Bloomberg Index Services Limited

Benchmark Statement for

Bloomberg BFIX

This benchmark statement (this "Statement") is provided by Bloomberg Index Services Limited ("BISL" and, with its affiliates, "Bloomberg") as the administrator of the Bloomberg BFIX (the "Benchmark") and is intended to meet the requirements of the European Union's regulation on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds (Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016, herein the "BMR"), including the regulatory technical standards ("RTS") promulgated thereunder, as and to the extent the EU BMR and related RTS were "on-shored" in the UK from 1 January 2021 (the "BMR").

	Requirement [Regulatory Reference]	Benchmark Family Information
(1)	General disclosure requirements	
	The benchmark statement shall state:	Date of publication: 31 October 2019
	(a) the date of publication of the statement and, where applicable, the date of its last update;	Date of last update: 24 September 2024
	(b) where available, the	BISL does not assign ISINs to all of the Indices.
	international securities identification number (ISIN) of the benchmark or benchmarks; alternatively, for a family of benchmarks, the statement may provide details of where the ISINs	Users should be aware that ISINs may have been obtained on the Indices by third parties and, in doing so, such third parties may have supplied inaccurate or incomplete information with regard to the underlying Index or may have obtained multiple ISINs for the same Index. Users should contact BISL if they have questions regarding the proper identification of its Indices.
	are publicly accessible free of charge;	BISL does assign a unique Financial Instrument Global Identifier ("FIGI") to its Indices. FIGIs may be found at https://openfigi.com/ by searching for the relevant Index within the family.
	(c) whether the benchmark, or any benchmark in the family of benchmarks, is determined using contributions of input data;	The Indices do not utilize contributions of input data.
	(d) whether the benchmark or any benchmark in the family of benchmarks qualifies as one of the types of benchmarks listed under Title III of Regulation (EU) 2016/1011, including the specific provision by virtue of which the benchmark qualifies as that type.	None of the Indices are 'regulated-data benchmarks', 'interest rate benchmarks' or 'commodity benchmarks' as those terms are defined in the BMR. In addition, none of the Indices are 'critical benchmarks' or 'significant benchmarks' as those terms are defined in the BMR. All of the Indices would be deemed 'non-significant'.
	[RTS 1(1)]	

(2)

The benchmark statement shall clearly and unambiguously define the market or economic reality measured by the benchmark and the circumstances in which such measurement may become unreliable.

[BMR 27(1)(a)]

In defining the market or economic reality, the benchmark statement shall include at least the following information:

(a) a general description of the market or economic reality.

(b) the geographical boundaries, if any, of the market or economic reality;

(c) any other information that the administrator reasonably considers to be relevant or useful to help users or potential users of the benchmark to understand the relevant features of the market or economic reality, including at least the following elements insofar as reliable data on these elements is available:

(i) information on actual or potential participants in the market;

(ii) an indication of the size of the market or economic reality.

[RTS 1(2)]

Market or economic reality measured by the benchmark family:

The Bloomberg BFIX ("BFIX" or the "Benchmark"), provides Spot, Forward and Non-Deliverable Forward ("NDF") rate fixings for certain currencies and metals. As used in this benchmark statement, the term "fixings" refers only to such Spot, Forward and NDF rates and not to any other rate, calculation or other information that may be related to, or associated with, such fixings that are made available by Bloomberg. Based on pricing provided by the Bloomberg Generic Price ("BGN") and Bloomberg Generic Price Executable ("BGNE"), BFIX is made broadly available to the investment community with the objective of providing FX fixings that are reliable, representative, and transparent for the currency and metals markets around the world.

The BFIX Index methodology is available <u>here</u>.

Participants in the foreign exchange (FX) markets underlying the fixings include central banks and national governments, banks and other financial institutions, corporates engaged in hedging activities and speculative traders. The FX market trades approximately \$5 trillion per day.

(3) In defining the potential limitations of the benchmark and the circumstances in which the measurement of the market or economic reality may become unreliable, the benchmark statement shall include at least:

> (a) a description of the circumstances in which the administrator would lack sufficient input data to determine the benchmark in accordance with the methodology;

(b) where relevant, a description of instances when the accuracy and reliability of the methodology used for determining the benchmark can no longer be ensured, such as when the administrator deems the liquidity in the underlying market as insufficient;

(c) any other information that the administrator reasonably considers to be relevant or useful to help users and potential users to understand the circumstances in which the measurement of the market or economic reality may become unreliable, including a description of what might constitute an exceptional market event.

[RTS 1(3)]

(4)

Benchmark Limitations:

Though the Benchmark is designed to be representative of the markets they measure or otherwise align with their stated objective, they may not be representative in every case or achieve their stated objective in all instances. It is designed and calculated strictly to follow the rules of the methodology, and any BFIX fixing or other output is limited in its usefulness to such design and calculation.

Markets can be volatile, including those market interests which the Benchmark intends to measure or upon which the Benchmark is dependent in order to achieve its stated objective. For example, illiquidity can have an impact on the quality or amount of data available to the Administrator for calculation and may cause the Benchmark to produce unpredictable or unanticipated results.

In addition, market trends and changes to market structure may render the objective of the unachievable or to become impractical to replicate by investors.

In particular, the BFIX is designed to represent the current value of the underlying currency pairs. FX markets are subject to a variety of risks and potential limitations, including the widespread use of leverage in FX trading, political risk associated with governments controlling (or attempting to control) the value of their currencies, appreciation/devaluation risks and interest rate risk. For certain markets, the BFIX is subject to illiquidity and low transaction volumes.

The benchmark statement shall lay down technical specifications that clearly and unambiguously identify the elements of the calculation of the benchmark in relation to which discretion may be exercised, the criteria applicable to the exercise of such discretion and the position of the persons that can exercise discretion, and

The Indices are rules-based (methodology available <u>here</u>), and their construction is designed to consistently produce values without the exercise of expert judgment or discretion. Nevertheless, BISL may use expert judgment or discretion with regards to the following:

- Index restatements
- Extraordinary circumstances during a market emergency
- Data interruptions, issues, and closures

When expert judgment or discretion is required, BISL undertakes to be consistent in its application, with recourse to written procedures outlined in the methodology of the Indices and internal procedures manuals. In certain how such discretion may be subsequently evaluated.

[BMR 27(1)(b)]

In specifying the controls and rules that govern any exercise of judgement or discretion by the administrator or any contributors in calculating the benchmark or benchmarks, the benchmark statement shall include an outline of each step of the process for any ex post evaluation of the use of discretion, together with a clear indication of the position of any person(s) responsible for carrying out the evaluations.

circumstances exercises of expert judgment or discretion are reviewed by senior members of BISL management and Bloomberg Compliance teams, and are reported to the Product, Risk & Oversight Committee (**PROC**), BISL's governance committee, which operates under the supervision of BISL's oversight function, the Benchmark Oversight Committee (**BOC**). BISL also maintains and enforces a code of ethics to prevent conflicts of interest from inappropriately influencing index construction, production, and distribution, including the use of expert judgment or discretion.

[RTS 1(4)]

(5) A benchmark statement shall contain at least the rationale for adopting the benchmark methodology and procedures for the review and approval of the methodology.

[BMR27(2)(b)]

In specifying the procedures for review of the methodology, the benchmark statement shall at least outline the procedures for public consultation on any material changes to the methodology.

[RTS 1(5)]

An administrator shall publish, together with the benchmark statement referred to in Article 27, a procedure concerning the actions to be taken by the administrator in the event of changes to or the cessation of a benchmark which may be used in the Union in accordance with Article 29(1). The procedure may be drafted, where applicable, for families of benchmarks and

The methodology is designed to reflect the performance of the underlying global foreign exchange and certain precious metals markets.

The methodology approach incorporates a rules-based calculation that does not require the exercise of discretion in their calculation processes. Additionally, the methodology is subject to strict input data eligibility requirements to ensure its replicability and resilience.

The Administrator will review the Benchmark (both the rules of construction and data inputs) on a periodic basis, not less frequently than annually, to determine whether they continue to reasonably measure the intended underlying market interest, the economic reality or otherwise align with their stated objective. More frequent reviews may result from extreme market events and/or material changes to the applicable underlying market interests.

Criteria for data inputs include reliable delivery and active underlying markets. An active market is defined as one in which (a) BFIX has received from BGN at least one bid and ask price in the fixing window, and (b) the bid and ask are within 30 seconds of each other. In no event will BFIX take a BGN price that is from a single source. If no qualified BGN price can be produced within a fixing window, the previous fix will be carried forward.

Other than as set forth in the methodology, there are no minimum liquidity requirements for fixing constituents and/or minimum requirements or standards for the quantity or quality of the input data.

For further detail on the procedures for the review and approval of methodologies, the procedures for public consultation on material changes and the process for cessation, see the Benchmark and Methodology Launch & Changes and Cessation Policy sections of the <u>BISL Benchmark Procedures Handbook</u>.

shall be updated and published whenever a material change occurs. [BMR28(1)] (6) The benchmark statement shall Users should be aware that factors, including external factors beyond the control provide notice of the of BISL, may necessitate changes to, or the cessation of the Indices or components possibility that factors, thereof. For example, markets measured by the Benchmark may undergo including external factors structural changes which may affect the liquidity of underlying inputs of the fixings beyond the control of the of the Benchmark. In addition, regulatory changes can adversely impact the administrator, may necessitate effectiveness of methodology design. changes to, or the cessation of the benchmark. [BMR 27(1)(c)] (7) The benchmark statement shall If financial product issuers or investment managers choose to use one of the advise users that changes to, Benchmark as a reference in a financial product or an investment fund, they should consider the possibility that factors, including external factors, may necessitate or the cessation of, the benchmark may have an changes to, or the cessation of the Benchmark or components thereof, including impact upon the financial the potential need to terminate or modify the terms of a financial product resulting contracts and financial from the termination of the calculation of one or more of the Benchmark. instruments that reference the benchmark or the measurement of the performance of investment funds. [BMR 27(1)(d)] A benchmark statement shall All key terms and other relevant information are set forth in the methodology for contain at least the definitions the Benchmark available here. for all key terms relating to the benchmark. [BMR 27(2)(a)] (9) The administrator shall review BISL shall review this Statement on a periodic basis, at least once every two years. and, where necessary, update BISL will also review and, if determined necessary, update this Statement in the the benchmark statement for event of any material changes to the information provided herein, and whenever

each benchmark or family of

benchmarks in the event of any changes to the information to be provided under this Article and at least every two years.

[BMR 27(1)]

In addition to the cases referred to in the third subparagraph of Article 27(1) of Regulation (EU) 2016/1011, an update of the benchmark

the information contained herein ceases to be correct or sufficiently precise including whenever there is a change in the type of the benchmark or a material change in the methodology.

statement shall be required whenever the information contained in the statement ceases to be correct or sufficiently precise, and including in any event in the following cases:

(a) whenever there is a change in the type of the benchmark;

(b) whenever there is a material change in the methodology used for determining the benchmark or, if the benchmark statement is for a family of benchmarks, in the methodology used for determining any benchmark within the family of benchmarks.

[RTS 6]

(10)

A benchmark statement shall contain at least the criteria and procedures used to determine the benchmark, including a description of the input data, the priority given to different types of input data, the minimum data needed to determine a benchmark, the use of any models or methods of extrapolation and any procedure for rebalancing the constituents of a benchmark's index.

[BMR 27(2)(c)]

Input Data

As described under "Market or economic reality measured by the benchmark family" in row (2) above, BFIX fixing calculations are based upon BFIX uses Bloomberg's BGN and BGNE as its pricing sources and only accepts quotes that contain both a bid and ask, which are the most appropriate for FX transaction pricing.

Criteria for data inputs include reliable delivery and active underlying markets. An active market is defined as one in which (a) BFIX has received from BGN at least one bid and ask price in the fixing window, and (b) the bid and ask are within 30 seconds of each other. In no event will BFIX take a BGN price that is from a single source. If no qualified BGN price can be produced within a fixing window, the previous fix will be carried forward.

Interpolation

When calculating cross currency fixings, where it is necessary to align different settlement dates, BFIX may interpolate between the available BFIX forward tenors in order to calculate the necessary adjustments to the resultant BFIX.

[For greater detail regarding the criteria and procedures used to determine the Indices, please refer to the publicly-available methodology for the Indices available here.]

11) | 🖊

A benchmark statement shall contain at least the controls and rules that govern any The Indices are rules-based, and their construction is designed to consistently produce values without the exercise of expert judgment or discretion.

exercise of judgement or discretion by the administrator or any contributors, to ensure consistency in the use of such judgement or discretion.

[BMR27(2)(d)]

For the purpose of providing information on the controls and rules that govern any exercise of judgment or discretion in the calculation of the benchmark or of the family of benchmarks, the benchmark statement shall at least:

(a) indicate the position of each function or body who may exercise discretion;

(b) outline each step of the expost evaluation process for the use of discretion.

[RTS 27(1)(4)]

(12)

(13)

A benchmark statement shall contain at least the procedures which govern the determination of the benchmark in periods of stress or periods where transaction data sources may be insufficient, inaccurate or unreliable and the potential limitations of the benchmark in such periods.

[BMR 27(2)(e)]

A benchmark statement shall contain at least the procedures for dealing with errors in input data or in the determination of the benchmark, including when a re-determination of the benchmark is required.

[BMR 27(2)(f)]

Nevertheless, BISL may use expert judgment or discretion with regards to the following:

- Index restatements
- Extraordinary circumstances during a market emergency
- Data interruptions, issues, and closures

When expert judgment or discretion is required, BISL undertakes to be consistent in its application, with recourse to written procedures outlined in the methodology of the Indices and internal procedures manuals. In certain circumstances exercises of expert judgment or discretion are reviewed by senior members of BISL management and Bloomberg Compliance teams, and are reported to the PROC, BISL's governance committee, which operates under the supervision of BISL's oversight function, the **BOC**. BISL also maintains and enforces a code of ethics to prevent conflicts of interest from inappropriately influencing index construction, production, and distribution, including the use of expert judgment or discretion.

See "Benchmark Limitations" in row (3) above.

Periods of inability to provide a fixing are generally dictated by anticipated periods where there is no active market, such as holidays or off-trading hours for less frequently traded currencies. Bloomberg has robust controls and procedures in place to minimize unanticipated fixing failures and their impact. In the event of such an unanticipated failure, BFIX would determine whether the event occurred during an active market. If so, BFIX will endeavour to publish the fixing or revised fixing as soon as practicable. If no qualified BGN or BGNE price can be produced within a fixing window, the previous fix will be carried forward.

BISL makes every effort to provide accurate calculation of BFIX fixings. However, to the extent a material error in a fixing is uncovered following its publication and dissemination, a notification will be sent to BFIX clients alerting them of such error and the expected date of a revised publication, if warranted. BISL considers the following factors to determine whether to restate. Not all conditions need to be

relevant type , as listed in

present to warrant a restatement, and certain factors may be more determinative that others depending on the circumstances of the given error. A. The relative importance of the data field impacted by the error; B. When the error occurred and when it was discovered; C. The number of fixings affected; D. Whether the impacted fixings are linked to tradable products; E. The magnitude of the error; F. The burden of restatement on client re-processing relative to the impact of the error; G. The impact of the restatement on analytical tools. Any decisions to amend and/or republish a BFIX rate will be reported to the PROC after implementation. Bloomberg reserves the right not to amend or republish any BFIX rate after the publication of the rate for the same currency on the following business day in the United States of America. Bloomberg will retain records relating to any amendment to or republication of a BFIX rate for a minimum period of 5 years. (14)A benchmark statement shall See "Benchmark Limitations" in row (3) above. contain at least the identification of potential limitations of the benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs. [BMR 27(2)(g)] (15) **Specific disclosure** Not applicable. requirements for regulated data benchmarks. *In addition to the information* to be included pursuant to Article 1, for a regulated-data benchmark or, where applicable, family of regulateddata benchmarks, the benchmark statement shall state at least the following in its description of the input data: (a) the sources of the input data used; (b) for each source, the

	Article 3(1)(24) of Regulation (EU) 2016/1011.	
	[RTS 2]	
(16)	Specific disclosure requirements for interest rate benchmarks	Not applicable.
	1. In addition to the information to be included pursuant to Article 1, for an interest rate benchmark or, where applicable, family of interest rate benchmarks, the benchmark statement shall include at least the following information:	
	(a) a reference alerting users to the additional regulatory regime applicable to interest rate benchmarks under Annex I to Regulation (EU) 2016/1011;	
	(b) a description of the arrangements that have been put in place to comply with that Annex.	
	[RTS 3]	
(17)	Specific disclosure requirements for commodity benchmarks	Not applicable.
	In addition to the information to be included pursuant to Article 1, for a commodity benchmark or, where applicable, family of commodity benchmarks, the benchmark statement shall at least:	
	(a) indicate whether the requirements of Title II of, or Annex II to, Regulation (EU) 2016/1011 apply to the benchmark, or family of benchmarks as prescribed by Article 19 of that Regulation;	
	(b) include an explanation as to why Title II of or, as the case	

Regulation applies; (c) include in the definitions of

may be, Annex II to that

key terms a concise description of the criteria that define the relevant underlying physical commodity;

(d) where applicable, indicate where the explanations are published that the administrator is required to publish under paragraph 7 of Annex II to that Regulation.

[RTS 4]

(18)Specific disclosure requirements for critical benchmarks

In addition to the information to be included pursuant to Article 1, for a critical benchmark, or, where applicable, a family of benchmarks that contains at least one critical benchmark, the benchmark statement shall include at least the following information:

(a) a reference alerting users to the enhanced regulatory regime applicable to critical benchmarks under Regulation (EU) 2016/1011;

(b) a statement indicating how users will be informed of any delay in the publication of the benchmark or of any redetermination of the benchmark, and indicating the (expected) duration of measures.

[RTS 5]

Not applicable.

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Annex 1 - Climate-Related Disclosures

EXPLANATION O	HOW ESG FACTORS ARE REFLECTED IN THE BENCHMARK STATEMENT
SECTION 1	- CONSIDERATION OF ESG FACTORS
Item 1. Name of the benchmark administrator.	Bloomberg Index Services Limited
Item 2. Type of benchmark or family of benchmarks.	Other Benchmarks
Item 3. Name of the benchmark or family of benchmarks.	BFIX
Item 4. Are there in the portfolio of the benchmark administrator any EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks, benchmarks that pursue ESG objectives or benchmarks that take into account ESG factors?	Yes
Item 5 . Does the benchmark or family of benchmarks pursue ESG objectives?	No
ESG factors: combined ESG factors, environaged aggregated level.	ositive, provide below the details (score) in relation to the following onmental, social and governance for each family of benchmarks at an aggregated weighted average value at the level of the family of
a) List of combined ESG factors:	Details on each ESG factor: N/A
b) List of environmental factors:	Details on each ESG factor: N/A
c) List of social factors:	Details on each ESG factor: N/A
d) List of governance factors:	Details on each ESG factor: N/A
	ositive, provide below the details (score) for the benchmark or family of factors: combined ESG factors, environmental, social and governance, et concerned.
administrator included in the benchmark s	e provided in the form of a hyperlink to a website of the benchmark statement. The information on the website shall be easily available and II ensure that information published on their website remains available
The score of the ESG factors shall not be cat an aggregated weighted average value	disclosed for each constituent of the benchmark, but shall be disclosed of the benchmark.
a) List of combined ESG factors:	Details on each ESG factor: N/A

b) List of environmental factors:	Details on each ESG factor: N/A
c) List of social factors:	Details on each ESG factor: N/A
d) List of governance factors:	Details on each ESG factor: N/A
Hyperlink to the information on ESG factors for the benchmark or family of benchmarks:	N/A
Item 8. Data and standards used.	
a) Description of data sources used to provide information on the ESG factors in the benchmark statement.	N/A
Describe how the data used to provide information on the ESG factors in the benchmark statement are sourced and whether, and to what extent, data are estimated or reported.	
b) Reference standards. List the supporting standards used for the reporting under item 6 and/or item 7.	N/A

SECTION 2 - ADDITIONAL DISCLOSURE REQUIREMENTS FOR EU CLIMATE TRANSITION AND EU PARIS-ALIGNED BENCHMARKS Item 9. Where a benchmark is labelled as 'EU Climate Transition Benchmark' or 'EU Paris-aligned Benchmark', benchmark administrators shall also disclose the following information: N/A forward-looking year-on-year a) decarbonisation trajectory; N/A b) degree to which the IPCC decarbonisation trajectory (1,5°C with no or limited overshoot) has been achieved on average per year since creation; N/A c) overlap between those benchmarks and their investable universe, as defined in Article 1, point (e), of Commission Delegated Regulation (EU) 2020/1818, using the active share at asset level.

SECTION 3 - DISCLOSURE OF THE ALIGNMENT WITH THE OBJECTIVES OF THE PARIS **AGREEMENT**

Item 10. By the date of application of this Regulation, for significant equity and bond benchmarks, EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks, benchmark administrators shall, for each benchmark, or where applicable, the family of benchmarks, disclose the following information:

benchmark, or where applicable, the family	of benchmarks, disclose the following information:
a) Does the benchmark align with the target of reducing carbon emissions or the attainment of the objectives of the Paris Agreement;	No
accordance with international	Not applicable. The benchmark is not aligned with the target of reducing carbon emissions or the attainment of the objectives of the Paris Agreement and therefore no temperature scenario is used.
c) the name of the provider of the temperature scenario used for the alignment with the target of reducing GHG emissions or the attainment of the objectives of the Paris Agreement;	Not applicable. There is no temperature scenario provider as no temperature scenario is used.
i measurement of the allonnent	Not applicable. The benchmark does not use a methodology to measure alignment with a temperature scenario as no temperature scenario is used
e) the hyperlink to the website of the temperature scenario used.	Not applicable. There is no temperature scenario used.

been updated and reason for the update: 24 September 2024. Updates of methodology links and links to the BISL Benchmark Procedures Handbook.

Take the next step.

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