

FTSE Fast Volatility Target Index Series

v1.2

Contents

Section 1 Introduction	3
Section 2 Management responsibilities	4
Section 3 FTSE Russell Index policies	5
Section 4 Index calculation methodology	7
Appendix A Definitions	11
Appendix B Parameters	14

Section 1

Introduction

1. Introduction

- 1.1 This document sets out the Ground Rules for the construction and management of the FTSE Fast Volatility Target Index Series.
- 1.2 The FTSE Fast Volatility Target Index Series (each an “**Index**” and collectively the “**Indices**”) represents the performance of an investment strategy that provides variable exposure to an underlying index, while targeting a specified level of volatility. The exposure to the underlying index decreases or increases (subject to a cap) on a daily basis proportionally to the ratio between a volatility target and the realized volatility of the underlying index.
- 1.3 The Index Series will be calculated on an end of day basis.
- 1.4 These Ground Rules should be read in conjunction with the corresponding Ground Rules or index methodology of the relevant component indices, which are available at <https://www.lseg.com/en/ftse-russell>
- 1.5 The Index Series does not take account of ESG factors in its index design.
- 1.6 FTSE Russell**
 - 1.6.1 FTSE Russell hereby notifies users of the Index that it is possible that circumstances, including external events beyond the control of FTSE Russell, may necessitate changes to, or the cessation of, the Index and therefore, any financial contracts or other financial instruments that reference the Index or investment funds which use the Index to measure their performance should be able to withstand, or otherwise address the possibility of changes to, or cessation of, the Index.
 - 1.6.2 Index users who choose to follow this Index or to buy products that claim to follow this Index should assess the merits of the Index’ rules-based methodology and take independent investment advice before investing their own or client funds. No liability whether as a result of negligence or otherwise is accepted by FTSE Russell for any losses, damages, claims and expenses suffered by any person as a result of:
 - any reliance on these Ground Rules, and/or
 - any inaccuracies in these Ground Rules, and/or
 - any non-application or misapplication of the policies or procedures described in these Ground Rules, and/or
 - any inaccuracies in the compilation of the Index or any constituent data.

Section 2

Management responsibilities

2. Management responsibilities

2.1 FTSE International Limited (FTSE)

2.1.1 FTSE is the benchmark administrator of the Index¹.

2.1.2 FTSE is responsible for the daily calculation, production and operation of the Index and will:

- maintain records of the Index weightings of all constituents;
- make changes to the constituents and their weightings in accordance with the Ground Rules;
- carry out the periodic reviews of the Index and apply the changes resulting from the reviews as required by the Ground Rules;
- publish changes to the constituent weightings resulting from their ongoing maintenance and the periodic reviews;
- disseminate the Index

2.1.3 These Ground Rules set out the methodology and provide information about the publication of the Index.

2.2 Amendments to these Ground Rules

2.2.1 These Ground Rules shall be subject to regular review (at least once a year) by FTSE Russell to ensure that they continue to best reflect the aims of the Index. Any proposals for significant amendments to these Ground Rules will be subject to consultation with FTSE Russell advisory committees and other stakeholders if appropriate. The feedback from these consultations will be considered by the FTSE Russell Index Governance Board before approval is granted.

2.2.2 As provided for in the statement of principles for FTSE Russell Equity Indices, where FTSE Russell determines that the Ground Rules are silent or do not specifically and unambiguously apply to the subject matter of any decision, any decision shall be based as far as practical on the statement of principles. After making any such determination, FTSE Russell shall advise the market of its decision at the earliest opportunity. Any such treatment will not be considered as an exception or change to the Ground Rules, or to set a precedent for future action, but FTSE Russell will consider whether the Ground Rules should subsequently be updated to provide greater clarity.

¹ The term administrator is used in this document in the same sense as it is defined in [Regulation \(EU\) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds](#) (the European Benchmark Regulation) and [The Benchmarks \(Amendment and Transitional Provision\) \(EU Exit\) Regulations 2019](#) (the UK Benchmark Regulation).

Section 3

FTSE Russell Index policies

3. FTSE Russell Index policies

These Ground Rules should be read in conjunction with the following policy documents which can be accessed through the links below:

3.1 **Statement of Principles for FTSE Russell Equity Indices (the Statement of principles)**

Indices need to keep abreast of changing markets and the Ground Rules cannot anticipate every eventuality. Where the Ground Rules do not fully cover a specific event or development, FTSE Russell will determine the appropriate treatment by reference to the statement of principles which summarises the ethos underlying FTSE Russell's approach to index construction. The statement of principles is reviewed annually and any changes proposed by FTSE Russell are presented to the FTSE Russell Policy Advisory Board for discussion before approval by the FTSE Russell Index Governance Board.

The statement of principles can be accessed through the following link:

[Statement of Principles.pdf](#)

3.2 **Queries and Appeals**

FTSE Russell's complaints procedure can be accessed through the following link:

[Benchmark Determination Complaints Handling Policy.pdf](#)

3.3 **Index Policy for Trading Halts and Market Closures**

3.3.1 Guidance for the treatment of index changes in the event of trading halts or market closures can be found through the following link:

[Index Policy for Trading Halts and Market Closures.pdf](#)

3.4 **Index Policy in the Event Clients are Unable to Trade a Market or a Security**

3.4.1 Details of FTSE Russell's treatment can be accessed through the following link:

[Index Policy in the Event Clients are Unable to Trade a Market or a Security.pdf](#)

3.5 Recalculation Policy and Guidelines

3.5.1 Where an inaccuracy is identified, FTSE Russell will follow the steps set out in the FTSE Russell Index recalculation guidelines when determining whether an index or index series should be recalculated and/or associated data products reissued. Users of the Index will be notified through appropriate media.

For further information, please refer to the FTSE Russell recalculation policy and guidelines document which is available from the FTSE Russell website through the link below or by contacting info@ftserussell.com.

[Recalculation_Policy_and_Guidelines_Equity_Indices.pdf](#)

3.6 Policy for Benchmark Methodology Changes

3.6.1 Details of FTSE Russell's policy for making benchmark methodology changes can be accessed through the following link:

[Policy_for_Benchmark_Methodology_Changes.pdf](#)

3.7 FTSE Russell Governance Framework

3.7.1 To oversee its indices, FTSE Russell employs a governance framework that encompasses product, service and technology governance. The framework incorporates the London Stock Exchange Group's three lines of defence risk management framework and is designed to meet the requirements of the IOSCO Principles for Financial Benchmarks², the European benchmark regulation³ and the UK benchmark regulation⁴. The FTSE Russell Governance framework can be accessed through the following link:

[FTSE_Russell_Governance_Framework.pdf](#)

3.8 Real Time Status Definitions

3.8.1 Please refer to the following guide for details of real time status definitions for indices which are calculated in real time.

[Real_Time_Status_Definitions.pdf](#)

² IOSCO Principles for Financial Benchmarks Final Report, FR07/13 July 2013.

³ Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds.

⁴ The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019.

Section 4

Index calculation methodology

4. Index calculation methodology

4.1 Index Value calculation:

For each Index, the Index Value is equal to the Index Base Value on the Index Base Date.

Thereafter, for each Index Business Day, the Index Value is calculated in accordance with the following formula, subject to Consequences of Disruption Event or Consequence of Extraordinary Event:

$$I_t = I_{t-1} + n_{t-1} \times (S_t - S_{t-1}) - Cost_t - Cash_t$$

with

$$Cost_t = Abs(n_{t-1} - n_t) \times S_t \times TC + Abs(n_{t-1}) \times S_{t-1} \times FC \times \frac{Act_{t-1,t}}{365}$$

$$Cash_t = S_{t-1} \times n_{t-1} \times r_{t-1} \times \frac{Act_{t-1,t}}{CDCF}$$

where:

t	means an Index Business Day t;
t-1	means the Index Business Day immediately preceding Index Business Day t;
I_x	means the Index Value on Index Business Day x;
S_x	means the Reference Price of the Index Constituent on Index Business Day x;
n_x	means the number of units of Index Constituent on Index Business Day x calculated as per section 4.2;
r_x	means the relevant interest rate level on Index Business Day x (see IR RIC in the Appendix B below) or if such level is not available, the immediately preceding interest rate level;
$Cost_x$	means the Cost Component on Index Business Day x;
$Cash_x$	means the Cash Component on Index Business Day x;
TC	means the transaction cost for the Index Constituent (see TC in the Appendix B below);
FC	means the funding cost for the Index Constituent (see FC in the Appendix B below);
CDCF	means the CDCF for the Index (see CDCF in the Appendix B below);

$Act_{x-1,x}$ means the number of calendar days between Index Business Day x (excluded) and Index Business Day $x-1$ (included);

$$Abs(a) = \begin{cases} +a & \text{if } a > 0 \\ -a & \text{if } a \leq 0 \end{cases}$$

4.2 Number of units calculation:

In respect of an Index and an Index Business Day t , the number of units of Index Constituent is calculated as:

$$n_t = E_t \times \frac{I_{t-1}}{S_{t-1}}$$

with

$$E_t = \min \left[L_M, \frac{TV}{\sigma_t} \times VAF_{t-1} \right]$$

where:

- n_x means the number of units of Index Constituent on Index Business Day x ;
- E_x means the level of risk exposure on Index Business Day x ;
- I_x means the Index Value on Index Business Day x ;
- S_x means the Reference Price of the Index Constituent on Index Business Day x ;
- L_M means the maximum leverage (see L_M in the Appendix B below);
- VAF_x means the volatility adjustment factor on Index Business Day x calculated as per section 4.3;
- TV means the target level of volatility of the Index (see TV in the Appendix B below);
- σ_x means the realized volatility of the Index Constituent on Index Business Day x calculated as per section 4.4;

4.3 Volatility adjustment factor calculation:

In respect of an Index and an Index Business Day t , the volatility adjustment factor is calculated as follows:

$$VAF_t = \max \left[VAF_f, \min \left(VAF_c, 2 - \frac{var_t}{TV^2} \right) \right]$$

With:

$$var_t = \frac{252 \times \sum_{k=t-K_{var}+1}^t \left(\frac{I_k}{I_{k-1}} - 1 \right)^2}{K_{var} - 1}$$

where:

- VAF_x means the volatility adjustment factor on Index Business Day x ;

VAF_f	means the volatility adjustment factor floor (see VAF_f in the Appendix B below);
VAF_c	means the volatility adjustment factor cap (see VAF_c in the Appendix B below);
var_x	means the realised variance of the Index on Index Business Day x ;
TV	means the target level of volatility (see TV in the Appendix B below);
K_{var}	means the number of days over which the realised variance is calculated (see K_{var} in the Appendix B below);

4.4 Realized volatility calculation:

On any Index Business Day t , the realised volatility estimate of the Index Constituent is calculated as:

$$\sigma_t = \max [\sigma_{S,t} , \sigma_{L,t}]$$

where:

$$\sigma_{S,t} = \sqrt{\frac{252}{\sum_{k=1}^{K_{vol}} \alpha_{S,k}} \times \left\{ \sum_{k=t-K_{vol}+1}^{t-1} \alpha_{S,t-k+1} \times \left(\frac{S_k}{S_{k-1}} - 1 \right)^2 + \alpha_{S,1} \times \left(\frac{S_{twap_t}}{S_{t-1}} - 1 \right)^2 \right\}}$$

$$\sigma_{L,t} = \sqrt{\frac{252}{\sum_{k=1}^{K_{vol}} \alpha_{L,k}} \times \left\{ \sum_{k=t-K_{vol}+1}^{t-1} \alpha_{L,t-k+1} \times \left(\frac{S_k}{S_{k-1}} - 1 \right)^2 + \alpha_{L,1} \times \left(\frac{S_{twap_t}}{S_{t-1}} - 1 \right)^2 \right\}}$$

where:

S_x	means the Reference Price of the Index Constituent on Index Business Day x ;
K_{vol}	means the number of days over which the volatility estimates are calculated (see K_{vol} in the Appendix B below);
$\alpha_{S,x}$	means the short period exponential weighting factor calculated as $(1 - \lambda_S) \times \lambda_S^{x-1}$;
$\alpha_{L,x}$	means the long period exponential weighting factor and calculated as $(1 - \lambda_L) \times \lambda_L^{x-1}$;
λ_S	means the short period decay factor for the Index (see λ_S in the Appendix B below);
λ_L	means the long period decay factor for the Index (see λ_L in the Appendix B below);
S_{twap_x}	means the TWAP Value of the Index Constituent on Index Business Day x calculated as per section 4.6;

4.5 Total Return and Decrement Index Value calculation:

For each Index, the total return version and/or the decrement version are calculated as follows:

$$TRI_t = TRI_{t-1} \times \left[\frac{I_t}{I_{t-1}} + r_{t-1} \times \frac{Act_{t-1,t}}{CDCF} - \frac{Act_{t-1,t} \times PerD}{DDCF} \right]$$

where:

TRI_x	means the value of the total return and/or decrement version of the Index on Index Business Day x ;
I_x	means the Index Value on Index Business Day x ;
r_x	means the relevant overnight interest rate on Index Business Day x (see IR RIC in the Appendix B below);
$CDCF$	means the CDCF for the Index (see CDCF in the Appendix B below);
$PerD$	means the amount of percentage decrement (see PerD in the Appendix B below);
$Act_{x-1,x}$	means the number of calendar days between Index Business Day x (excluded) and Index Business Day $x-1$ (included);
$DDCF$	means the DDCF for the Index (see DDCF in the Appendix B below);

4.6 TWAP Value calculation:

On any Index Business day t , the TWAP Value is calculated as the average value of the Index Constituent during the TWAP Window. In addition, if no values are available during the TWAP Window, the TWAP Value shall be the Reference Price of the Index Constituent for such a day.

where:

TWAP Window	means the period starting on TWAP Start (included) and ending on TWAP End (excluded);
TWAP Start	means the TWAP Start for the Index (see TWAP Start in the Appendix B below);
TWAP End	means the TWAP End for the Index (see TWAP End in the Appendix B below);

Appendix A

Definitions

Capitalised terms used in this document but not otherwise defined are defined in the following table.

Term	Definition
Index Business Day	Means any weekdays on which the Index Constituent value is scheduled to be published by its calculation agent
Index Constituent	Means any financial instruments, underlying components or underlying indices as specified in the Ground Rules
Index Base Date	Means the date for which the Index Base Value applies
Index Base Value	Means the arbitrary number (e.g. 1000) set on the Index Base Date as the starting value of an index
Index Base Currency	Means the currency that the Index is calculated in
Index Value	Means in respect of an Index and an Index Business Day, the end of day value of the Index
Underlying Index	Means an Index Constituent which is an index, with a corresponding index sponsor and calculation agent
Underlying ETF	Means an Index Constituent which is an exchange-traded fund
Futures Contract	Means an Index Constituent which is a futures contract traded on a regulated market
Reference Price	Means, in respect of an Index Constituent and an Index Business Day <ul style="list-style-type: none"> (a) which is an Underlying Index, the end of day value of such Underlying Index as published by its calculation agent (b) which is an Underlying ETF, the official closing price of such underlying ETF as published by the relevant exchange (c) which is a Futures Contract, the daily settlement price of such Futures Contract as published by the relevant exchange
Index Constituent Currency	Means the currency that the Index Constituent is calculated in
Exchange Rate	Means, in respect of an Index, an Index Constituent and an Index Business Day, the foreign exchange rate equal to the WM/R at 04:00pm London time, to convert the Index Constituent Currency to the Index Base Currency. If the currency of the Index Constituent is the same as the Index Base Currency, then the exchange rate shall be 1.

Disruption Event:	
Underlying Index Disruption Event	Means, in respect of an Underlying Index the non-publication of the end of day value of such Underlying Index by its calculation agent
Underlying ETF Disruption Event	Means, in respect of an Underlying ETF , any of the following events: (a) Price Failure: the non-publication of the closing levels or market value of the Underlying ETF by the relevant exchange (b) Trading Disruption: a material suspension, limitation, disruption of trading, a halt in trading imposed by the relevant exchange on the Underlying ETF (c) Exchange Disruption: the exchange upon which the Underlying ETF trades is affected by an event that disrupts the ability of market participants to effect transactions in, or obtain market values for such Underlying ETF (d) Early Closure: the unscheduled closure of the relevant exchange
Futures Disruption Event	Means, in respect of a Futures Contract, any of the following events: (a) Price Failure: the non-publication of the daily settlement price of the Futures Contract (b) Trading Disruption: a material suspension, limitation, disruption of trading, a halt in trading imposed by the relevant exchange on the Futures Contract (c) Exchange Disruption: the exchange upon which the Futures Contract trades is affected by an event that disrupts the ability of market participants to effect transactions in, or obtain market values for such Futures Contract (d) Early Closure: the unscheduled closure of the relevant exchange
Disrupted Day	Means an Index Business Day on which a Disruption Event has occurred or is continuing
Disruption Event	Means an Underlying Index Disruption Event that FTSE Russell deems material
Consequence of a Disruption Event	FTSE Russell may: (a) defer or suspend the calculation and publication of the Index until the next Index Business Day which is not a Disrupted Day; or (b) determine a good faith estimate of any affected or missing input data required to calculate the value of the Index; or (c) use the last available Reference Price for the Index Constituent impacted by the Disruption Event; (d) postpone the rebalancing of the Index Constituent(s)

Extraordinary Event:	
Underlying Index Extraordinary Event	Means, in respect of an Underlying Index, the cancellation of the Underlying Index
Underlying ETF Extraordinary Event	Means, in respect of an Underlying ETF , any of the following events: (a) the termination, cessation or unwinding of the Underlying ETF (b) the suspension or non-execution of subscription or redemption order in respect of the Underlying ETF (c) the introduction of a mandatory redemption or partial redemption of the Underlying ETF shares (d) any change or modification of the Underlying ETF governing or constitutional documents, or the Underlying ETF investment policies that could reasonably affect the market value of the Underlying ETF
Futures Extraordinary Event	Means, in respect of a Futures Contract, any of the following events: (a) the Futures Contract is no longer negotiated on the relevant exchange (b) the Futures Contract is replaced by a successor product that is not acceptable to FTSE Russell (c) a material change in the expiry calendar, formula or method of calculating such Futures Contract (d) the cancellation of the Futures Contract
Extraordinary Event	Means an Underlying Index Extraordinary Event that FTSE Russell deems material
Consequence of an Extraordinary Event	FTSE Russell may: (a) re-weight or substitute the Index Constituent(s) impacted by the Extraordinary Event (b) replace the impacted input data with new data with similar characteristics (c) adjust the value of the Index, or make any other appropriate amendments to the Index (d) modify this Ground Rules (e) terminate the Index

Appendix B

Parameters

Index details

Index name	Index Type	Index Base Currency	RIC	Ticker	Index Base Date	Index Base Value	Index Launch Date	Index Constituent (IC)	IC Type
Russell 1000 Fast VT 10% Index	Excess Return	USD	.RU1FTV10E	-	27 Jan 2016	100	10 Nov 2025	Russell 1000 Total Return Index (RIC: .RUITR)	Underlying Index
Russell 1000 Fast VT 10% TR Index	Total Return	USD	.RU1FTV10T	-	27 Jan 2016	100	20 Nov 2025	Russell 1000 Total Return Index (RIC: .RUITR)	Underlying Index
Russell Top 50 Volatility Shield 10% Index	Excess Return	USD	.RT50S10E	RT50S10E	1 Feb 2016	100	7 April 2026	Russell Top 50 Total Return Index (RIC: .RU50TR)	Underlying Index
Russell 1000 CFF Volatility Shield 10% Index	Excess Return	USD	.R1CFS10E	R1CFS10E	1 Feb 2016	100	7 April 2026	Russell 1000 Cash Flow Focus Total Return Index (RIC: .RCFFR1T)	Underlying Index
Russell 2000 CFF Volatility Shield 10% Index	Excess Return	USD	.R2CFS10E	R2CFS10E	1 Feb 2016	100	7 April 2026	Russell 2000 Cash Flow Focus Total Return Index (RIC: .RCFFR2T)	Underlying Index
FTSE China A50 Volatility Shield 10% Index	Excess Return	USD	.CA50S10E	CA50S10E	22 Aug 2014	100	-	FTSE China A50 Total Return Index (RIC: .TRIXIN9U)	Underlying Index

Index parameters

Index Name	TV	L_M	$\lambda_S; \lambda_L$	K_{vol}	K_{var}	VAF_f	VAF_c	IR_{RIC}	$CDCF$	$DDCF$	TC	FC	$PerD$
Russell 1000 Fast VT 10% Index	10%	150%	(0.90;0.96)	100	20	80%	100%	USDSOFR=	360	365	0%	0%	0%
Russell 1000 Fast VT 10% TR Index	10%	150%	(0.90;0.96)	100	20	80%	100%	USDSOFR=	360	365	0%	0%	0%
Russell Top 50 Volatility Shield 10% Index	10%	150%	(0.90;0.96)	100	20	100%	100%	USDSOFR=	360	365	0%	0%	0%
Russell 1000 CFF Volatility Shield 10% Index	10%	150%	(0.90;0.96)	100	20	100%	100%	USDSOFR=	360	365	0%	0%	0%
Russell 2000 CFF Volatility Shield 10% Index	10%	150%	(0.90;0.96)	100	20	100%	100%	USDSOFR=	360	365	0%	0%	0%
FTSE China A50 Volatility Shield 10% Index	10%	150%	(0.90;0.96)	100	20	100%	100%	USDSOFR=	360	365	0%	0%	0%

TWAP Window parameters

Index Name	TWAP Start	TWAP End
Russell 1000 Fast VT 10% Index	15:25 ET (12.25 ET for scheduled partial trading day)	15:30 ET (12.30 ET for scheduled partial trading day)
Russell 1000 Fast VT 10% TR Index	15:25 ET (12.25 ET for scheduled partial trading day)	15:30 ET (12.30 ET for scheduled partial trading day)
Russell Top 50 Volatility Shield 10% Index ⁵	15:25 ET (12.25 ET for scheduled partial trading day)	15:30 ET (12.30 ET for scheduled partial trading day)
Russell 1000 CFF Volatility Shield 10% Index ⁶	15:25 ET (12.25 ET for scheduled partial trading day)	15:30 ET (12.30 ET for scheduled partial trading day)
Russell 2000 CFF Volatility Shield 10% Index ⁷	15:25 ET (12.25 ET for scheduled partial trading day)	15:30 ET (12.30 ET for scheduled partial trading day)
FTSE China A50 Volatility Shield 10% Index ⁸	14:25 CST	14:30 CST

⁵ From 1 Feb 2016 to 24 Oct 2025, the historic tick data of the Index Constituent was unavailable. During this period, the TWAP Value was proxy calculated using the tick data of the Russell 1000 Total Return Index.

⁶ From 1 Feb 2016 to 12 Dec 2025, the historic tick data of the Index Constituent was unavailable. During this period, the TWAP Value was proxy calculated using the tick data of the Russell 1000 Total Return Index.

⁷ From 1 Feb 2016 to 12 Dec 2025, the historic tick data of the Index Constituent was unavailable. During this period, the TWAP Value was proxy calculated using the tick data of the Russell 2000 Total Return Index.

⁸ From 24 Aug 2014 to 12 Apr 2026, the historic tick data of the Index Constituent was unavailable. During this period, the TWAP Value was proxy calculated using the tick data of the FTSE China A50 Total Return Index (CNH).

Disclaimer

© 2026 London Stock Exchange Group plc and its applicable group undertakings ("LSEG"). LSEG includes (1) FTSE International Limited ("FTSE"), (2) Frank Russell Company ("Russell"), (3) FTSE Global Debt Capital Markets Inc. "FTSE Canada", (4) FTSE Fixed Income LLC ("FTSE FI"), (5) FTSE (Beijing) Consulting Limited ("WOFE"), (6) FTSE EU SAS ("FES"). All rights reserved.

FTSE Russell® is a trading name of FTSE, Russell, FTSE Canada, FTSE FI, WOFE, FES and other LSEG entities providing LSEG Benchmark and Index services. "FTSE®", "Russell®", "FTSE Russell®", "FTSE4Good®", "ICB®", "Refinitiv", WMR™, "FR™" and all other trademarks and service marks used herein (whether registered or unregistered) are trademarks and/or service marks owned or licensed by the applicable member of LSEG or their respective licensors.

The FTSE Fast Volatility Target Index Series is calculated by or on behalf of FTSE International Limited or its affiliate, agent or partner.

FTSE International Limited is authorised as a Benchmark Administrator and regulated in the United Kingdom (UK) by the Financial Conduct Authority ("FCA") according to the UK Benchmark Regulation, FCA Reference Number 796803. FTSE EU SAS is authorised as Benchmark Administrator and regulated in the European Union (EU) by the Autorité des Marchés Financiers ("AMF") according to the EU Benchmark Regulation.

All information is provided for information purposes only. All information and data contained in this publication is obtained by LSEG, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical inaccuracy as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the accuracy, timeliness, completeness, merchantability of any information or LSEG Products, or of results to be obtained from the use of LSEG products, including but not limited to indices, rates, data and analytics, or the fitness or suitability of the LSEG products for any particular purpose to which they might be put. The user of the information assumes the entire risk of any use it may make or permit to be made of the information.

No responsibility or liability can be accepted by any member of LSEG nor their respective directors, officers, employees, partners or licensors for (a) any loss or damage in whole or in part caused by, resulting from, or relating to any inaccuracy (negligent or otherwise) or other circumstance involved in procuring, collecting, compiling, interpreting, analysing, editing, transcribing, transmitting, communicating or delivering any such information or data or from use of this document or links to this document or (b) any direct, indirect, special, consequential or incidental damages whatsoever, even if any member of LSEG is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information.

No member of LSEG nor their respective directors, officers, employees, partners or licensors provide investment advice and nothing in this document should be taken as constituting financial or investment advice. No member of LSEG nor their respective directors, officers, employees, partners, or licensors make any representation regarding the advisability of investing in any asset or whether such investment creates any legal or compliance risks for the investor. A decision to invest in any such asset should not be made in reliance on any information herein. Indices and rates cannot be invested in directly. Inclusion of an asset in an index or rate is not a recommendation to buy, sell or hold that asset nor confirmation that any particular investor may lawfully buy, sell or hold the asset or an index or rate containing the asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.

No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the applicable member of LSEG. Use and distribution of LSEG data requires a licence from LSEG and/or its licensors.