Bloomberg MSCI Euro Corporate Paris-Aligned Index

Bloomberg MSCI Euro Corporate PAB Index is designed to meet the standards of the EU Paris Aligned Benchmark (PAB) Label. The index sets an initial 50% reduction of absolute GHG emissions relative to the standard Bloomberg Euro Aggregate Corporate Index¹, followed by an annual 7.5% decarbonisation relative to the baseline emissions. The index uses an exclusions based approach to achieve the decarbonisation trajectory. To be included, securities must be investment grade, fixed-rate, corporate bonds. The index was created on April 8, 2022 with history backfilled to January 1, 2021.

Rules of Inclusion

Sector	Corporate (industrial, utility, and financial institutions) issuers only.
Eligible Currencies	Principal and interest must be denominated in EUR.
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:
	• Expected ratings at issuance may be used to promote timely index inclusion or to properly classify split-rated issuers.
	• 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.
Amount Outstanding	EUR300mn minimum par amount outstanding.
Coupon	Fixed-rate coupon.
	• Callable fixed-to-floating rate bonds are eligible during their fixed-rate term only.
	• Bonds with step-up coupons and those that change according to a predetermined schedule are also eligible.
Maturity	• At least one year until final maturity, regardless of optionality.
	• 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 perpetual bonds are not included.
Market of Issue	• Publicly issued in the global or regional markets.

¹ On December 31st 2020, the baseline target emissions were set as the lower of 50% of the Parent Total Emissions or the Emissions Total of the Screened Index generated after the PAB exclusions were applied.

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• Only fully taxable issues are eligible.

Seniority of Debt

Security Types

Included

• Bullet, putable, sinkable/amortizing and callable bonds

Senior and subordinated issues are included.

- Original issue zero coupon
- Underwritten MTN
- Fixed-rate and fixed-to-floating (including fixed-to-variable) capital securities

Excluded

- Treasuries, government-related, securitized, and covered bonds
- Contingent capital securities, including traditional CoCos and contingent write-down securities
- Bonds with equity type features (e.g. warrants, convertibles, preferreds)
- Inflation-linked bonds, floating-rate issues
- Fixed-rate perpetuals
- Private placements, retail bonds
- Structured notes, pass-through certificates
- Illiquid securities with no available pricing

Environment, Social and Governance (ESG) Rules

MSCI Absolute GHG Emissions	The index excludes bonds where MSCI does not have reported or estimated Scope 1, 2 and 3 absolute GHG emissions data.				
MSCI Business Involvement Screen	The following business lines and activities are excluded from the index:Controversial Weapons				
	 Cluster Munitions 				
	o Landmines				
	 Depleted Uranium 				
	 Biological/Chemical Weapons 				
	 Blinding Lasers 				
	 Non-Detectable Fragments 				
	o Incendiary				
	Tobacco Producers				
	UNGC Violations				
	Environment Controversy Score of 0 or 1				
	 Thermal Coal revenue >= 1% 				
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- Oil & Gas revenue >= 10%
- Power Generation revenue >= 50%

Monthly Emissions Exclusions Process

The Monthly Exclusions process is run 5 business days before month end. The process will establish the Emissions Threshold (the emissions level at which bonds with emissions above that level will be excluded from the index) required to maintain compliance with the PAB Label Decarbonisation Trajectory² for the following month.

Overview

- Total emissions are calculated for every bond by adding the Scope 1&2 and Scope 3 emissions, if one of Scope 1 & 2 or Scope 3 emissions are missing the total is set to zero
- The sum of weighted total emissions is calculated for the parent index (bonds with no emissions have zero weight)
- The emissions target is calculated as the lower of the decarbonisation trajectory or 50% of parent emissions
- If exclusions are required, the bonds that are above the emissions threshold are excluded until the PAB index is below the emissions target for the month

Rebalancing Rules

Frequency	The Emissions Threshold level for the index is established on the fifth to last business day of each month. Bonds with emissions above this level will be excluded from the Returns Universe of the following month. On the last business day of the month (the rebalancing date), the composition of the latest Projected Universe taking into account the new Emissions Threshold 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, ticker changes, etc.) are reflected daily. These changes will affect the composition of the index 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.

² Decarbonisation is calculated on a monthly basis to achieve a yearly 7.5% decarbonisation level against the date of the baseline emissions.

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Pricing and Related Issues

Sources & Frequency	All index-eligible bonds are priced on a daily basis by Bloomberg's evaluated pricing service, BVAL.
Pricing Quotes	Bonds are quoted as a percentage of par.
Timing	• 4:15pm (London time).
	• On early market closes, prices are taken as of 12:15pm (London time), unless otherwise noted.
	• If the last business day of the month is a UK holiday, prices from the previous business day are used.
Bid or Offer Side	Bonds in the index are priced on the mid side. Bonds in the index are priced on the bid side. The initial price for new corporate issues entering the index is the offer side; after the first month, the bid price is used.
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. Index users may also challenge price levels, which are then reviewed and updated as needed.
Calendar	The Bloomberg MSCI Euro Aggregate Corporate PAB Index follows the UK bond market holiday schedule. FX rates are updated daily using WM Reuters 4pm (London) rates. FX forwards are also sourced from WM Company.

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