

MSCI EUR Corporates IG Climate Change ESG Select Index Methodology

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1 Introduction

The MSCI EUR Corporates IG Climate Change ESG Select Index is designed to represent the performance of a strategy that seeks systematic integration of environmental, social and governance (ESG) norms and reflect the opportunities and risks associated with the transition to a lower carbon economy in Investment Grade Corporate Bond investing.

The MSCI EUR Corporates IG Select Index is constructed from the MSCI EUR IG Corporate Bond Index (herein, the “Parent Index”) by applying selection criteria using country of domicile and security type based on coupon, seniority, maturity, age of bond, credit rating and bond size.

The MSCI EUR Corporates IG Climate Change ESG Select Index (herein, the “Index”) is constructed from the eligible universe defined above by incorporating business exclusion screens including Controversial Weapons, Nuclear Weapons, Nuclear Utilities, Conventional Weapons, Tobacco, Thermal Coal, Unconventional Oil & Gas, ESG Controversy Score, Environment Controversy Score and ESG Rating. Additionally, companies that are not in compliance with the United Nations Global Compact principles are also excluded from the index.

Securities are further selected by applying a liquidity screen within each sector-maturity bucket, followed by security selection based on target count and highest MSCI Low Carbon Transition¹ (LCT) scores within each sector-maturity tier². A security selection buffer of 50% is applied during the security selection and the resulting constituents are weighted in proportion of their weights in the Parent Index. The index is finally diversified by capping the issuers in the index at 4%.

¹ Please refer to Appendix II: MSCI Low Carbon Transition Risk Assessment and <https://www.msci.com/climate-change-solutions> for further details regarding the MSCI Low Carbon Transition score and category

² There are 33 sector-maturity tiers corresponding to 11 GICS sectors and 3 Maturity tiers (1-4 years, 4-7 years and 7-10 years).

2 MSCI ESG Research

MSCI ESG Research provides in-depth research, ratings and analysis of the environmental, social and governance-related business practices of thousands of companies worldwide. It consists of an integrated suite of tools and products to efficiently manage research, analysis and compliance tasks across the spectrum of ESG factors.

The Index uses company ratings and research provided by MSCI ESG Research. In particular, this index uses the following MSCI ESG Research products: MSCI ESG Ratings, MSCI Climate Change Metrics, MSCI ESG Controversies and MSCI ESG Business Involvement Screening Research.

For details on MSCI ESG Research’s full suite of ESG products, please refer to: <https://www.msci.com/esg-investing>

2.1 MSCI ESG Ratings

MSCI ESG Ratings provides research, analysis and ratings of how well companies manage environmental, social and governance risks and opportunities.

MSCI ESG Ratings provides an overall company ESG rating - a seven-point scale from ‘AAA’ to ‘CCC’. In addition, the product provides scores and percentiles indicating how well a company manages each key issue relative to industry peers.

For more details on MSCI ESG Ratings, please refer to: <https://www.msci.com/esg-ratings>

2.2 MSCI Climate Change Metrics

MSCI Climate Change Metrics is designed to support investors seeking to achieve a range of objectives, including measuring and reporting on climate risk exposure, implementing low carbon and fossil fuel-free strategies, and factoring climate change research into their risk management processes. It provides Carbon Emissions, Fossil Fuel exposure, environmental impact (i.e., clean technology) data and screens, as well as climate-related risk exposure and management assessment on companies such as Low Carbon Transition scores and categories.

For more details on MSCI Climate Change Metrics, please refer to <https://www.msci.com/climate-change-solutions>.

2.3 MSCI ESG Controversies

MSCI ESG Controversies provides assessments of controversies concerning the negative environmental, social, and/or governance impact of company operations, products and services. The evaluation framework used in MSCI ESG Controversies is designed to be consistent with international norms represented by the UN Declaration of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, and the UN Global Compact. MSCI ESG Controversies Score falls on a 0-10 scale, with “0” being the most severe controversy.

For more details on MSCI ESG Controversies, please refer to :

<https://www.msci.com/documents/10199/acbe7c8a-a4e4-49de-9cf8-5e957245b86b>

2.4 MSCI ESG Business Involvement Screening Research

MSCI ESG Business Involvement Screening Research (BISR) aims to enable institutional investors to manage environmental, social and governance (ESG) standards and restrictions reliably and efficiently.

For more details on MSCI ESG Business Involvement Screening Research, please refer to http://www.msci.com/resources/factsheets/MSCI_ESG_BISR.pdf.

3 Constructing the MSCI EUR Corporates IG Select Index

3.1 Underlying Universe

The selection universe for the MSCI EUR Corporates IG Select Index is defined by the constituents of the underlying Parent Index which is the MSCI EUR IG Corporate Bond Index.

3.2 Eligibility Criteria

The following criteria are applied to the Parent Index to derive the MSCI EUR Corporates IG Select Index.

3.2.1 Country of Domicile

Securities included in the MSCI EUR Corporates IG Select Index must belong to issuers domiciled in developed market countries³ defined in Appendix I.

3.2.2 Security Type

Only Plain Vanilla Bonds⁴ with the following features are eligible for inclusion in the MSCI EUR Corporates IG Select Index:

- **Coupon:** Only securities with fixed coupons are eligible.
- **Seniority:** Only Senior issues are eligible.
- **Maturity:** Each index constituent must have a maturity greater than or equal to 1.5 years as measured from the Effective Date⁵. Each index constituent must also have a maturity less than or equal to 10 years as measured from the Effective Date.
- **Age of security:** Each bond must have an issuance date less than or equal to 3 years prior to the Effective Date.

³ The list of developed market countries is defined in the MSCI Corporate Bond Indexes Methodology within Appendix I: MSCI Developed Market Universe.

⁴ Plain Vanilla Bonds have fixed Coupon Rate and Time of Coupon Payments, fixed Date of Maturity, fixed Face Value/Par Value.

⁵ Defined in Section 5.1

- **Credit Rating:** Each bond must have a minimum rating of Baa3 / BBB- as rated by Moody’s / S&P. For bonds that are rated by both S&P and Moody’s, the lower rating will be used to determine the index eligibility criteria.
- **Security size threshold:** Each bond must have a notional amount outstanding greater than or equal to Euro 500 million.
- **Private Placement:** All private placement bonds are excluded.

4 Constructing the MSCI EUR Corporates IG Climate Change ESG Select Index

Constructing the MSCI EUR Corporates IG Climate Change ESG Select Index involves the following steps:

- Defining the Eligible Universe
- Defining the ESG Screening Criteria
- Defining the Liquidity Screening Criteria
- Defining the Security Selection Criteria
- Determining the Index Weights

4.1 Defining the Eligible Universe

The Eligible Universe for the MSCI EUR Corporates IG Climate Change ESG Select Index is defined by the constituents of the universe defined in Section 3.

4.2 Defining the ESG Screening Criteria

The screening criteria defined in Appendix II is applied to the Eligible Universe. The remaining securities are eligible for inclusion in the Index. The exclusions are based on the data provided by MSCI ESG Research and are determined quarterly coinciding with the rebalance frequency of the Index.

4.3 Defining the Liquidity Screening Criteria

The universe of securities after applying the above steps is divided into 33 sector-maturity buckets corresponding to 11 GICS sectors and 3 Maturity buckets (1-4 years, 4-7 years and 7-10 years). Within each sector-maturity bucket, the security with highest notional amount outstanding within each issuer is selected.

4.4 Defining the Security Selection Criteria

- A target security selection count is determined for each sector-maturity bucket based on the below criteria by applying an initial target count of 100 for the index:
 - If the universe after the liquidity screening criteria step above has 400 bonds and using 100 as the initial target count of the Index, the target security count % applicable to each sector-maturity bucket is determined as: $100/400 = 25\%$. This implies 25% by count (rounded up) of each sector-maturity bucket will be selected in the Index. Due to the rounding up within each sector-maturity bucket, the final count of securities in the Index may be more than 100.
- The target count of securities determined above, are selected from each sector-maturity bucket based on highest LCT score.
- A security selection buffer of 50% is applied during security selection within each sector-maturity bucket (explained in Appendix III).

4.5 Determining the Index Weights

- The securities eligible for inclusion in the Index, are weighted in proportion of their weights in the Parent Index which is market value weighted.
- The maximum weight of any issuer in the Index is capped at 4% in accordance with the MSCI Capped Indexes methodology⁶.

⁶ Please refer to the MSCI Capped Indexes methodology at www.msci.com/index-methodology

5 Maintaining the MSCI EUR Corporates IG Select Index

5.1 Quarterly Index Review

The MSCI EUR Corporates IG Select Index is reviewed on a quarterly basis, with the Effective Date being the first business day of February, May, August and November⁷. In general, the pro forma indexes are announced three business days before the effective date.

In general, MSCI uses latest available MSCI ESG Research data on the announcement date for the rebalancing of the MSCI EUR Corporates IG Select Index.

At each Index Review, the Eligible Universe is updated, and the composition of the Index is reassessed based on the methodology described in Section 3.

6 Maintaining the MSCI EUR Corporates IG Climate Change ESG Select Index

6.1 Quarterly Index Review

The MSCI EUR Corporates IG Climate Change ESG Select Index is reviewed on a quarterly basis, with the Effective Date being the first business day of February, May, August and November⁷. In general, the pro forma indexes are announced three business days before the effective date.

In general, MSCI uses latest available MSCI ESG Research data on the announcement date for the rebalancing of the MSCI EUR Corporates IG Climate Change ESG Select Index.

At each Index Review, the Eligible Universe is updated, and the composition of the index is reassessed based on the methodology described in Section 4.

⁷ Prior to Mar 28, 2022, the effective dates coincided with the first business day of January, April, July and October. From Mar 28, 2022, onwards, the effective dates coincided with the first business day of February, May, August and November.

7 PRICING

The Index construction from inception to March 31, 2021 is based on price sourced from Refinitiv only whereas the index construction from April 1, 2021 to July 30, 2021 is based on price sourced from both Refinitiv and IDC. The index construction after July 30, 2021 is based on prices sourced from Refinitiv only.

If an index constituent is no longer priced (intra-rebalancing) by the pricing source or the price is unavailable, the last available price is used.

Appendix I: List of Eligible Developed Markets Countries

Country of Domicile
Austria
Belgium
Denmark
Finland
France
Germany
Ireland
Italy
Luxembourg
Netherlands
Norway
Portugal
Spain
Sweden
Switzerland
United Kingdom

Appendix II: ESG-based Exclusion Criteria

Nuclear weapons:

- All companies that manufacture nuclear warheads and/or whole nuclear missiles.
- All companies that manufacture components that were developed or are significantly modified for exclusive use in nuclear weapons (warheads and missiles).
- All companies that manufacture or assemble delivery platforms that were developed or significantly modified for the exclusive delivery of nuclear weapons.
- All companies that provide auxiliary services related to nuclear weapons.
- All companies that manufacture components that were not developed or not significantly modified for exclusive use in nuclear weapons (warheads and missiles) but can be used in nuclear weapons.
- All companies that manufacture or assemble delivery platforms that were not developed or not significantly modified for the exclusive delivery of nuclear weapons but have the capability to deliver nuclear weapons.
- All companies that manufacture components for nuclear-exclusive delivery platforms.

Nuclear utilities

- All companies that own or operate nuclear Power Plants.

Conventional Weapons:

- All companies deriving 5% or more aggregate revenue from weapons systems, components, and support systems and services.

Tobacco:

- All companies classified as a "Producer".
- All companies deriving 5% or more aggregate revenue from the production, distribution, retail, supply and licensing of tobacco-related products.

Thermal Coal:

- All Companies deriving any revenue (either reported or estimated) from the mining of thermal coal (including lignite, bituminous, anthracite and steam coal) and its sale to external parties.

- It excludes revenue from metallurgical coal; coal mined from internal power generation (e.g. in case of vertically integrated power producers); intra-company sales of mined thermal coal; and revenue from coal trading.

Unconventional Oil & Gas:

- Companies that derive more than 0% revenue from unconventional oil and gas. It includes revenues from oil sands, oil shale (kerogen-rich deposits), shale gas, shale oil, coal seam gas, and coal bed methane. It excludes all types of conventional oil and gas production including Arctic onshore/offshore, deep water, shallow water and other onshore/offshore.

International Norms:

- All companies that fail to be in compliance with the United Nations Global Compact principles.

ESG Controversy Score (“Red Flags”):

- Securities of companies having faced very severe controversies pertaining to ESG issues are not eligible for inclusion in the Index. This is implemented by excluding constituents of the Eligible Universe with MSCI ESG Controversy Score = 0 (“Red Flag” companies). For more details on MSCI ESG Controversies Score, please refer to <https://www.msci.com/esg-integration>.

Environment Controversy Score (“Orange Flag” and “Red Flag”):

- Securities of companies having an Environment Controversy Score of 1 or 0.
- This metric is an assessment of controversies (if any) related to a firm’s impact on the environment. Factors affecting this evaluation include whether a company is involved in controversies related to land use and biodiversity, toxic spills and releases, energy and climate change, water management, operational non-hazardous waste, environmental impact of products and service, and management of supply chain environmental impact.

ESG Rating:

- Securities of companies having an MSCI ESG Rating of “CCC” or “B”.

Missing Scores:

- All companies with missing LCT Score and ESG Score are excluded from the Index.

Controversial Weapons:

- All companies with any tie to Controversial Weapons (cluster munitions, landmines, depleted uranium weapons, biological/chemical weapons, blinding lasers, non-detectable fragments and incendiary weapons), as defined in Appendix I of the MSCI Global Ex-Controversial Weapons Indexes available at <https://www.msci.com/index-methodology>.

Thermal Coal Based Power Generation:

- All companies deriving more than 10% revenue (either reported or estimated) from thermal coal-based power generation.

Nuclear Based Power Generation:

- All companies deriving more than 5% revenue (either reported or estimated) from nuclear-based power generation.

Uranium Mining:

- All companies deriving more than 5% revenue (recent-year percent of revenue or maximum estimated percent) from the mining of Uranium.

Carbon Intensity (Carbon Emissions - Scope 1+2 / USD million sales):

- All companies having a carbon intensity more than 1500 (most recently reported or estimated) measured using the company's Scope 1 + Scope 2 greenhouse gas emissions normalized by sales in million USD.

Energy Consumption Intensity (GWh / EUR million sales):

- All companies having an energy consumption (GWh) per million EUR revenue of more than 300.

Human Rights Concerns Controversies:

- All companies having more than one Severe or Very Severe controversy cases in the last three years related to human rights violations issues.

Appendix III: Security Selection Buffer Example

A security selection buffer of 50% is applied during the on-going index review. For example, assume it is required to select 40 securities from a specific sector-maturity bucket, then buffers are applied between ranks 21 and 60. The securities in the eligible universe (after applying the Liquidity Screening Criteria) with a LCT score ranked at or above 20 will be added to the Index on a priority basis. The existing constituents that have a LCT score rank between 21 and 60 are then successively added until the number of securities in the Index reaches 40. If the number of securities is below 40 after this step, the remaining securities in the eligible universe with the highest LCT score rank are added until the number of securities in the Index reaches 40.

THE FOLLOWING SECTIONS HAVE BEEN MODIFIED SINCE APRIL 2021:

- Section 3 has been updated to reflect the additional criteria to exclude private placement bonds
- Section 6.1 has been updated to reflect the updated quarterly rebalancing calendar

THE FOLLOWING SECTIONS HAVE BEEN MODIFIED SINCE MARCH 2022:

- Appendix II has been updated to reflect updated and additional ESG-based exclusion criteria

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