined above:

- Exclude issuers with any ties to the following categories: Biochemical Systems, Biochemical System Components, Depleted Uranium, Cluster Bombs, Land Mines, Nuclear Systems, Nuclear System Components
- Exclude issuers that generate any revenue from Weapons
- Exclude issuers that generate more than 25% of revenue from Nuclear Power
- Exclude Tobacco Producers that generate more than 10% of revenue from Tobacco
- Exclude issuers that generate more than 10% of revenue from Tobacco
- Exclude issuers that generate more than 5% of revenue from Gambling Operations or Gambling Support
- Exclude issuers that generate more than 10% of revenue from Adult Revenue

From September 2020, the index also excludes issuers from the following business lines/ activities:

- Carbon Emission Intensity more than 750
- Revenue from Thermal Coal greater than 10%
- Revenue from Generation of Thermal Coal greater than 10%

MSCI ESG Controversies Excludes any issuer with a “Red” MSCI ESG Controversies score (equal to zero), which measures an issuer’s involvement in major ESG controversies and how well they adhere to international norms and principles.

Factor Tilts

The weight of each index eligible security is adjusted by a fixed multiplier (see table), which is determined by its MSCI ESG Rating (AAA, AA, A, BBB, BB, NR).

ESG Rating	Tilt
AAA, AA, A	1.5x
BBB	1.0x

BB	0.8x
NR	1.0x

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	All index-eligible bonds are priced on a daily basis by Bloomberg's evaluated pricing service, BVAL, except CHF-denominated bonds, which are priced by SIX, and JPY-denominated corporates, which are priced by Japan Securities Dealers Association (JSDA).
Pricing Quotes	Bonds are quoted as a percentage of par.
Timing	<p>Prices are snapped at the following times:</p> <ul style="list-style-type: none"> North American currency bonds: 4 p.m. (New York time); 4 p.m. (Toronto time) for CAD-denominated securities. USD-denominated bonds prior to January 14, 2021 used 3p.m. New York time pricing snap. Pan-European currency bonds: 4:15 p.m. (London time); 4 p.m. (London time) for CHF-denominated securities. Asian currency bonds: 5 p.m. (Sydney time) for AUD-denominated and NZD-denominated securities; 3 p.m. (Tokyo time) for JPY-denominated securities; 5 p.m. (Shanghai time) for CNY-denominated securities; 5 p.m. (Tokyo time) for all other securities. <p>If the last business day of the month is a public holiday in a major regional market, prices from the previous business day are used to price bonds in the particular market.</p>

Bid or Offer Side	Bonds in the index are priced on the bid side. The initial price for new corporate and EM local currency issues entering the index is the offer side; after the first month, the bid price is used. Japanese, Euro and Sterling treasury bonds use mid prices.
Settlement Assumptions	T+1 calendar day settlement basis. 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 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.
Currency Hedging	Returns hedged to various currencies are published for multi-currency indices. 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 Bloomberg MSCI Global Aggregate 1-3 Year SRI Carbon ESG-Weighted Index is a global, multi-currency index that is generated every business day of the year except for January 1, the only holiday common to all regional calendars. During holidays observed by local markets, the index will still be generated using prices from the previous business day. FX rates are updated daily using WM Reuters 4pm (London) rates. FX forwards are also sourced from WM Company.

Accessing Index Data

Bloomberg Terminal®	<p>Bloomberg benchmarks are the global standard for capital markets investors.</p> <ul style="list-style-type: none"> • INDE<GO> - The Bloomberg Indices dashboard page, which contains daily, monthly, and year-to-date index returns for key indices from each index family as well as a link to index publications. • 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. • DES<GO> - The index description page provides transparency into an individual index including membership information, aggregated characteristics and returns, and historical performance. • INP<GO> - The Bloomberg Indices Publications page, which includes methodologies, factsheets, monthly reports, announcements and technical notes. A user may also subscribe to index publications via the "Actions" button. • 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.
Bloomberg Indices Website (www.bloomberg.com/indices)	<p>The index website makes available limited index information including:</p> <ul style="list-style-type: none"> • Index methodology and factsheets • Current performance numbers for select indices

Data Distribution	Index subscribers may choose to receive index data in files. Files may include:
--------------------------	---

- Index level and/or constituent level returns and characteristics for any indices
- 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

Index Ticker

I36635US: Total Return USD Unhedged

Index Licensing

Bloomberg requires index data licenses for services and products linked to the Indices

- | | | |
|---|-----------------------------------|--------------------------------------|
| • Index or Constituent-Level Redistribution | • Bond Pricing Service | • Exchange Traded Funds (ETFs) |
| • Exchange Traded Notes (ETNs) | • Index-Linked Insurance Products | • Mutual Funds |
| • OTC Derivative Products | • Custom Index Solutions | • Separately Managed Accounts (SMAs) |

Disclaimer

This document and the information contained in it, including without limitation all text, data, graphs and charts (collectively, the "Information") is the property of MSCI Inc. and/or its affiliates (collectively, "MSCI"), Bloomberg Index Services Limited and/or its affiliates (collectively, "Bloomberg"), or their licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (MSCI and Bloomberg, collectively, the "Information Providers") and is provided for informational purposes only. The Information may not be reproduced or disseminated in whole or in part without prior written permission from the authorized Information Provider(s). All rights in the Bloomberg MSCI Environmental, Social & Governance (ESG) fixed income indices (the "ESG Indices") vest in MSCI and Bloomberg. The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indices, databases, risk models, analytics or software, or in connection with issuing, offering, sponsoring, managing or marketing securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information.

The user of the Information assumes the entire risk of any use it makes or permits to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF) AND, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS OR MERCHANTABILITY).

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information including with respect to any direct, indirect, special, punitive, consequential (including lost profits) or other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit liability that may not by applicable law be excluded or limited, including without limitation (as applicable), for death or personal injury to the extent such injury results from the negligence or willful default of itself or its servants, agents or sub-contractors.

Information containing historical information, data or analysis should not be taken as an indication or guarantee of future performance, analysis, forecast or prediction. Past performance does not guarantee future results. All levels, prices and spreads are historical and do not represent current market levels, prices or spreads, some or all of which may have changed since the publication of this document.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

MSCI's wholly-owned subsidiary, MSCI ESG Research LLC, is a Registered Investment Adviser under the Investment Advisers Act of 1940. Except with respect to any applicable products or services from MSCI ESG Research LLC, none of MSCI's products or services recommends, endorses, approves or otherwise expresses any opinion regarding issuers, securities, financial products or instruments or trading strategies and none of MSCI's products or services is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and no such products or services may be relied on as such.

The ESG Indices use ratings and other data, analysis and information from MSCI ESG Research LLC. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI, or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research LLC. MSCI ESG Research LLC materials, including materials utilized in ESG Indices or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. ESG Indices are unmanaged indices that cannot be invested in directly. None of the ESG Indices recommend, endorse, approve or otherwise express any opinion regarding any issuer, securities, financial products or instruments or trading strategies and none of the ESG Indices are intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and they may not be relied on as such. Any funds, products or other securities or investment vehicles using or based on the ESG Indices are not sponsored, endorsed, or promoted by Bloomberg or MSCI.

Any use of or access to the ESG Indices requires a license from both MSCI and Bloomberg. Any use of or access to other products, services or information of Bloomberg requires a license from Bloomberg. Any use of or access to other products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, MSCI ESG Research, FEA, and other MSCI brands and product names are the trademarks or service marks of MSCI. BLOOMBERG is a trademark and service mark of Bloomberg Finance L.P. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's.

©2021 Bloomberg Finance L.P. All rights reserved

Take the next step.

For additional information,
email indexhelp@bloomberg.net
or press the <HELP> key twice
on the Bloomberg Terminal*

[bloomberg.com/indices](https://www.bloomberg.com/indices)

Beijing	Hong Kong	New York	Singapore
+86 10 6649 7500	+852 2977 6000	+1 212 318 2000	+65 6212 1000
Dubai	London	San Francisco	Sydney
+971 4 364 1000	+44 20 7330 7500	+1 415 912 2960	+61 2 9777 8600
Frankfurt	Mumbai	São Paulo	Tokyo
+49 69 9204 1210	+91 22 6120 3600	+55 11 2395 9000	+81 3 4565 8900