

## GSS Bond Index Service Mapping Template

Date of completion		Contact details	
21/06/2022		Contact person(s) / organisational unit: Jonathan Gardiner / Bloomberg Indices Email address(es): jgardiner20@bloomberg.net Phone number(s): +44 20 35253712	
Section A - Description of index			
Index overview			
<b>Index name</b>		Bloomberg MSCI Global Green Bond Index	
<b>Please provide a brief description of the index (max. 100 words)</b>		The Bloomberg MSCI Green Bond Index offers investors an objective and robust measure of the global market for fixed income securities issued to fund projects with direct environmental benefits. An independent research-driven methodology is used to evaluate index-eligible green bonds to ensure they adhere to established Green Bond Principles and to classify bonds by their environmental use of proceeds.	
<b>Launched (year)</b>		2014	
<b>Index dissemination</b>		Licenced users and Bloomberg Terminal users	
<b>Webpage / Documentation link</b>		<a href="https://www.msci.com/documents/10199/242721/Barclays_MSCI_Green_Bond_Index.pdf/6e4d942a-0ced-4e7d-9aff-d7643e1bde96">https://www.msci.com/documents/10199/242721/Barclays_MSCI_Green_Bond_Index.pdf/6e4d942a-0ced-4e7d-9aff-d7643e1bde96</a>	
Eligibility criteria			
<b>Index factors</b>		Environmental	
<b>Project category selection</b>		Green Project Categories The six eligible environmental categories defined by MSCI ESG Research are listed below. - Alternative Energy - Energy Efficiency - Pollution Prevention and Control - Sustainable Water - Green Building - Climate Adaptation	Social Project Categories N/A
<b>Comments</b>		These categories are not mutually exclusive – a bond may fall into one or more of the categories. Other environmental activities that do not fit into these categories, including sustainable forestry/afforestation may also be candidates for inclusion based on evaluations by MSCI ESG Research.	
<b>Sector</b>		Treasury, corporate, government-related, and securitized bonds are included. This includes taxable municipals.	
<b>Market coverage</b>		Global	
<b>Is the index an EU Climate Transition Benchmark?</b>		No	
<b>Is the index an EU Paris-aligned Benchmark?</b>		No	
<b>Is the index recognised under any other regulation?</b>		Yes, it is a UK Benchmark Regulation compliant Benchmark.	
<b>GSS bond eligibility: Alignment</b>		Green Bond Principles	
<b>Comments</b>			



<b>GSS bond eligibility: Methodology</b>	<p>Green bonds are fixed income securities in which the proceeds will be exclusively and formally applied to projects or activities that promote climate or other environmental sustainability purposes through their use of proceeds.</p> <ul style="list-style-type: none"> <li>For the Bloomberg Barclays MSCI Global Green Bond Index, securities are independently evaluated by MSCI ESG Research along four dimensions to determine whether they should be classified as a green bond. These eligibility criteria reflect themes articulated in the Green Bond Principles and require commitments about a bond's: <ul style="list-style-type: none"> <li>Stated use of proceeds;</li> <li>Process for green project evaluation and selection;</li> <li>Process for management of proceeds; and</li> <li>Commitment to ongoing reporting of the environmental performance of the use of proceeds.</li> </ul> </li> <li>Both self-labeled green bonds and unlabeled bonds will be evaluated using these criteria for potential index inclusion. So long as projects fall within an eligible MSCI ESG Research green bond category and there is sufficient transparency on the use of proceeds, a bond will be considered for the index even if it is not explicitly marketed as green.</li> <li>Meeting all four criteria is required for bonds issued after the publication of the Green Bond Principles in 2014. Green bonds issued prior to 2014 that are widely accepted by investors as green bonds may still qualify for the index, even if all four principles are not satisfied, since no formal guidelines were available to issuers at the time of issuance</li> </ul>
<b>Last update to methodology</b>	2021
<b>Data input</b>	Data Provider
<b>If sourced from data provider(s), name of data provider(s)</b>	MSCI
<b>Data adjustments or estimates</b>	No
<b>Verification and quality of data</b>	An independent research driven methodology is used to evaluate index-eligible green bonds to ensure they adhere to established Green Bond Principles and to classify bonds by their environmental use of proceeds.
<b>Comparability across securities</b>	Only fixed income securities that meet prescribed eligibility criteria.
<b>Eligible currencies</b>	Treasury, corporate, government-related, and securitized bonds are included. This includes taxable municipals.
<b>Ongoing reporting criteria and frequency</b>	<p>MSCI ESG Research reserves an additional three months beyond the 12-month deadline to review an issuer's green bond report. This allows time for the green bond report to be located and contact to be made with the issuer in case any questions or issues are raised.</p> <ul style="list-style-type: none"> <li>If an issuer has not published a report within 15 months of issuance, or 15 months of the prior use of proceeds report, it will be flagged as "On Watch" in the next monthly green bond technical note, with details provided in the note regarding the timing and process for removal of the bond from the index.</li> <li>If the issuer has not published a report within 18 months from issuance or the last annual report, its bond(s) will be removed from the index upon the next index rebalance. Furthermore, the bond(s) will be considered permanently ineligible for the index.</li> </ul>
<b>Maturity</b>	<p>Unlike other Bloomberg Barclays Aggregate Bond Indices, the Global Green Bond Index does not have a 1-year minimum time to maturity and will hold bonds until final maturity. The inclusion of Green Bonds to maturity within the indices is designed to accommodate this market practice by not forcing unwanted turnover.</p> <ul style="list-style-type: none"> <li>Bonds that convert from fixed to floating rate, including fixed-to-float perpetuals, will exit the index before converting to floating-rate. Fixed-rate perpetual bonds are not included.</li> <li>Sub-indices based on maturity are inclusive of lower bounds. Intermediate maturity bands include bonds with maturities of 1 to 9.999 years. Long maturity bands include maturities of 10 years or greater.</li> </ul>
<b>Credit quality</b>	<p>Securities must be rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&amp;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:</p> <ul style="list-style-type: none"> <li>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.</li> <li>Expected ratings at issuance may be used to ensure timely index inclusion or to properly classify split-rated issuers.</li> <li>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.</li> <li>German Pfandbriefe are assigned ratings that are one full rating category above the issuer's unsecured debt.</li> <li>For the Canadian Dollar market, DBRS is considered in addition to Moody's, S&amp;P, and Fitch. When all four ratings agencies are available, the highest and lowest ratings are removed and the lower of the two remaining is used.</li> </ul>
<b>Amount outstanding</b>	<p>Fixed minimum issue size are set for all local currency markets:</p> <ul style="list-style-type: none"> <li>150mn: CAD</li> <li>300mn: USD (excluding MBS, ABS, and CMBS)*, EUR, CHF, AUD</li> <li>200mn: GBP</li> <li>35bn: JPY</li> <li>1bn: RON, PEN, USD MBS pass-throughs</li> <li>25mn: USD ABS and CMBS tranches*</li> <li>2bn: DKK, NOK, PLN, ILS, HKD, MYR</li> <li>2.5bn: SEK</li> <li>5bn: CNY**</li> <li>10bn: MXN, CZK, THB</li> <li>20bn: RUB</li> <li>500mn: NZD, SGD</li> <li>200bn: HUF</li> <li>100bn: CLP</li> <li>500bn: KRW</li> <li>1trn: COP</li> <li>2trn: IDR</li> </ul> <p>*As of April 1, 2017, ABS and CMBS tranches eligible for the US Aggregate between \$25-300mn became eligible for Global Green Bond Index.  **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>



<b>Coupon type</b>	<ul style="list-style-type: none"> <li>• Fixed-rate coupon.</li> <li>• Callable fixed-to-floating rate bonds are eligible during their fixed-rate term only.</li> <li>• Bonds with a step-up coupon that changes according to a predetermined schedule are eligible.</li> </ul>
<b>Qualifying bonds</b>	<p>Fixed-rate bullet, puttable, sinkable/amortizing and callable bonds</p> <ul style="list-style-type: none"> <li>• Taxable municipal securities, including Build America Bonds (BABs)</li> <li>• Original issue zero coupon bonds</li> <li>• Bonds issued through underwritten MTN programs</li> <li>• Enhanced equipment trust certificates (EETC)</li> <li>• Certificates of deposit</li> <li>• Fixed-rate and fixed-to-float (including fixed-to-variable) capital securities</li> <li>• Loan participation notes</li> <li>• US Agency CMBS (as of July 1, 2014)</li> <li>• Malaysian government Sukuk (as of April 1, 2015)</li> </ul>
<b>Exclusions</b>	<ul style="list-style-type: none"> <li>• Contingent capital securities, including traditional CoCos and contingent write-down securities, with explicit capital ratio or solvency/balance sheet-based triggers</li> <li>• Bonds with equity type features (e.g., warrants, convertibles, preferreds, DRD/QDI-eligible issues)</li> <li>• Inflation-linked bonds, floating-rate issues</li> <li>• Fixed-rate perpetuals</li> <li>• Tax-exempt municipal securities</li> <li>• Private placements, retail bonds</li> <li>• Sinkable Russian OFZ bonds issued prior to 2009</li> <li>• USD25/USD50 par bonds</li> <li>• Structured notes, pass-through certificates</li> <li>• Non-ERISA eligible CMBS</li> <li>• US agency MBS hybrid ARMs</li> <li>• Formosa bonds (as of April 1, 2017)</li> <li>• Illiquid securities where reliable pricing is unavailable</li> </ul>



Index maintenance	
<b>Ongoing alignment methodology</b>	<p>At issuance, issuers of index eligible green bonds must either report on projects financed by the bonds' proceeds, or commit to doing so within one year. This reporting obligation will continue until bond proceeds have been fully dispersed or for the life of the bond, as circumstances necessitate. For reporting to be considered eligible, it must include one or more of the following:</p> <ul style="list-style-type: none"> <li>- A list of specific projects/investments, including amount disbursed to each individual project;</li> <li>- Aggregate project/investment categories, including amount disbursed to each project type;</li> <li>- Quantitative or qualitative reporting on the environmental impact of the project pool (e.g., greenhouse gas emissions savings, reduction in water consumption, increased energy efficiency per unit of output, etc.).</li> </ul> <ul style="list-style-type: none"> <li>• MSCI ESG Research reserves an additional three months beyond the 12-month deadline to review an issuer's green bond report. This allows time for the green bond report to be located and contact to be made with the issuer in case any questions or issues are raised.</li> <li>• If an issuer has not published a report within 15 months of issuance, or 15 months of the prior use of proceeds report, it will be flagged as "On Watch" in the next monthly green bond technical note, with details provided in the note regarding the timing and process for removal of the bond from the index.</li> <li>• If the issuer has not published a report within 18 months from issuance or the last annual report, its bond(s) will be removed from the index upon the next index rebalance. Furthermore, the bond(s) will be considered permanently ineligible for the index.</li> </ul>
<b>Price source</b>	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 JSDA).
<b>Frequency of calculating</b>	Daily
<b>Frequency of rebalancing</b>	Monthly
<b>Weighting method</b>	Market Value
<b>If index a mix of Green, Social project categories: allocation method across GSS projects</b>	Only Green
<b>New issuances</b>	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.
<b>Description of governance</b>	<p>BISL uses two primary committees to provide overall governance and effective oversight of its benchmark administration activities:</p> <ol style="list-style-type: none"> <li>1. Product, Risk &amp; Operations Committee (PROC) provides direct governance and is responsible for the first line of controls over the creation, design, production and dissemination of benchmark indices, strategy indices and fixings administered by BISL. The PROC is composed of Bloomberg personnel with significant experience or relevant expertise in relation to financial benchmarks. Meetings are attended by Bloomberg Legal &amp; Compliance personnel. Nominations and removals are subject to review by the BOC.</li> <li>2. Benchmark Oversight Committee (BOC) provides business oversight. The BOC is independent of the PROC and is responsible for reviewing and challenging the activities carried out by the PROC. In carrying out its oversight duties, the BOC receives reports of management information both from the PROC as well as Bloomberg Legal &amp; Compliance members engaged in second level controls.</li> </ol> <p>On a quarterly basis, the PROC reports to the BOC on governance matters, including but not limited to client complaints, the launch of new benchmarks, operational incidents (including errors &amp; restatements), major announcements and material changes concerning the benchmarks, the results of any reviews of the benchmarks (internal or external) and material stakeholder engagements.</p>



Section B - About the Administrator	
<b>Index Administrator</b>	Bloomberg Index Services Limited (BISL)
<b>National Supervisory Authority</b>	Financial Conduct Authority ("FCA")
<b>Alignment to IOSCO Objectives and Principles of Securities Regulation and the IOSCO Assessment Methodology?</b>	Yes
<b>About the Administrator</b>	Bloomberg's index team has a proven track record in creating industry leading and bespoke indices across asset classes, including best in class fixed income and commodity indices. Bloomberg Index Services Limited (BISL) takes an innovative approach to delivering strategic benchmarks that help market participants address their evolving needs. As an integral part of Bloomberg, BISL has access to a comprehensive range of trusted data and reliable technology for calculations, analytics and workflow automation, along with distribution capabilities that can help amplify the visibility of our customers' products.

