

**iBoxx USD Asia-
Pacific ex- Greater
China Non-
Sovereigns
Investment Grade
CTB Index
Methodology**

March 2026

Table of Contents

iBoxx USD Asia-Pacific ex-Greater China Non-Sovereigns Investment Grade CTB Index	4
Index Objective	4
Bond selection rules	5
Issuer domicile	5
Issuer type	5
Bond type	5
Credit rating	6
Time to maturity	6
Amount outstanding	7
International clearability	7
ESG Criteria	7
Controversies	7
UNGC/GSS screening	7
2Sustainalytics Controversial Weapons Radar screening	8
Product Involvement	8
Green Bonds	9
Climate Bonds Initiative (CBI)	9
Environmental Finance (EF)	9
S&P Market Intelligence Reference Data	9
Bond classification	10
Sub-sovereigns	10
Collateralized	11
Covered Bonds	11
Corporates	11
Additional Classification	12
Index calculation	14
Static data	14
Bond prices	14
Rebalancing process	14
Index Construction	14
Emission Data	15
S&P Global Trucost Greenhouse Gas Emissions	15

S&P Global Trucost Intensity: GHG	15
Weight capping	15
CTB trajectory	15
Decarbonisation trajectory base date	16
Parent index absolute emission calculation	16
Absolute emission decarbonization trajectory calculation	17
Parent index carbon intensity calculation	18
Carbon intensity decarbonization trajectory calculation	18
CTB-based selection	19
Lifetime Intensity Cost Calculation	19
Green bonds and sustainability bonds	20
Final Selection of Bonds	20
Index data	20
Index Calculus	20
Treatment of the special intra-month events	21
Index and analytics weights	21
Funged bonds	21
Parent and new tranche are both index constituents	21
Parent is an index constituent, but the new tranche is not	22
Parent is not an index constituent but the new tranche is	22
Full redemptions: exercised calls, puts and buybacks	22
Bonds trading flat of accrued	22
Maturity extension	22
Maturity Extension for Perpetual Bonds Without a Reset Date	22
Maturity Extension for Perpetuals & Dated Fixed-to-Fixed Bonds With a Reset Date	22
Multi-coupon bonds	23
Ex-dividend conventions	23
Index History	23
Settlement conventions	23
Calendar	23
Publication of the Index	24
Data publication and access	24
Methodology Changes	25
Summary of Key ESG Factors	26
Index Governance	34
Further Information	35

Disclaimer	36
Performance Disclosure/Back-Tested Data	36
Intellectual Property Notices/Disclaimer	37
ESG Indices Disclaimer	39

iBoxx USD Asia-Pacific ex-Greater China Non-Sovereigns Investment Grade CTB Index

Index Objective

The iBoxx USD Asia-Pacific ex-Greater China Non-Sovereigns Investment Grade CTB

Index consists of investment-grade USD-denominated bonds issued by non-sovereign issuers from Asia-Pacific countries, excluding the Greater China area, within the iBoxx USD APAC ex-Greater China Non-Sovereigns Investment Grade Capped Index (“underlying index”). The index aims to meet the minimum standards required for an EU Climate Transition Benchmark (CTB) described in the regulations, particularly Articles 7 and 11 of Regulation (EU) 2020/1818.

The index applies exclusions based on company involvement in specific business activities, company violations against the principles of the United Nations Global Compact (UNGC), and involvement in relevant controversies, described in the *ESG criteria* section.

The index follows the minimum requirements set by EU CTBs and follows a specified decarbonization trajectory, detailed in section *CTB trajectory*. In order to meet the required decarbonization targets, on each rebalancing date, bond exclusion are determined through an selection process. A selection process is outlined in further detail in section *Selection of Bonds*.

For more information on pricing, please refer to the iBoxx Pricing Rules document, available at <https://www.spglobal.com/spdji/en/>.

Bond selection rules

Bonds must meet all criteria described in the sections below to be eligible for index inclusion.

Issuer domicile

Issuers must not be from countries/territories belonging to the Asia-Pacific ex-Greater China region (Mainland China, Hong Kong SAR, Macau SAR, Taiwan).

Issuer type

Bonds must be issued by non-sovereigns (excluding regions).

Bond type

The following bond types are included in the index:

- Bonds with known cash-flows
- Fixed coupon bonds
- Zero coupon bonds
- Callable and puttable bonds
- Covered bonds
- Step-ups and event-driven bonds such as rating-driven or registration-driven bonds
- Amortizing bonds and sinking funds with fixed sinking schedules
- Perpetuals and fixed-to-float bonds with a reset date at or after the first call date
- Contingent convertible and other Basel III compliant AT1 and T2 capital with mandatory conversion/ write down with pre-specified objective trigger
- Preference share-style AT1s
- Extended bonds, as defined under *Maturity extension* in this document

The following bond types are excluded from the index:

- Floating Rate Notes
- 144As and private placements
- Retail bonds
- Inflation and other index-linked bonds
- Structured notes
- Other collateralized bonds (excl. covered) Brady bonds
- Catastrophe bonds
- Payment-In-Kinds (PIKs)
- Optional and mandatory convertible bonds
- Perpetuals and fixed-to-float bonds with a reset date prior to the first call date

- Subordinated bank or insurance debt with non-regulatory conversion options before the first call date
- Bonds cum- or ex-warrant
- New bonds entering the index that have already been called prior to rebalancing

For retail bonds and private placements, publicly available information is not always conclusive and the classification of a bond as a retail bond or a private placement will be made at S&P DJI's discretion based on the information available at the time of determination. Any bond classified as retail or private placement is added to the list of excluded private placements and retail bonds. The list is published on [https:// www.spglobal.com/spdji/en/](https://www.spglobal.com/spdji/en/) for future reference and to ensure decisions' consistency.

In instances where a new bond type is not specifically excluded or included according to the published index rules, S&P DJI will analyze the features of such securities in line with the principles set out in **Issuer domicile** of this methodology. S&P DJI may consult the specific Index Committees. Any decision as to the eligibility or ineligibility of a new bond type will be published and the index rules will be updated accordingly.

Credit rating

Bonds must be rated investment grade by one or more of the following three credit rating agencies:

- Fitch Ratings
- Moody's Investor Service
- S&P Global Ratings

If more than one of the above agencies rates a bond, then the iBoxx rating is the average of the provided ratings. The index consolidates ratings to the nearest rating grade and does not use rating notches. For more information on determining average ratings, please refer to the iBoxx Rating Methodology document available at <https://www.spglobal.com/spdji/en/>.

For senior debt, if a bond is not rated by any of the three credit rating agencies, the bond's issuer rating applies to the bond if available. Long-term foreign currency issuer ratings are applied to bonds issued by foreign issuers and long-term local currency issuer ratings are applied to bonds issued by domestic entities.

Unrated bonds with an implied investment grade rating are also eligible for the index.

Defaulted bonds are ineligible for the index. Bonds that are in default or that trade flat of accrued are removed from the index at the first rebalancing following the default/start of trading flat of accrued.

Bonds with an RD/SD rating are excluded from the index.

Time to maturity

At each rebalancing effective date, all bonds must have a minimum time to maturity of at least six months, calculated from the rebalancing effective date to the final maturity date using the respective bond's day count convention.

All bonds must have an original time to maturity of at least 18 months, calculated from the bond's first settlement date to the maturity date, to be eligible for index inclusion.

For the specific bond types below, the indices determine the bond's expected workout date as follows:

- Plain vanilla bonds: the expected workout date is the final maturity date
- Dated and undated callable financial hybrid capital bonds: the expected workout date is the first call date

- Non-financial hybrid capital bonds with an interest rate reset: the expected workout date is the first reset date
- Soft bullets: the expected workout date is the first call date
- Sinking funds and amortizing bonds: the expected workout date calculates using the bond's average life

Amount outstanding

All bonds must be denominated in USD with a minimum outstanding amount of USD 250 million.

International clearability

Bonds must be clearable via one of the following three clearing venues:

- Clearstream
- Euroclear
- Hong Kong CMU

ESG Criteria

The index screens constituents based on the following ESG-related criteria.

Controversies

Sustainalytics Controversy Score

Sustainalytics Controversies Research identifies companies' involved in incidents and events that may pose a business or reputation risk to a company due to the potential impact on stakeholders or the environment. The controversy score is based on the most up-to-date information from a wide range of reliable international and local news and NGO sources. Controversies are rated on a scale from one to five with five denoting controversies that have the most severe impact to stakeholders and the environment, leading to business risks to companies.

In particular, the index excludes companies that have a controversy score of 5 in the following incidents:

- Operations Incidents
- Environmental Supply Chain Incidents
- Product & Service Incidents
- Business Ethics Incidents
- Governance Incidents
- Public Policy Incidents

For more information, please refer to [Sustainalytics Controversies Research](#).

UNGC/GSS screening

Sustainalytics Global Standards Screening

Companies are expected to operate within internationally accepted norms and standards related to:

- Human Rights
- Society

- Labor
- Environment

Sustainalytics Global Standards Screening (GSS) assesses companies compliance with the United Nations (UN) Global Compact Principles. It identifies companies that are violating or are at risk of violating these principles, by assigning one of the following three statuses:

- Non-Compliant. Classification given to companies that do not act in accordance with the UNGC principles and its associated standards, conventions, and treaties
- Watchlist. Classification given to companies that are at risk of violating one or more principles, for which all dimensions for Non-Compliant status could not be established or confirmed
- Compliant. Classification given to companies that act in accordance with the UNGC principles and its associated standards, conventions, and treaties

The nature and scope of impact on stakeholders is one of the primary ways Sustainalytics determine compliance status.

Companies classified as Non-Compliant, according to Sustainalytics, are ineligible for the index.

For more information, please refer to the [Sustainalytics Global Standards Screening](#).

2Sustainalytics Controversial Weapons Radar screening

Issuers with exposure to the following activities are excluded:

- Nuclear Weapons
 - Company found to have any involvement in nuclear weapons activities are excluded.
- Controversial Weapons
 - Company found to have any involvement in controversial weapons activities are excluded.

For more information, please refer to the [Sustainalytics Global Standards Screening](#).

Product Involvement

Sustainalytics Product Involvement Screening

Product Involvement (PI) provides research on company involvement in products and services, which allow for screening companies according to specific criteria motivated by ethical, impact, compliance or ESG risk considerations.

Issuers with exposure to the following activities and at the following thresholds are excluded:

- Tobacco
 - Companies deriving more than 5% of their total revenue from the aggregated involvement of all categories (including production, retail, related products/services and others) in tobacco are excluded.
- Oil Sands
 - Companies deriving more than 5% of their total revenue from the aggregated involvement of all categories (including production, retail, related products/services and others) in oil sands are excluded.
- Palm Oil
 - Companies deriving more than 5% of their total revenue from the aggregated involvement of all categories (including production, retail, related products/services and others) in palm oil

are excluded.

- Thermal Coal
 - Extraction – companies deriving more than 5% of their total revenue from thermal coal extraction are excluded.
 - Power generation – companies deriving more than 5% of their total revenue from thermal coal based power generation are excluded.
- Small Arms
 - Retail / distribution (assault weapons) – companies involved in the retail and/or distribution of assault weapons are excluded.
 - Retail / distribution (non-assault weapons) – companies involved in the retail and/or distribution of small arms (non-assault weapons) are excluded.

For more information, please refer to the [Sustainalytics' Product Involvement Research Methodology](#).

Green Bonds

The index leverages external, independent data sources for determining “Green” bonds. The data is provided by Climate Bonds Initiative (CBI), Environmental Finance (EF) and S&P Market Intelligence Reference Data and contains self-labelled as well as other eligible Green bond issuances. The index considers bonds broadly based on the International Capital Market Association’s (ICMA) voluntary Green Bond Principles (GBP). The methodology uses dual sourcing, supplemented with (in-house) professional expertise, to determine whether multiple sources classify a given bond as “Green” based on the use of proceeds. This ensures each bond is “Green” labelled based upon at least 2 independent sources. All bonds need to have a clear commitment for the use of proceeds. Data is further verified based on publicly available prospectus and other relevant documents. Bonds for which the classification is pending or unlabeled are not considered “Green”.

ICMA is a regulatory authority and trade association that serves European capital markets to promote greater transparency, efficiency and harmony.

Climate Bonds Initiative (CBI)

Climate Bonds Initiative is an international organization working to mobilize global capital for climate action. CBI achieves this through the development of the [Climate Bonds Standard](#) and [Certification Scheme](#). Policy Engagement and Market Intelligence work. CBI provide weekly and monthly files to classify green bonds based on use of proceeds.

For more information on CBI, please refer to <https://www.climatebonds.net>.

Environmental Finance (EF)

Environmental Finance has a reputation in delivering market-leading content on the risks and opportunities present to the financial community of the move to a lower-carbon environment.

For more information on EF, please refer to <https://efdata.org/>.

S&P Market Intelligence Reference Data

Provides green bonds classification.

S&P Market Intelligence Reference Data offers detailed reference data for bonds which enables a comprehensive view of assets from issuance to maturity. Self-labelled bonds green are captured based on information provided in the bond prospectus.

Bond classification

All bonds are classified based on the principal activities of the issuer and the main sources of the cash flows used to pay coupons and redemptions. In addition, a bond's specific collateral type or legal provisions are evaluated. Hence, it is possible that bonds issued from different subsidiaries of the same issuer carry different classifications.

The issuer classification is reviewed regularly based on updated information received by S&P DJI, and status changes are included in the indices at the next rebalancing if necessary.

Where the sector classification of a specific entity is not clear due to the diversified business of the entity, a decision is made at S&P DJI's discretion. S&P DJI assigns the classification according to its evaluation of the business risk presented in the security prospectus and annual reports, if available. S&P DJI also compares the classification to peers in the potential sectors. Membership lists including classification are published on the FTP server and in the *Indices* section of the webpage for registered users.

Sub-sovereigns

Bonds issued by entities with explicit or implicit government backing due to legal provision, letters of comfort, or the public service nature of the issuer's business. The issuer requires a strong central government ownership/relationship if its bonds are not explicitly guaranteed by the central government.

The four main sub-sovereign sectors are:

- **Agencies:** Bonds issued by entities with a major focus on government-sponsored, public, noncompetitive services. The issuers are financial in nature and carry out government policies through special development programs, often explicitly government-backed or with a business scope defined by a specific law.
- **Supranationals:** Bonds issued by supranational entities, i.e. entities that are owned by more than one central government (e.g. World Bank, EIB).
- **Local Government:** Bonds issued by local governments (e.g. Province of Manitoba, Canada).
- **Other Sub-Sovereigns:** All remaining bonds considered sub-sovereign, classified into the following three main categories:
 - **Non-Financials:** Bonds issued by entities from the non-financial sector with an explicit or strong implicit debt guarantee from the state. The issuer's credit rating is closely correlated to the sovereign rating and expresses a strong credit uplift based on a high level of government support. S&P DJI expects the issuer's credit rating to be no worse than on par or two notches below the sovereign rating. A 'strong implicit guarantee' means the issuer is 100% owned by the state or public sector with its debt consolidated into state public debt, or the issuer has preexisting access to government financing or funding derived from tax revenues. State-owned issuers that are profit oriented, provide competitive services, and operate under a regulatory framework are considered Corporates.
 - **Guaranteed Financials:** A specific bond issued by a private sector financial institution that is irrevocably guaranteed by a government. Most of these bonds are issued under programs set-up after the 2008 financial crisis.

Bonds issued by unguaranteed institutions with an irrevocable and explicit guarantee by a central government that covers amount and timeliness of all interest and principal payments until the maturity of the bond.

Collateralized

Covered Bonds

Bonds which are secured by a general pool of assets in case the issuer becomes insolvent, in particular bonds conforming to the criteria specified in UCITS 22.4 or similar directives, e.g. CAD III. In addition, bonds with a structure affording an equivalent risk and credit profile that are considered by the market as covered bonds are also included in the indices.

Corporates

Corporate bonds are issued by public or private corporations. Corporate bonds are further classified into Financials and Non-Financials bonds, and then into multiple-level economic sectors according to the issuer's business scope. The category insurance-wrapped is added under Financials for corporate bonds whose timely coupon and/or principal payments are guaranteed by a special mono-line insurer such as AMBAC or MBIA. The sector overview is as follows.

iBoxx Corporates Sector Overview

	Economic Sector	Market Sector	Market Sub-Sector
Financials	Core Financials	Banks	Banks
		Insurance	Life Insurance
	Nonlife Insurance		
	Financial Services	Financial Services	Equity Investment Instruments
			General Financial
		Insurance-wrapped	*
	Real Estate	Real Estate	Real Estate Investment & Services
			Real Estate Investment Trusts

	Economic Sector	Market Sector	Market Sub-Sector		
Non-Financials	Basic Materials	Basic Resources	Forestry & Paper		
			Industrial Metals		
			Mining		
	Consumer Goods	Chemicals	Automobiles & Parts	Chemicals	
				Automobiles & Parts	
		Food & Beverage	Personal & Household Goods	Beverages	
				Food Producers	
				Household Goods	
		Consumer Services	Retail	Travel & Leisure	Leisure Goods
					Personal Goods
	Tobacco				
	Academic & Educational Services				
	Energy	Oil & Gas	Renewable Energy	Media	
				Oil Equipment / Services & Distribution	
	Health Care	Health Care	Health Care	Oil & Gas Producers	
				Renewable Energy	
	Industrials	Construction & Materials	Industrial Goods & Services	Health Care Equipment & Services	
				Pharmaceuticals & Biotechnology	
				Construction & Materials	
				Aerospace & Defense	
				Electronic & Electrical Equipment	
				General Industrials	
				Industrial Engineering	
	Industrial Transportation				
	Technology	Technology	Technology	Support Services	
				Software & IT Services	
	Telecommunications	Telecommunications	Telecommunications	Technology Hardware & Equipment	
Integrated Telecommunications					
Utilities	Utilities	Utilities	Wireless Telecommunications		
			Electricity		
			Gas / Water & Multiutilities		

Additional Classification

Corporate debt is further classified into senior and subordinated debt. Bank senior debt structure additionally differentiates between Bail-in and Preferred bonds. The Bail-in classification captures all senior notes which are subject to write-down or conversion into a subordinated instrument on the occurrence of a resolution event, as well as senior bank debt issued by bank holding companies.

Hybrid capital issued by banking and insurance institutions is further detailed into the respective tiers of subordination.

The market information on the tier of subordination for insurance capital is often less standardized and clear than the equivalent issues by banks. In these cases, the classification is based on the maturity, coupon payment and deferral provisions of the bond from the offering circulars of the bonds. The table below displays the seniority classification of debt issued by both financial and non-financial sectors.

Seniority Levels Overview

Market Sector	Seniority Level 1	Seniority Level 2	Seniority Level 3	
Bank	SEN	Preferred	*	
		Bail-in	*	
	SUB	T2 (post-Jan '13 issuances)	T2 callable	
			T2 non-callable	
		T2 (pre-Jan '13 issuances)	LT2 callable	
			LT2 non-callable	
			UT2	
T1	T1 step			
	T1 non-step			
Insurance	SEN	*	*	
	SUB	T3	*	
		T2 dated	T2 dated callable	
			T2 dated non-callable	
		T2 perpetual	*	
T1	*			
Financial Services	SEN	*	*	
	SUB	T3	*	
		T2	T2 callable	
			T2 non-callable	
		T2 dated	T2 dated callable	
			T2 dated non-callable	
		T2 perpetual	*	
		T1	*	
			T1 step	
			T1 non-step	
Other	Hybrid**			
	Non-hybrid			
Other sectors	SEN	*	*	
	SUB	Other	Hybrid** Non-hybrid	

** Bonds must satisfy the following criteria to be considered hybrids:

- Subordinated
- Deferrable coupons
- First non-call period \geq 5 years
- Either perpetual or 'long-dated', where 'long-dated' is defined as $>$ 25 years of the time to maturity at issuance

Index calculation

Static data

Information used in the index calculation is sourced from offering circulars and checked against standard data providers.

Bond prices

For more details, please refer to the *iBoxx Pricing Methodology* document, available in the *Methodology* section of the webpage at <https://www.spglobal.com/spdji/en/>.

Rebalancing process

The iBoxx USD Asia-Pacific ex-Greater China Non-Sovereigns Investment Grade CTB Index is rebalanced monthly on the last business day of the month after the close of business. Changes to outstanding amounts are only taken into account if they are publicly known three business days before the end of the month. Changes in ratings are only taken into account if they are publicly known two business days before the end of the month. New bonds issued are taken into account if they are publicly known to settle until the last calendar day of the month, inclusive, and if their rating has become known at least three trading days before the end of the month.

Three business days before the end of each month, a membership list with final amount outstanding for each bond is published.

Two business days before the end of each month, the rating information for the constituents is updated and the list is adjusted for all rating changes which are known to have taken place two trading days before the end of the month. Bonds which are known to have been upgraded to investment grade two trading days before the end of the month are not included in the membership, but bonds which are known to have been downgraded to sub-investment grade two trading days before the end of the month do get excluded from the membership. However, if any bonds which are part of the broader USD universe become eligible two business days prior to rebalancing because of rating or amount changes, they will be included in the Index.

On the last business day of each month, S&P DJI publishes the final membership with closing prices for the bonds, and various bonds analytics based on the index prices of the bonds.

Index Construction

At each rebalancing, select eligible constituents from the underlying index according to the following process:

1. Add Trucost Absolute GHG Emission and Carbon Intensity data to individual issuers. In cases where GHG Scope 3 downstream data is missing for an issuer, estimate the data by applying the Trucost GICS sector averages. Exclude issuers without GHG Scope 1 and 2 emissions data.
2. Remove issuers without complete emissions data and issuers failing the ESG screens.
3. Cap constituents according to the constraints described in the *Weight capping* section.
4. Select final bond constituents to achieve the decarbonization targets according to the process described in the *Final Selection of bonds* section below.

Emission Data

Starting with the parent universe, append Trucost CO₂-equivalent Scope 1, 2, 3 Upstream, and 3 Downstream Absolute GHG Emissions data and corresponding Carbon Intensity by Revenue as calculated by Trucost. Any Trucost data with a financial year five years or more prior to the rebalancing reference date's year is considered as not covered.

S&P Global Trucost Greenhouse Gas Emissions

Scope 1, 2, and 3 emissions are sourced from S&P Global Trucost to meet decarbonization objectives which are in line with the European Union's benchmark regulations ("EU BMR"). All three scope emissions are measured in tons of CO₂ equivalent units.

- **Scope 1 emissions** - Greenhouse gas (GHG) emissions from directly emitting sources that are owned or controlled by a company, for example, the emissions produced by the internal combustion engines of a trucking company's lorry fleet.
- **Scope 2 emissions** - Greenhouse gas (GHG) emissions from the consumption of purchased electricity, steam, or other sources of energy generated upstream from a company's direct operations.
- **Scope 3 upstream emissions** - Greenhouse gas (GHG) emissions from other upstream activities not covered in Scope 2 (categorised by the Greenhouse Gas Protocol).
- **Scope 3 downstream emissions** - Greenhouse gas (GHG) emissions associated with the use of sold goods and services.

S&P Global Trucost Intensity: GHG

Scope 1, 2, and 3 carbon intensities are sourced from S&P Global Trucost. All three scope carbon intensities are measured in tons of CO₂e/\$M units.

- **Scope 1 intensity** - Greenhouse gas (GHG) emissions from sources that are owned or controlled by the company (categorised by the Greenhouse Gas Protocol) divided by the company's revenue.
- **Scope 2 intensity** - Greenhouse gas (GHG) emissions from consumption of purchased electricity, heat or steam by the company (categorised by the Greenhouse Gas Protocol) divided by the company's revenue.
- **Scope 3 upstream intensity** - Greenhouse gas (GHG) emissions from other upstream activities not covered in Scope 2 (categorised by the Greenhouse Gas Protocol) divided by the company's revenue.
- **Scope 3 downstream intensity** - Downstream indirect greenhouse gas (GHG) emissions associated with the use of sold goods and services as a multiple of revenue

Weight capping

At each rebalancing, index constituents are market-value-weighted, subject to the following constraints:

- a single issuer weight cap of 3% of the index.
- a single country weight cap of 20% of the index.

CTB trajectory

Minimum decarbonization requirements for an index to qualify as an EU CTB Benchmark described in Article 7 & Article 11 of the Commission Delegated Regulation (EU) 2020/1818.

In line with these requirements, the decarbonisation trajectory of iBoxx USD Asia-Pacific ex-Greater China Non-Sovereigns Investment Grade CTB Index is determined by maximum limits on greenhouse gas (GHG) emissions at each rebalance date. This is achieved by measuring index emissions as the *weighted average absolute GHG emissions* in tonnes of CO2 equivalent.

On each index rebalance date after the base date (defined below), the index emissions must be:

- at least 30% lower than the Parent Index emissions
- reduced by at least 7% on average per annum compared to index emission targets a year ago

Decarbonisation trajectory base date

A base date is required in order to calculate the decarbonisation trajectory of the index. Index history starts on August 31, 2022 with a base date of August 31, 2022. The EU Regulation allows for updates to the base date during the life of the index due to changes in methodology or substantial changes in underlying ESG/GHG emissions data. On August 31, 2022 the base date and base emissions level are updated to reflect the change in the Scope 3 emissions data. Please refer to the Section 7 for a log of any methodology changes.

Parent index absolute emission calculation

To calculate the absolute emissions for the parent index, the total base market value of the index is aggregated as debt outstanding for parent index.

To calculate carbon footprint, as the parent index is a subset of the broader iBoxx Global Core index and the iBoxx Asia-Pacific universe, the approximate total base market value (BMV) of each ticker, sourced from bonds in USD, EUR, and GBP in both indexes is appended. The total BMV is aggregated at the Trucost issuer level as debt outstanding for each company to determine its Carbon Footprint.

The Parent index emissions are calculated as follows:

$$Parent\ Index\ Absolute\ Emissions = \sum_i^n (w_i \times Carbon\ Footprint_i \times Debt^{Parent})$$

where:

n	is the number of companies in the parent index
w_i	weight of company i in the parent index
$Carbon\ Footprint_i$	$\frac{GHG1_i + GHG2_i + GHG3_i}{Debt_i}$
$GHG1_i$	Scope 1 GHG emissions for company i
$GHG2_i$	Scope 2 GHG emissions for company i
$GHG3_i$	Scope 3 GHG emissions for company i
$Debt_i$	market value of debt outstanding for company i in currency USD/GBP/EUR
$Debt_{Parent}$	total market value of debt outstanding in the parent index

The parent index scope 1+2 emission are calculated as follows:

$$\text{Parent Index Scope 1 + 2 Absolute Emissions} = \sum_i^n (w_i \times \text{Scope 1 + 2 Carbon Footprint}_i \times \text{Debt}_{\text{Parent}}^{\text{Parent}})$$

where:

n	is the number of companies in the parent index
w_i	weight of company i in the parent index
$\text{Scope 1 + 2 Carbon Footprint}_i$	$\frac{(GHG1_i + GHG2_i)}{Debt_i}$
$GHG1_i$	Scope 1 GHG emissions for company i
$GHG2_i$	Scope 2 GHG emissions for company i
$Debt_i$	market value of debt outstanding for company i in currency USD/GBP/EUR
$Debt_{\text{Parent}}$	total market value of debt outstanding in the parent index

The Parent index scope 3 emissions are calculated as follows:

$$\text{Parent Index Scope 3 Absolute Emissions} = \sum_i^n (w_i \times \text{Scope 3 Carbon Footprint}_i \times \text{Debt}_{\text{Parent}}^{\text{Parent}})$$

where:

n	is the number of companies in the parent index
w_i	weight of company i in the parent index
$\text{Scope 3 Carbon Footprint}_i$	$\frac{(GHG3_i)}{Debt_i}$
$GHG3_i$	Scope 3 GHG emissions for company i
$Debt_i$	market value of debt outstanding for company i in currency USD/GBP/EUR
$Debt_{\text{Parent}}$	total market value of debt outstanding in the parent index

Absolute emission decarbonization trajectory calculation

The decarbonization trajectories for scope 1+2 and scope 3 are calculated based on the starting parent index absolute emissions at the base date.

- For year y, d_{th} day of the year:

$$\text{AbsoluteEmissionTrajectory}_{\text{Scope1+2},y,d} = \text{ParentAbsoluteEmissions}_{\text{Scope1+2},\text{base year}} \times 0.7 \times 0.93^{y - \text{base year} - 1 + \frac{d}{\text{basis}}}$$

$$\text{Absolute Emission Trajectory}_{\text{Scope3},y,d} = \text{Parent Absolute Emissions}_{\text{Scope3},\text{base year}} \times 0.7 \times 0.93^{y - \text{base year} - 1 + \frac{d}{\text{basis}}}$$

the basis is 365 if y is not a leap year and 366 if y is a leap year.

Parent index carbon intensity calculation

The parent index carbon intensity is calculated as the weighted average carbon intensity of the broad investable universe.

$$\text{Parent Index Carbon Intensity} = \sum_i^n (w_i \times \text{Carbon Intensity}_i)$$

where:

n	is the number of bonds in the parent index
w_i	weight of bond i in the parent index
$\text{Carbon Intensity}_i$	is the carbon intensity of bond i

$$\text{Parent Index Scope 1 + 2 Carbon Intensity} = \sum_i^n (w_i \times \text{Scope 1 + 2 Carbon Intensity}_i)$$

where

- n is the number of bonds in the parent index
- w_i = weight of bond i in the parent index
- $\text{Scope 1 + 2 Carbon Intensity}_i$ is the sum of scope 1 and 2 carbon intensity of bond i

$$\text{Parent Index Scope 3 Downstream Carbon Intensity} = \sum_i^n (w_i \times \text{Scope 3 Downstream Carbon Intensity}_i)$$

where:

- n is the number of bonds in the parent index
- w_i = weight of bond i in the parent index
- $\text{Scope 3 Downstream Carbon Intensity}_i$ is the scope 3 downstream carbon intensity of bond i

Carbon intensity decarbonization trajectory calculation

The intensity trajectories are calculated based on the starting Parent Carbon Intensity at the base date.

- For year y, d_{th} day of the year:

$$Intensity\ Trajectory_{Scope1+2,y,d} =$$

$$Parent\ Carbon\ Intensity_{Scope1+2,basyear} \times 0.7 \times 0.93^{y-basyear-1 + \frac{d}{basis}}$$

$$Intensity\ Trajectory_{Scope3Downstream,y,d} =$$

$$Parent\ Carbon\ Intensity_{Scope3Downstream,basyear} \times 0.7 \times 0.93^{y-basyear-1 + \frac{d}{basis}}$$

the basis is 365 if y is not a leap year and 366 if y is a leap year.

CTB-based selection

The overall index decarbonization is achieved by targeting two separate Absolute Emission trajectories: Scope 1 & 2 and Scope 3. To achieve the index absolute mission trajectories, bonds are selected via a ranking rule applied to all eligible bonds. The ranking is based on a combination of the bond's carbon intensity for scope 1+2 and scope 3 downstream and the bond's maturity date.

Lifetime Intensity Cost Calculation

The Lifetime Intensity Cost of each bond is used to rank bonds for the decarbonization deselection.

The approach aims to estimate the aggregate intensity cost for each bond until maturity.

First, the "Intensity cost" of each bond in each year is calculated until maturity. The "intensity cost" is calculated as the difference between the bond's current carbon intensity and the carbon intensity daily trajectory (calculated as above) for that year. The current carbon intensity of each issuer is assumed to remain constant during the life of the bond.

If the carbon intensity of bond is higher than the carbon intensity trajectory in a particular year on a particular day, the intensity cost will be positive. Otherwise, the intensity cost will be zero.

For bond i, and year y, day d_{th} :

$$Daily\ Intensity\ Cost_{Scope1+2,i,y,d} = \max(0, Carbon\ Intensity_{Scope1+2,i,y,d} - Intensity\ Trajectory_{Scope1+2,y,d})$$

$$Daily\ Intensity\ Cost_{Scope3Downstream,i,y,d} = \max(0, Carbon\ Intensity_{Scope3Downstream,i,y,d} - Intensity\ Trajectory_{Scope3Downstream,y,d})$$

To get the "Lifetime Intensity Costs" of each bond, we aggregate the daily intensity cost estimates at each year until maturity (capped on Dec 31, 2050).

For year y, day d_{th} :

$$Lifetime\ Intensity\ Cost_{Scope1+2,y,i} = \frac{\sum_k^d (Daily\ Intensity\ Cost_{Scope1+2,i,y,k})}{basis}$$

$$Lifetime\ Intensity\ Cost_{Scope3Downstream,y,i} = \frac{\sum_k^d (Daily\ Intensity\ Cost_{Scope3Downstream,i,y,k})}{basis}$$

the basis is 365 if y is not a leap year and 366 if y is a leap year.

The total lifetime intensity for bond i is to sum up the costs for each year until maturity.

$$Total\ Lifetime\ Intensity\ Cost_{Scope3Downstream,i} = \sum_{y = rebalancedate}^{maturity} (Lifetime\ Intensity\ Cost_{Scope3Downstream,y,i})$$

$$Total\ Lifetime\ Intensity\ Cost_{Scope3Downstream,i} = \sum_{y = rebalancedate}^{maturity} (Lifetime\ Intensity\ Cost_{Scope3,y,i})$$

where:

maturity = min(Dec 31 2050, expected bond maturity)

(for perpetual bonds, maturity is assumed to be 5 years from first settlement date)

Green bonds and sustainability bonds

Green bonds and sustainability bonds, that follow the corresponding ICMA principles for Green Bond Principles and Sustainability Bond Guidelines, are assumed to have Lifetime Intensity Costs of zero.

Final Selection of Bonds

- If the weighted average Scope 3 absolute emission of the index is above the Scope 3 absolute emission trajectory for the year, split bonds into two groups. Bonds whose current year Scope 3 absolute emission is equal to or lower than the current year Scope 3 absolute emission trajectory are ranked higher than bonds whose current year Scope 3 absolute emission is higher. Within each group, rank bonds based on Scope 3 Downstream Lifetime Intensity Cost estimate, in ascending order, from zero to the largest positive number. Exclude bonds from the lowest-ranked to highest-ranked until the weighted average Scope 3 absolute emission of the resulting index is below the Scope 3 absolute emission trajectory for the rebalancing date.
- If the resulting weighted average Scope 1+2 absolute emission of the index is above the Scope 1+2 absolute emission trajectory after Scope 3 selection, split the remaining eligible bonds into two groups. Bonds whose current year Scope 3 downstream absolute emission is equal to or lower than the current year Scope 3 downstream absolute emission trajectory and bonds whose current year Scope 1+2 absolute emissions are equal or lower than the current year Scope 1+2 absolute emissions trajectory are ranked higher than bonds whose current year Scope 3 downstream absolute emission and current year Scope 1+2 absolute emissions is higher. Within each group, rank bonds based on Scope 1+2 Lifetime Intensity Cost estimate, in ascending order, from zero to the largest positive number. Exclude bonds from the lowest-ranked to highest-ranked until the weighted average total absolute emission of the resulting index is below the total absolute emission trajectory for the rebalancing date.

Index data

The calculation of the index is based on bid prices. New securities are included in the index at their respective ask prices when they enter the index family. If no price can be established for a particular security, the index continues to be calculated based on the last available price. This might be the case in periods of market stress, or disruption as well as in illiquid or fragmented markets. If the required inputs become impossible to obtain, S&P DJI may consult market participants prior to the next rebalancing date. Decisions are made publicly available on a timely basis and S&P DJI may refer back to previous cases.

The rebalancing takes place after close of market on the last trading day of a rebalancing month.

Index Calculus

For specific index formulas please refer to the *iBoxx Bond Index Calculus Methodology* available at [https:// www.spglobal.com/spdji/en/](https://www.spglobal.com/spdji/en/).

Treatment of the special intra-month events

Data for the application of corporate actions in the index may not be fully or timely available at all times, e.g. the final call prices for make-whole calls or the actual pay-in-kind percentage for PIK-payment options. In such cases, S&P DJI will estimate the approximate value based on the available data at the time of calculation.

Index and analytics weights

The iBoxx USD Asia-Pacific ex-Greater China Non-Sovereigns Investment Grade CTB Index is market-value-weighted, with the bond's amount outstanding as the weighting factor. The amount outstanding of a bond is only adjusted at the monthly rebalancing process at the end of each month. However, scheduled redemption payments for amortizing bonds and sinking funds are taken into account from the date they occur, as they have a significant influence on index return and analytical values. In addition, bonds that are fully redeemed intra-month are also taken into account immediately. Therefore, the indices are based on adjusted amount outstanding, derived from the amount issued and closely related to the amount outstanding of a bond. The concept is summarized below.

Definitions:

- *Amortizing bonds*: Bonds whose face value is redeemed according to a schedule at more than one redemption date. Interest payments are made on the basis of the remaining value of the bond.
- *Sinking funds*: Bonds, for which money is applied periodically to redeem part of the outstanding before maturity. At the redemption dates the appropriate amount of bonds may either be retired randomly from the outstanding bonds, or purchased on the open market and thus retired. Interest payments are made on the remaining outstanding bonds.
- *Fully redeemed bonds*: Bonds that are fully called or completely repurchased prior to or at the calculation date.

The amount issued of a bond does not change when coupons are paid and bonds are redeemed. However, additional tranches and unscheduled repurchases have to be taken into account to arrive at a suitable basis for index and analytics calculations. Therefore the adjusted amount outstanding is the common basis on which all calculations are based.

In addition, incoming bond prices are linked to the amount outstanding, rather than to the amount issued. This ensures a common basis (to the nominal value of 100), on which all bonds are priced and the indices are calculated.

Funged bonds

Bonds may be issued in several tranches. The different tranches are initially legally separate and therefore trade independently for a certain period. On and after the funged date, the tranches will be combined into one bond, i.e. the parent tranche will contain the original security, as well as the additional notional(s) from the new tranche(s). After the funged date, the prices for both the securities are the same, because they constitute one uniform bond. This is reflected in the indices as follows:

Parent and new tranche are both index constituents

- After the funged date, the price from the parent tranche is used for the funged tranche; no price for the funged bond
- Funged tranche leaves the index at the next rebalancing and parent amount outstanding increases accordingly

Parent is an index constituent, but the new tranche is not

- No special intra-month treatment necessary
- Parent amount outstanding increases at the next rebalancing

Parent is not an index constituent but the new tranche is

- No special intra-month treatment necessary
- Funged tranche leaves the index; parent tranche enters the index at the next rebalancing

Full redemptions: exercised calls, puts and buybacks

If a bond is fully redeemed intra-month, the bond effectively ceases to exist. In all calculations, the redeemed bond is treated as cash based on the last price, the call price or repurchase price, as applicable. The redemption factor, redemption and the redemption price are used to treat these events in the index and analytics calculation. In addition, the clean price of the bond is set to the redemption price, and the interest accrued until the redemption date is treated as an irregular coupon payment.

Bonds trading flat of accrued

If a bond is identified as trading flat of accrued, the accrued interest of the bond is set to 0 in the total return index calculation and is excluded from the calculation of all bond and index analytical values.

Bonds will be considered trading flat of accrued in any of the following situations:

- a bond has been assigned a default rating and/or
- issuer has announced a failure to pay a coupon and/or
- issuer has announced an intention not to make a payment on an upcoming coupon (grace period).

Maturity extension

Maturity Extension for Perpetual Bonds Without a Reset Date

Maturity	Coupon/call structure	Workout date at issuance	Updated Workout date if not called
Perpetual	Fixed/ Callable	Assume first call date as workout date	Extend workout date until the assumed next call date - 5 years from first call date*.

*Assumes the terms allow for a redemption at the new assumed maturity date.

Maturity Extension for Perpetuals & Dated Fixed-to-Fixed Bonds With a Reset Date

Maturity	Coupon/Call structure	Workout Date at issuance	Updated Workout date if not called
Perpetual	Reset*/Callable	Assume first call date as workout date	Extend workout date until the end of the next reset date*
Dated	Reset/Callable	Assume reset date as workout date	Extend workout date until the end of the next reset date or final maturity date*

*Assumes the bond terms allow for a redemption at the new assumed maturity date

Multi-coupon bonds

Some bonds have pre-defined coupon changes that lead to a change in the annual coupon over the life of the bond. In all instances, the coupon change must be a fixed amount on top of a fixed coupon, i.e. floating coupon bonds are not eligible for the indices. The two main categories of bonds are step-up bonds and event-driven bonds.

- **Step-up bonds:** These are bonds with a pre-defined coupon schedule that cannot change during the life of the bond. The coupon schedule is used in all bond calculations.
- **Event-driven bonds:** These are bonds whose coupon may change upon occurrence (or non-occurrence) of pre-specified events, such as rating changes, e.g. rating-driven bonds, failure to register (register-driven bonds), or failure to complete a merger (merger-driven bonds). In the calculation of the indices and the analytics, the coupon schedule as of the calculation date is used. That is to say, any events occurring after the calculation date are ignored in the determination of the applicable coupon schedule. *Example of an event-driven bond:* A bond's rating changes on 31 December 2003 from A- to BBB+ and the coupon steps up from 6% to 6.25% from 1 March 2004 onward. The coupon dates are 1 October and 1 April each year. The correct coupon schedule for the bond and index calculations is date dependent. The index calculation on 20 December 2003 uses the 6% coupon for the whole life of the bond, while the calculation on 31 January 2004 uses a 6% coupon for the current coupon period to 29 February 2004, and a 6.25% coupon for all later interest payments. The index calculation on 20 March uses a 6% coupon until 29 February, a 6.25% coupon for the remainder of the current coupon period and a 6.25% coupon for all future coupon payments. The index calculation after 1 April uses a 6.25% coupon.

Ex-dividend conventions

Some markets have ex-dividend conventions. Ex-dividend means that the next coupon is detached from the bond several days in advance of the coupon payment date. The date on which the next coupon is detached is the ex-dividend date and the period between the ex-dividend date and the coupon payment date is the ex-dividend period. If a bond is in the ex-dividend period, the next coupon payment will not be paid to a buyer of this bond, but will be paid to the original bond holder.

The indices and analytics calculations take ex-dividend conventions into account. During the ex-dividend period, the accrued interest of the bond is negative, while the next coupon payment is held separate in the variable coupon adjustment. If the bond enters the index during the ex-dividend period, then the next coupon payment and the coupon adjustment will not accrue to the index. However, if the bond was already in the index, the next coupon payment needs to be included in the total return calculations. This is controlled via the ex-dividend indicator which is 0 if the bond enters the index during the current ex-dividend period and 1 if not. The same treatment is also applied to all analytics calculation, i.e. the first cash flow is excluded from the calculations if the bond enters during the current ex-dividend period.

Index History

The index history starts on August 31, 2022. The index has a base value of 125.88, equal to that of the underlying index on that date. The decarbonization base date starts on August 31, 2022.

Settlement conventions

All iBoxx indices calculate using the assumption of T+0 settlement days.

Calendar

S&P DJI publishes an index calculation calendar available on <https://www.spglobal.com/spdji/en/> under *iBoxx Indices Calendars*. This calendar provides an overview of the index calculation holidays of the iBoxx bond index families each year.

Publication of the Index

The index calculates each Monday - Friday and on the last calendar day of each month. The index is calculated on the basis of end-of-day prices on each trading day defined in the iBoxx USD Asia-Pacific ex-Greater China Non-Sovereigns Investment Grade CTB Index calculation calendar. For non-trading days, the index is calculated with the previous trading day's closing prices.

The index calculation calendar is available on under *iBoxx Indices Calendars* for data subscribers. The approximate publication time for the Asian end-of-day is 7 pm HKT/SGT. Index data and bond price information is also available from the main information vendors. The Asian end-of-day indices are rebalanced using the Asian end-of-day prices from the last business day of the month.

The index calculation calendar conforms to the recommendations of the Securities Industry and Financial Markets Association (SIFMA):

- Pricing for domestic and global bonds takes place on each SIFMA recommended US trading day
- Pricing for Eurodollar bonds takes place on each SIFMA recommended UK trading day (additional holidays to the US calendar: Easter Monday, May Day, Summer Bank Holiday and Boxing Day)

Data publication and access

The table below summarizes the publication of iBoxx USD Asia-Pacific ex-Greater China Non-Sovereigns Investment Grade CTB Index in the Indices section of the S&P DJI website at <https://www.spglobal.com/spdji/en/> for registered users and on the FTP server.

In addition to the indices detailed in this methodology, other indices covered by this document may be available. For a list of available indices, please refer [here](#).

Data publication and access

Frequency	File Type	Access
Daily	Underlying file – Bond level	FTP Server
	Indices files – Index level	FTP Server / website/ Bloomberg for index levels only
T-3 and T-2	Preview components	FTP Server / website
Monthly	End of month components	FTP Server / website
	XREF files	FTP Server

The index identifiers for the publication channels are:

Index Name	Version	ISIN	SEDOL	BBG Tickers	RIC
iBoxx USD Asia-Pacific ex-Greater China Non-Sovereigns Investment Grade CTB Climate Trans	TRI	GB00BT95ZH09	BT95ZH0	IBXXUCTB	.IBXXUCTB
iBoxx USD Asia-Pacific ex-Greater China Non-Sovereigns Investment Grade CTB	CPI	GB00BT95ZJ23	BT95ZJ2	IBXXUCTP	.IBXXUCTP

Methodology Changes

	Annual Index Review 2025
Mar. 31, 2026	<ul style="list-style-type: none">• Introduction of subordinated debt classification tiers for Financial Services
12 /01/2025	<ul style="list-style-type: none">• Index name changed from iBoxx USD Asia-Pacific ex-Greater China Non-Sovereigns Investment Grade Climate Transition Index to iBoxx USD Asia-Pacific ex-Greater China Non-Sovereigns Investment Grade CTB Index

Summary of Key ESG Factors

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY ¹			
1.	Name of the Benchmark Administrator.	S&P Dow Jones Indices Limited ('S&P DJI Ltd')	
2.	Type of benchmark or family of benchmarks. ²	Fixed Income	
3.	Name of the S&P Dow Jones Indices benchmark or family of benchmarks.	iBoxx USD Asia-Pacific ex-Greater China Non-Sovereigns Investment Grade CTB Index	
4.	Does the benchmark methodology for the benchmark or family of benchmarks take into account ESG factors?	Yes	
5.	If the response to (4) is "Yes," the indices stated here take into account ESG factors.	For a list of the benchmarks within this family that take in account ESG factors, please refer to the S&P Dow Jones Indices Limited Index Register .	
6.	Where the response to (4) is 'Yes', the section below lists those ESG factors that are taken into account by the ESG indices governed by the methodology, including those ESG factors listed in Annex II to Delegated Regulation (EU) 2020/1816.		
	ESG Factors ³	S&P DJI ESG Factor	Comments
6.a List of Environmental Factors	N/A	Sustainalytics Product Involvement Screening: <i>Thermal Coal</i>	Exclusion. For more information, please refer to the 'Bond selection rules' section, the 'Product Involvement' sub-section, of the methodology.
	N/A	Sustainalytics Product Involvement Screening: <i>Oil Sands</i>	Exclusion. For more information, please refer to the 'Bond selection rules' section, the 'Product Involvement' sub-section, of the methodology.
	N/A	Sustainalytics Product Involvement Screening: <i>Palm Oil</i>	Exclusion. For more information, please refer to the 'Bond selection rules' section, the 'Product Involvement' sub-section, of the methodology.
	GHG intensity of the benchmark	Absolute GHG Emissions; Carbon Intensity; 7%	Weighting. For more information, please refer to

1. The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK [The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019].

2. The "type of benchmark" refers to the type of 'underlying asset' as selected from the list provided in Annex II in the European Union Commission Delegated Regulation (EU) 2020/1816 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published.

3. ESG factors' means the environmental, social and governance factors (i) referred to in Annex II of European Union Commission Delegated Regulation (EU) 2020/1816 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published; and (ii) additional ESG factors taken into account by the methodology. Where relevant this column also includes cross references to the mandatory exclusions under Article 12 Regulation (EU) 2020/1818.

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY ¹			
		Decarbonization Trajectory; 30% < Parent Index Emissions	the ' <i>Index Construction</i> ' of the methodology
	Percentage of green bonds in the benchmark portfolio	Green Bond Improvement	Weighting. For more information, please refer to the ' <i>Bond selection rules</i> ' section, the ' <i>Green Bonds</i> ' sub-section, of the methodology
	<i>Regulation (EU) 2020/1818. Article 12(2): companies that are found or estimated by them or by external data providers to significantly harm one or more of the environmental objectives referred to in Article 9 of Regulation (EU) 2020/852 of the European Parliament and of the Council (8), in accordance with the rules on estimations laid down in Article 13(2) of this Regulation</i>	Sustainalytics Controversy Score	Exclusion. For more information, please refer to the ' <i>Bond selection rules</i> ' section, the ' <i>Controversies</i> ' sub-section, of the methodology.
6.b List of Social Factors considered	Number of benchmark constituents subject to social violations (absolute number and relative divided by all benchmark constituents), as referred to in international treaties and conventions, United Nations principles or, where applicable, national law. <i>Regulation (EU) 2020/1818. Article 12(1)(c): companies that benchmark administrators find in violation of the United Nations Global Compact (UNGC) principles or the Organisation for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises.</i>	Sustainalytics Global Standards Screening: ' <i>Non-compliant</i> '	Exclusion. For more information, please refer to the ' <i>Bond selection rules</i> ' section, the ' <i>UNGC/GSS screening</i> ' subsection, of the methodology.
	International treaties and conventions, United Nations principles or, where applicable, national law used in order to determine what constitutes a 'controversial weapon'.	Controversial Weapons Radar screening: <i>Controversial Weapons</i>	Exclusion. For more information, please refer to the ' <i>Bond selection rules</i> ' section, the ' <i>Controversial Weapons Radar screening</i> ' sub-section, of the methodology.
	Weighted average percentage of benchmark constituents in the controversial weapons sector. <i>Regulation (EU) 2020/1818.</i>	Controversial Weapons Radar screening: <i>Controversial Weapons</i>	Exclusion. For more information, please refer to the ' <i>Bond selection rules</i> ' section, the ' <i>Controversial Weapons Radar screening</i> ' sub-section, of the

1. The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK [The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019].

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY ¹			
	<i>Article 12(1)(a): companies involved in any activities related to controversial weapons</i>		methodology.
	Weighted average percentage of benchmark constituents in the tobacco sector. <i>Regulation (EU) 2020/1818. Article 12(1)(b): companies involved in the cultivation and production of tobacco.</i>	Sustainalytics Product Involvement Screening: <i>Tobacco</i>	Exclusion. For more information, please refer to the 'Bond selection rules" section, the 'Product Involvement' sub-section, of the methodology.
	N/A	Controversial Weapons Radar screening: <i>Nuclear Weapons</i>	Exclusion. For more information, please refer to the 'Bond selection rules" section, the 'Controversial Weapons Radar screening" sub-section, of the methodology.
	N/A	Sustainalytics Product Involvement Screening: <i>Small Arms</i>	Exclusion. For more information, please refer to the 'Bond selection rules" section, the 'Product Involvement' sub-section, of the methodology.
	N/A	Sustainalytics Controversy Score	Exclusion. For more information, please refer to the 'Bond selection rules" section, the 'Controversies' sub-section, of the methodology.
6.c List of Governance Factors Considered	N/A	Sustainalytics Controversy Score	Exclusion. For more information, please refer to the 'Bond selection rules" section, the 'Controversies' sub-section, of the methodology.
7.	Data and standards used.		
7.a	Data input: Data sources, verification and quality of data.	<p>The datasets are defined as either:</p> <ul style="list-style-type: none"> • Reported: All data in the dataset are provided as disclosed by companies, or as stated in the public domain. • Modeled: All data are derived using a proprietary modelling process with only proxies used in the creation of the dataset. • Reported and Modeled: The dataset is either a mix of reported and Modeled data or is derived by the vendor using reported data/information in a proprietary scoring or determination process. <p>The index methodology uses the following ESG datasets.</p>	
7.b	Data Source.	Dataset.	
	S&P Trucost Limited (a part of S&P Global) (external data source)	This methodology uses several datasets provided by S&P Trucost Limited:	

1. The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK [The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019].

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY ¹		
		<ul style="list-style-type: none"> Physical risk scores dataset (Reported and Modeled) Greenhouse gas emissions and emissions disclosure dataset (Reported and Modeled) Green-to-brown share dataset (Reported and Modeled) <p>Trucost sector revenues dataset (Reported and Modeled) For further information, please refer to: https://www.support.marketplace.spglobal.com/en/datasets/alternative/trucost_environmental/trucost_environmental_data_methodology_guide.pdf</p>
	Sustainalytics (external data source)	<p>This methodology uses the following datasets provided by Sustainalytics, a global leader in sustainability research and analytics:</p> <ul style="list-style-type: none"> Product Involvement (Reported and Modeled) Global Standards Screening (Reported and Modeled) Controversy Ratings (Reported and Modeled) <p><i>For more information, please refer to www.sustainalytics.com.</i></p>
	Other	<p>Data is also sourced externally from Climate Bonds Initiative (“CBI”), Environmental Finance and S&P Market Intelligence Reference Data, supplemented with professional expertise and bond prospectuses.</p>
7.c	Verification and quality of data.	<p>S&P DJI’s Global Data Management Team holds the responsibility of data quality assurance and validation of third-party data sources, including all ESG datasets. This process involves regular reviews of new data received, and includes comparison with previous data, coverage and identifier checks as well as escalation of suspect data to data vendors. S&P DJI also hold regular feedback sessions with data partners and vendors to share any quality concerns and to remedy any issues that are observed during data validations performed by the Global Data Management Team. In addition, all users of third-party data perform their own review of data used in the maintenance of indices.</p> <p>For the S&P Global Trucost Research Process: S&P Global Trucost follows a four-step research process designed to minimize the environmental reporting burden of companies (“survey fatigue”) and to provide a transparent system for companies to verify their environmental performance profile, and, at any time, contribute to their most recently available data. Fourstep research process:</p> <ol style="list-style-type: none"> 1. MAP company business segments: S&P Global Trucost maps company business segments to more than 450 business activities in the S&P Global Trucost model. The model is based on the North American Industry Classification System (NAICS), but goes into greater granularity in some areas, such as power generating utilities. 2. ESTIMATE data-modelled profile: Once company business segments have been mapped to S&P Global Trucost sectors and their share of revenue apportioned to each, S&P Global Trucost is able to efficiently generate a data modelled profile for the company. S&P Global

1. The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK [The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019].

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY¹

		<p>Trucost uses its environmentally extended input/output (EIO) model to estimate data for over 800 environmental and operational metrics across the entire operations of companies, from the raw materials they depend on in their supply chains to the electricity they purchase to power their operations.</p> <p>3. COLLECT public disclosure: S&P Global Trucost searches for environmental performance information in annual reports, sustainability reports, websites, and other publicly disclosed sources. Third party datasets, like disclosures to the CDP, are also reviewed. We then standardize reported environmental performance data to best practice guidelines so that it can be compared across companies, regions, and business activities. To correct reporting errors, vigorous data control procedures are applied, such as sector specialist data reviews, automated outlier identifications and year-on-year comparisons. Wherever a material metric is not disclosed, S&P Global Trucost uses its modelled value, thus ensuring that all data gaps have been filled.</p> <p>4. ENGAGE with company: S&P Global Trucost then conducts an annual engagement with every company, providing the opportunity to verify environmental performance and provide additional information. Companies are further welcomed to contact S&P Global Trucost analysts at any point in their environmental reporting cycle to provide their most recently available data. This ensures S&P Global Trucost's data is both accurate and up to date.</p> <p>5. For further information, please refer to: https://support.marketplace.spglobal.com/en/datasets/alternative/trucost_environmental/trucost_environmental_data_methodology_guide.pdf</p> <p>Sustainalytics Datasets:</p> <p>1. Quality Approach to <i>Controversies</i> Company Research: Continuous improvement and maintenance of quality and research standards; Continuous refinement of methodologies and guidance to adjust to emerging societal ESG developments;</p> <p>Continuous screening and curation of news and NGO sources; Screening of corporate reporting and web disclosure; Senior sector lead quality reviews of controversy assessments before publication.</p> <p>For high scoring controversy ratings (Categories 4 and 5), companies are contacted to verify allegations that are relevant in the controversy ratings methodology and their response is taken into consideration, and whenever relevant included; proposals for assessment changes are reviewed by an internal oversight body. If the proposal is approved, a written</p>
--	--	--

1. The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK [The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019].

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY¹

		<p>indicator assessment is drafted according to Sustainalytics Controversy guidelines. Before such assessment is published, a quality and editorial review is conducted.</p> <p>Data and deliverable management: Quality and reliability of Covered Company and identifier data through automated quality assurance; Quality and reliability of Sustainalytics proprietary (i.e. research) data through automated quality assurance, prior to publication; Senior sector lead quality reviews of controversy assessments before publication; Quality and reliability of biweekly client deliverables through end-of-gate quality assurance processes (automated and manual); Monitoring and investigating ESG score fluctuations and their root causes using manual and automated tools.</p> <p>Update cycle: Continuous daily news monitoring is conducted as incidents occur and feed into updates of controversy indicators; Quarterly reviews of high scoring cases regardless the occurrence of incidents; Three year back controversy screen for entities added to the research universe after every quarterly rebalance; Annual review of all company's controversy ratings when the overall Risk Rating of a company is annually updated; Analyst discretion to react to relevant developments at any time, regardless the above scheduled reviews.</p> <p>2. Quality Approach to <i>Global Standards Screening (GSS)</i> Company Research: Continuous improvement and maintenance of quality and research standards; Companies are contacted to verify allegations that are relevant in the Global Standards Screening methodology and their response is taken into consideration, and whenever relevant included; Quality reviews of ESG assessments before publication. For the Global Standards Screening, proposals for assessment changes are reviewed by an internal oversight body. If the proposal is approved, a written report is drafted according to the GSS guidelines. Before a Watchlist or Non Compliant status for an issue is published, a quality and editorial review is conducted on the report and the sources used therein.</p> <p>Data and deliverable management: Quality and reliability of Covered Company and identifier data through automated quality assurance; Quality and reliability of Sustainalytics proprietary (i.e. research) data through automated quality assurance, prior to publication; Quality and reliability of standard deliverables through end-of-gate quality assurance process; Quality and reliability of custom client deliverables through end-of-gate quality assurance processes (automated and manual); Monitoring and investigating ESG score fluctuations and their root causes using automated tools.</p> <p>Update cycle: Continuous monitoring is conducted as incidents occur and feed into updates of Global Standards Screening reports • Quarterly updates to Global Standards Screening reports • New companies added to the universe as a result of rebalancing are researched and updated in client systems quarterly; Corporate actions are processed in client systems on a quarterly basis in order to capture any involvement</p>
--	--	--

1. The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK [The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019].

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY¹

		<p>changes arising from mergers, acquisitions or other corporate actions.</p> <p>3. Quality Approach to <i>Product Involvement</i> Company Research: Continuous improvement and maintenance of quality and research standards; All Product Involvement research is reviewed by senior analysts. The review comprises checking the accuracy of the involvement analysis by studying the original source as well as consistency with the research methodology and framework; Final validation of the research before publication is done by the Research Manager. Assessment changes are additionally reviewed by an internal oversight body.</p> <p>Data and deliverable management: Quality and reliability of Covered Company and identifier data through automated quality assurance; Quality and reliability of Sustainalytics proprietary (i.e. research) data through automated quality assurance, prior to publication; Quality and reliability of standard deliverables through end-of-gate quality assurance process; Quality and reliability of custom client deliverables through end-of-gate quality assurance processes (automated and manual); Monitoring and investigating ESG score fluctuations and their root causes using automated tools.</p> <p>Update cycle: Product Involvement Research is updated annually; New companies added to the universe as a result of rebalancing are researched and updated in client systems quarterly; Corporate actions are processed in client systems on a quarterly basis in order to capture any involvement changes arising from mergers, acquisitions or other corporate actions. For further information on Environmental Finance research and methodology refer https://www.bonddata.org/policy/methodology.html.</p> <p>The CBI Green Bond Database screening process is available at https://www.climatebonds.net/files/files/Taxonomy/CBI_Taxonomy_Tables-08A%20%281%29.pdf</p> <p>For further information on S&P Market Intelligence Reference Data refer to https://ihsmarkit.com/products/pricing-and-referencedata.html.</p>
7.d	Reference standards.	<p>GHG Emissions data is sourced externally from S&P Global Trucost. Trucost uses the following standards:</p> <ul style="list-style-type: none"> • Scopes 1 and 2: the GHG Protocol Corporate Standard. • Scope 3 (upstream & downstream): The Corporate Value Chain Standard, which is a supplement to the GHG Protocol specific to Scope 3. <p>S&P DJI uses international sustainability disclosure frameworks such as SASB, GRI, UN Global Compact and the recommendations of the Financial Stability Board's Task Force for Climate-related Financial Disclosures as published in the 2017 Final Report.</p> <p>The methodology behind Sustainalytics Global Standards Screening is based on the following international standards:</p>

1. The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK [The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019].

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY ¹	
	<ul style="list-style-type: none"> • UN Global Compact Principles • OECD • World Governance Indicators • Industry-specific standards or initiatives. Examples are the Round Table on Sustainable Palm Oil, the standards for Systemically Important Banks, local Corporate Governance codes, and many others • Said industry-specific standards are incorporated in assessments of companies' management of ESG issues in ESG Risk Ratings. <p>Sustainalytics Datasets: Controversies Research tracks incidents through various media and NGO sources and is not a comprehensive screening product. The following standards are included in the framework for analysis for the Controversies research, however, reference to the exact standards or norms breaches is not described, given that Sustainalytics the reported allegations may have for businesses and stakeholders</p> <ul style="list-style-type: none"> • UN Global Compact Principles • OECD • Industry specific standards, initiatives or principles as further elaborated in underlying conventions and authoritative guidelines <p>ICMA Green Bond Principles (GBP), Social Bond Principles (SBP) and Sustainability Bond Guidelines (SBG).</p>
Appendix latest update:	September 2025 - regulatory references added to ESG Factors
Appendix updates:	N/A
Appendix first publication:	February 6, 2025

1. The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK [The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019].

Index Governance

Index Committee

An S&P Dow Jones Indices Index Committee maintains the indices. All committee members are full-time professionals at S&P Dow Jones Indices. Meetings are held regularly. The Index Committee oversees the management of the indices, including determinations of intra-rebalancing changes, maintenance and inclusion policies, and other matters affecting the maintenance and calculation of the indices.

In fulfilling its responsibilities, the Index Committee has full and complete discretion to (i) amend, apply, or exempt the application of index rules and policies as circumstances may require and (ii) add, remove, or by-pass any bond in determining the composition of an index.

The Index Committee may rely on any information or documentation submitted to it or gathered by it that the Index Committee believes to be accurate. The Index Committee reserves the right to reinterpret publicly available information and to make changes to the indices based on a new interpretation of that information at its sole discretion. All Index Committee discussions are confidential.

The Index Committee is separate from and independent of other analytical groups at S&P Global. In particular, the Index Committee has no access to or influence on decisions by S&P Global Ratings analysts.

S&P Dow Jones Indices' Index Committees reserve the right to make exceptions when applying the methodology if the need arises. In any scenario where the treatment differs from the general rules stated in this document or supplemental documents, clients will receive sufficient notice, whenever possible.

In addition to the daily governance of indices and maintenance of index methodologies, at least once within any 12-month period, the Index Committee reviews the methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. In certain instances, S&P Dow Jones Indices may publish a consultation inviting comments from external parties.

For more information on index governance policies, please refer [here](#).

Further Information

Client Support

For client support please contact index_services@spglobal.com.

Formal Complaints

Formal complaints should be emailed to spdji_compliance@spglobal.com.

Please note: spdji_compliance@spglobal.com should only be used to log formal complaints.

General Index Inquiries

For general index inquiries, please contact index_services@spglobal.com.

Disclaimer

Performance Disclosure/Back-Tested Data

Where applicable, S&P Dow Jones Indices and its index-related affiliates (“S&P DJI”) defines various dates to assist our clients by providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index’s Launch Date are considered back-tested. S&P DJI defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company’s public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed “Date of introduction”) is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index’s public release date.

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Information presented prior to an index’s launch date is hypothetical back-tested performance, not actual performance, and is based on the index methodology in effect on the launch date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Also, the treatment of corporate actions in back-tested performance may differ from treatment for live indices due to limitations in replicating index management decisions. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate certain ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using “Backward Data Assumption” (or pulling back) of ESG data for the calculation of back-tested historical performance. “Backward Data Assumption” is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as “product involvement”) were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on “Backward Data Assumption” please refer to the FAQ. The methodology and factsheets of any index that employs backward assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific data points and relevant time period for which backward projected data was used. Index returns shown do not

represent the results of actual trading of investable assets/securities. S&P DJI maintains the index and calculates the index levels and performance shown or discussed but does not manage any assets.

Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US \$10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US \$1,650), the net return would be 8.35% (or US \$8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US \$5,375, and a cumulative net return of 27.2% (or US \$27,200).

Intellectual Property Notices/Disclaimer

© 2026 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, SPX, SPY, The 500, US500, US 30, S&P 100, S&P COMPOSITE 1500, S&P 400, S&P MIDCAP 400, S&P 600, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, Select Sector, S&P MAESTRO, S&P PRISM, S&P STRIDE, GICS, SPIVA, SPDR, INDEXOLOGY, iTraxx, iBoxx, ABX, ADBI, CDX, CMBX, MBX, MCDX, PRIMEX, HHPI, and SOVX are registered trademarks of S&P Global, Inc. ("S&P Global") or its affiliates. DOW JONES, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P DJI does not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P DJI is impersonal and not tailored to the needs of any person, entity, or group of persons. S&P DJI receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P DJI does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P DJI makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P DJI is not an investment advisor, commodity trading advisor, fiduciary, "promoter" (as defined in the Investment Company Act of 1940, as amended) or "expert" as enumerated within 15 U.S.C. § 77k(a), and S&P DJI makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. S&P DJI is not a tax advisor. Inclusion of a security, commodity, crypto currency, or other asset within an index is not a recommendation by S&P DJI to buy, sell, or hold such security, commodity, crypto currency, or other asset, nor is it considered to be investment or trading advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse engineered, reproduced, or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P DJI. The Content shall not be used for any unlawful or unauthorized purposes. S&P DJI and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness, or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" "WHERE IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIMS ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF

MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special, or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related information and other analyses, including ratings, research and valuations are generally provided by licensors and/or affiliates of S&P Dow Jones Indices, including but not limited to S&P Global's other divisions such as S&P Global Market Intelligence. Any credit-related information and other related analyses and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. Any opinion, analyses and rating acknowledgement decisions are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Dow Jones Indices does not assume any obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P DJI does not act as a fiduciary or an investment advisor. While S&P DJI has obtained information from sources it believes to be reliable, S&P DJI does not perform an audit or undertake independent verification of any information it receives. S&P DJI reserves the right to vary or discontinue any index at any time for regulatory or other reasons. Various factors, including external factors beyond S&P DJI's control might necessitate material changes to indices.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P Global Ratings reserves the right to assign, withdraw or suspend such acknowledgement at any time and in its sole discretion. S&P Dow Jones Indices, including S&P Global Ratings, disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgement as well as any liability for any damage alleged to have been suffered on account thereof. Affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. Such affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, reserve the right to disseminate its opinions and analyses. Public ratings and analyses from S&P Global Ratings are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P Global Ratings publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

S&P Global keeps certain activities of its various divisions and business units separate from each other to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions, and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate, or otherwise address.

Some indices use the Global Industry Classification Standard (GICS®), which was developed by, and is the exclusive property and a trademark of, S&P Global and MSCI. Neither MSCI, S&P DJI nor any other party involved in making or compiling any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use

thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability, or fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P DJI, any of their affiliates or any third party involved in making or compiling any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

S&P Dow Jones Indices products are governed by the terms and conditions of the agreements under which they may be provided. A license is required from S&P Dow Jones Indices to display, create derivative works of and/or distribute any product or service that uses, is based upon and/or refers to any S&P Dow Jones Indices and/or index data.

The Content may have been created with the assistance of an artificial intelligence (AI) tool. While the AI tool may provide suggestions and insights, the final Content was composed, reviewed, edited, and approved by a human(s) at S&P Dow Jones Indices. As such, S&P Dow Jones Indices claims full copyright ownership of this AI-assisted Content, in accordance with applicable laws and regulations.

ESG Indices Disclaimer

S&P DJI provides indices that seek to select, exclude, and/or weight index constituents based on, but not limited to, certain environmental, social or governance (ESG) indicators, or a combination of those indicators, including the following: environmental indicators (including the efficient use of natural resources, the production of waste, greenhouse gas emissions, or impact on biodiversity); social indicators (such as, inequality and investment in human capital); governance indicators (such as sound management structures, employee relations, remuneration of staff, tax compliance, respect for human rights, anti-corruption and anti-bribery matters), specific sustainability or values-related company involvement indicators (for example, production/distribution of controversial weapons, tobacco products, or thermal coal), or controversies monitoring (including research of media outlets to identify companies involved in ESG-related incidents).

S&P DJI ESG indices use ESG metrics and scores in the selection and/or weighting of index constituents. ESG scores or ratings seek to measure or evaluate a company's, or an asset's, performance with respect to environmental, social and corporate governance issues.

The ESG scores, ratings, and other data used in S&P DJI ESG indices is supplied directly or indirectly by third parties (note these parties can be independent affiliates of S&P Global or unaffiliated entities) so an S&P DJI ESG index's ability to reflect ESG factors depends on these third parties' data accuracy and availability.

ESG scores, ratings, and other data may be reported (meaning that the data is provided as disclosed by companies, or an asset, or as made publicly available), modelled (meaning that the data is derived using a proprietary modelling process with only proxies used in the creation of the data), or reported and modelled (meaning that the data is either a mix of reported and modelled data or is derived from the vendor using reported data /information in a proprietary scoring or determination process).

ESG scores, ratings, and other data, whether from an external and/or internal source, is based on a qualitative and judgmental assessment, especially in the absence of well-defined market standards, and due to the existence of multiple approaches and methodologies to assess ESG factors and considerations. An element of subjectivity and discretion is therefore inherent in any ESG score, rating, or other data and different ESG scoring, rating, and/or data sources may use different ESG assessment or estimation methodologies. Different persons (including ESG data ratings, or scoring providers, index administrators or users) may arrive at different conclusions regarding the sustainability or impact of a particular company, asset, or index.

Where an index uses ESG scores, ratings or other data supplied directly or indirectly by third parties, S&P DJI does not accept responsibility for the accuracy or completeness of such ESG scores, ratings, or data.

No single clear, definitive test or framework (legal, regulatory, or otherwise) exists to determine 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives. In the absence of well-defined market standards and due to the existence of multitude approaches, the exercise of judgment is necessary. Accordingly, different persons may classify the same investment, product and/or strategy differently regarding 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives. Furthermore, the legal and/or market position on what constitutes an 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives may change over time, especially as further regulatory or industry rules and guidance are issued and the ESG sustainable finance framework becomes more sophisticated.

Prospective users of an S&P DJI ESG Index are encouraged to read the relevant index methodology and related disclosures carefully to determine whether the index is suitable for their potential use case or investment objective.