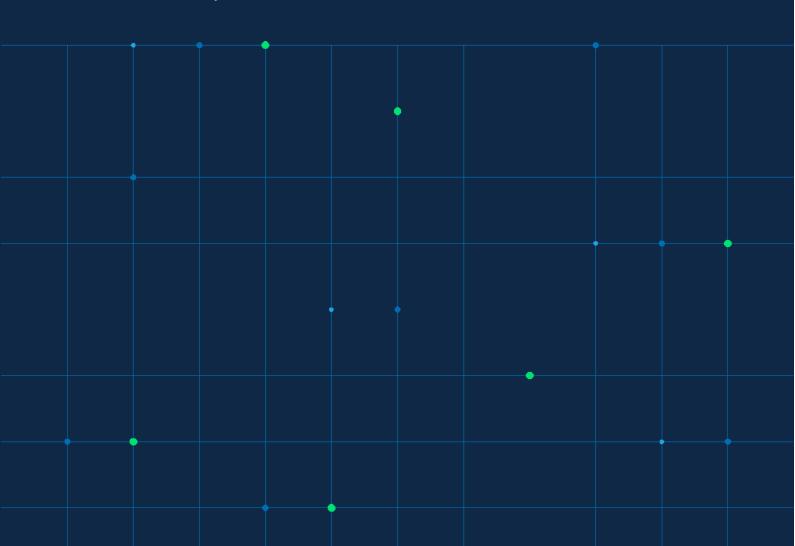


CME Group Rolling Futures Indices Methodology

CME Group Benchmark Administration Limited

Version 1.0

Publication Date: September 8th, 2025





Version Control

VERSION	KEY CHANGES	APPROVAL DATE
1.0	Initial version	September 8 th , 2025



Contents

1. Introduction	4
1.1. CME Group and CME Group Benchmark Administration Limited	4
2. CME Group Rolling Futures Indices	5
2.1. Introduction	5
3. Input Data	5
3.1. Input Data Specifications	5
3.2. Input Data Selection	5
3.3. Use of Expert Judgement	6
4. Calculation of the CME Group Rolling Futures Indices	7
4.1. Calculation Methodology	7
4.2. Unavailability of Input Data	7
5. Publication and Error Policy	8
5.1. Benchmark Publication	8
5.2. Error Policy	8
5.3. Publication Alerts	8
5.4. Consultations and Notices	8
6. Governance	9
6.1. Oversight Committee	9
6.2. Review of the Methodology	9
6.3. Consultation Process	9
6.4. Cessation	10
6.5. Records Retention	10
6.6. Auditing	10
6.7. Data Licensing and Distribution	10
6.8. Complaints Procedure	11
Appendix I – Key Terms & Definitions	12
Appendix II – ESG Disclosures	13



1. Introduction

1.1. CME Group and CME Group Benchmark Administration Limited

As a leading and diverse derivatives market operator, CME Group is the parent of four U.S. based designated contract markets (DCMs): Chicago Mercantile Exchange Inc. (CME), Board of Trade of the City of Chicago, Inc. (CBOT), New York Mercantile Exchange, Inc. (NYMEX), and the Commodity Exchange, Inc. (COMEX) (collectively, the "CME Group Exchanges"). These exchanges offer a wide range of products available across all major asset classes, including futures and options based on interest rates, equity indexes, foreign exchange, energy, metals, and agricultural commodities.

CME Group Benchmark Administration Limited (CBA or the Administrator) capitalises on CME Group's wealth of electronic transaction-based data in the calculation of its indices and benchmarks. CBA is authorised and supervised by the UK Financial Conduct Authority (FCA). CBA is the Benchmark Administrator of the CME Group Rolling Futures Indices, with Chicago Mercantile Exchange Inc. (CME Inc.) providing calculation agent and distribution services. The CME Group Rolling Futures Indices are benchmarks, designed on the basis of industry best practices and the IOSCO Principles for Financial Benchmarks.

The CME Group Rolling Futures Indices are available to licence for use as a benchmark under the UK Benchmark Regulation (BMR)¹.

¹ https://www.fca.org.uk/markets/benchmarks/regulation



2. CME Group Rolling Futures Indices

2.1. Introduction

The CME Group Rolling Futures Index family provides clients with a set of end-of-day indices that individually represent the performance of a continuous rolling investment in an underlying futures contract. The CME Group Rolling Futures Index family consists of 33 indices referencing CME Group's leading futures markets across the Agriculture, Metal, Energy, FX, Cryptocurrency and Treasury markets.

The overarching calculation methodology is identical for all the indices, however the contracts used as well as the timing and duration of the underlying contract roll have been chosen to follow the liquidity profile of each futures market.

Table 1 - The CME Group Rolling Futures Indices complex

Index Name	Ticker	Asset Class	Base Date	Base Value
				(USD)
CME Group Chicago Wheat Rolling Futures Index	ZWCRF	Agriculture	02-Jan-2004	100
CME Group KC Wheat Rolling Futures Index	KECRF	Agriculture	02-Jan-2014	100
CME Group Corn Rolling Futures Index	ZCCRF	Agriculture	02-Jan-2004	100
CME Group Soybean Rolling Futures Index	ZSCRF	Agriculture	02-Jan-2004	100
CME Group Soybean Meal Rolling Futures Index	ZMCRF	Agriculture	02-Jan-2004	100
CME Group Soybean Oil Rolling Futures Index	ZLCRF	Agriculture	02-Jan-2004	100
CME Group Lean Hogs Rolling Futures Index	HECRF	Agriculture	02-Jan-2004	100
CME Group Live Cattle Rolling Futures Index	LECRF	Agriculture	02-Jan-2004	100
CME Group Feeder Cattle Rolling Futures Index	GFCRF	Agriculture	02-Jan-2004	100
CME Group Gold Rolling Futures Index	GCCRF	Metals	04-Jan-2010	100
CME Group Copper Rolling Futures Index	HGCRF	Metals	04-Jan-2010	100
CME Group Platinum Rolling Futures Index	PLCRF	Metals	04-Jan-2010	100
CME Group Silver Rolling Futures Index	SICRF	Metals	04-Jan-2010	100
CME Group Aluminum Rolling Futures Index	ALICRF	Metals	01-Jun-2022	100
CME Group 10Y T-Note Rolling Futures Index	ZNCRF	Treasury	05-Jan-2004	100
CME Group 5Y T-Note Rolling Futures Index	ZFCRF	Treasury	05-Jan-2004	100
CME Group 2Y- T-Note Rolling Futures Index	ZTCRF	Treasury	05-Jan-2004	100
CME Group US T-Bond Rolling Futures Index	ZBCRF	Treasury	05-Jan-2004	100
CME Group Ultra 10Y T-Note Rolling Futures Index	TNCRF	Treasury	01-Apr-2016	100
CME Group Ultra US T-Bond Rolling Futures Index	UBCRF	Treasury	01-Mar-2010	100
CME Group Swiss Franc Rolling Futures Index	6SCRF	FX	02-Jan-2004	100
CME Group Canadian Dollar Rolling Futures Index	6CCRF	FX	02-Jan-2004	100
CME Group Japanese Yen Rolling Futures Index	6JCRF	FX	02-Jan-2004	100
CME Group Euro FX Rolling Futures Index	6ECRF	FX	02-Jan-2004	100
CME Group British Pound Rolling Futures Index	6GCRF	FX	02-Jan-2004	100
CME Group Mexican Peso Rolling Futures Index	6MCRF	FX	02-Jan-2004	100
CME Group Australian Dollar Rolling Futures Index	6ACRF	FX	02-Jan-2004	100
CME Group Bitcoin Rolling Futures Index	BTCCRF	Crypto	02-Jan-2018	100
CME Group Ether Rolling Futures Index	ETHCRF	Crypto	01-Mar-2021	100
CME Group RBOB Gasoline Rolling Futures Index	RBCRF	Energy	01-Dec-2010	100
CME Group NY Harbor ULSD Rolling Futures Index	HOCRF	Energy	03-Jan-2011	100
CME Group Natural Gas Rolling Futures Index	NGCRF	Energy	10-Nov-2011	100
CME Group Crude Oil Rolling Futures Index	CLCRF	Energy	01-Apr-2010	100



3. Input Data

3.1. Input Data Specifications

The CME Group Rolling Futures Indices calculation uses CME Group's futures contract settlement values. These futures contracts are traded on CME Group's Designated Contract Markets (DCM's): the Chicago Board of Trade (CBOT), the Commodity Exchange (COMEX), the New-York Mercantile Exchange (NYMEX) and the Chicago Mercantile Exchange (CME).

3.2. Input Data Selection

The CME Group Rolling Futures Indices contract selection is detailed in the <u>Calculation Methodology</u> section. The underlying futures Globex Symbols and Clearing Codes can be found in Table 2.

The Administrator has the right to change the contract selection of any CME Group Rolling Futures Index if the liquidity profile of the relevant contracts changes, any such changes would be announced by the administrator.

Table 2 - Globex Codes, Clearing Codes and respective DCMs

Underlying Futures Contract	Clearing Code	Globex Code	DCM
Chicago SRW Wheat	W	ZW	CBOT
KC HRW Wheat	KW	KE	CBOT
Corn	С	ZC	CBOT
Soybean	S	ZS	CBOT
Soybean Meal	06	ZM	CBOT
Soybean Oil	07	ZL	CBOT
Lean Hogs	LN	HE	CME
Live Cattle	48	LE	CME
Feeder Cattle	62	GF	CME
Gold	GC	GC	COMEX
Copper	HG	HG	COMEX
Platinum	PL	PL	NYMEX
Silver	SI	SI	COMEX
Aluminium	ALI	ALI	COMEX
10-Year T-Note	21	ZN	CBOT
5-Year T-Note	25	ZF	CBOT
2-Year T-Note	26	ZT	CBOT
U.S. Treasury Bond	17	ZB	CBOT
Ultra 10-Year U.S. Treasury Note	TN	TN	CBOT
Ultra U.S. Treasury Bond	UBE	UB	CBOT
Swiss Franc	E1	6S	CME
Canadian Dollar	C1	6C	CME
Japanese Yen	J1	6J	CME
Euro FX	EC	6E	CME
British Pound	BP	6B	CME
Mexican Peso	MP	6M	CME
Australian Dollar	AD	6A	CME
Bitcoin	BTC	BTC	CME
Ethereum	ETH	ETH	CME
RBOB Gasoline	RB	RB	NYMEX
NY Harbor ULSD	НО	НО	NYMEX
Henry Hub Natural Gas	NG	NG	NYMEX
Crude Oil	CL	CL	NYMEX



3.3. Use of Expert Judgement

Expert judgement is not used in the ordinary day to day determination of CME Group Rolling Futures Indices. The benchmark calculation methodology is rules-based and designed to consistently produce robust and reliable values which do not rely on expert judgement. However, CBA, in its capacity as Administrator of the CME Group Rolling Futures Indices, may exercise such expert judgement under unforeseen and extraordinary circumstances when deemed necessary to maintain the integrity, accuracy and reliability of the benchmark. These circumstances can include, but are not limited to: index restatements, periods of market stress or disruptions, or periods where data sources may be absent or become unreliable. Where such circumstances arise, a notice will be published on the CBA Notice Page.

The elements of the calculation of the benchmark in relation to which expert judgement may be exercised, can include, but are not restricted to, the following: (i) excluding certain input data from the calculation; (ii) adjusting/varying any component of the benchmark calculation; or (iii) delaying/estimating the value of input data.

Any exercise of expert judgement by the Administrator can only be carried out by suitably experienced, qualified staff members who have the authority to exercise such judgement as part of their function. The exercise of expert judgement by the Administrator will be reported to the relevant Oversight Committee to ensure that it has been applied consistently and in accordance with the applicable benchmark administration standards and benchmark methodology. The Administrator will retain all internal records detailing the use of expert judgement and the rationale for its use to allow for any ex-post review.



4. Calculation of the CME Group Rolling Futures Indices

4.1. Calculation Methodology

On a given month m, if the futures contracts held in the following month m+1 are unchanged compared to month m, then m is **not** a rebalancing month. If a rebalancing month is identified with the futures contract in m+1 being different from that of month m, the roll will occur in month m such that by month m+1 only the specified contract is held. Table 3 details the futures contract held at the start of each month for each asset.

For example, the Soybean Rolling Futures Index in April will roll on the 5th business day following the start of the month (i.e. the 6th business day) from the May to the July contract.

The **rolling period** for a rebalance, denoted rp, is a list of dates that represents the days on which the next rebalance will occur. The rolling period for each index is available in Table 4. The Administrator has the right to change the rolling period of any CME Group Rolling Futures Index if the liquidity profile of the relevant contracts changes.

On a given day t, the Rolling Futures Index value is calculated as per the below formula:

$$I_{t} = u_{1,t} \cdot P_{1,t} + u_{2,t} \cdot P_{2,t}$$

• If t = 0:

$$u_{0,i} = \frac{w_{0,i} \cdot I_0}{P_{i,0}}$$

• If day t is not in the rolling period, for each i:

$$u_{t,i} = u_{t-1,i}$$

• Otherwise:

$$u_{t,i} = \frac{w_{t,i}}{P_{i,t}} \cdot \left[u_{1,t-1} \cdot P_{1,t} + u_{2,t-1} \cdot P_{2,t} \right]$$

Within the rolling period, the weights are shifted from contract 1 to contract 2. The rolling process is done over a certain number of business days equal to the length of the rolling period rp.

The target weights are calculated as per below.

Let i be a roll step, i.e. an element of [1, 2,..., |rp|], then:

$$w_{i,1} = \left(1 - \frac{i}{|rp|}\right)$$
 ; $w_{i,2} = \frac{i}{|rp|}$

The target weights are rounded to the 10th decimal places.



Symbol	DESCRIPTION
t	Index Calculation Day
t-1	Previous Index Calculation Day
I_{t}	Index Value at t
$u_{t,i}$	Number of units held in the i-th contract on day t
$w_{t,i}$	Target weight for the i-th contract on day t
$P_{i,t}$	Settlement Price for the i-th contract on day t

Table 3 - CME Futures contracts held at the beginning of each month - the blue months denote expiration the following year

Asset	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Wheat	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Dec	Dec	Dec	Mar
Corn	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Dec	Dec	Dec	Mar
Soybean	Mar	Mar	May	May	Jul	Jul	Aug	Sep	Nov	Nov	Jan	Jan
Soybean Meal	Mar	Mar	May	May	Jul	Jul	Aug	Sep	Oct	Dec	Dec	Jan
Soybean Oil	Mar	Mar	May	May	Jul	Jul	Aug	Sep	Oct	Dec	Dec	Jan
Lean Hogs	Feb	Apr	Apr	Jun	Jun	Aug	Aug	Oct	Oct	Dec	Dec	Feb
Live Cattle	Feb	Apr	Apr	Jun	Jun	Aug	Aug	Oct	Oct	Dec	Dec	Feb
Feeder Cattle	Mar	Mar	May	May	Aug	Aug	Aug	Oct	Oct	Jan	Jan	Jan
Gold	Feb	Apr	Apr	Jun	Jun	Aug	Aug	Dec	Dec	Dec	Dec	Feb
Copper	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Dec	Dec	Mar	Mar
Platinium	Apr	Apr	Apr	Jul	Jul	Jul	Oct	Oct	Oct	Jan	Jan	Jan
Silver	Mar	Mar	May	May	Jul	Jul	Sep	Sep	Dec	Dec	Dec	Mar
Aluminium	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Treasuries	Mar	Mar	Jun	Jun	Jun	Sep	Sep	Sep	Dec	Dec	Dec	Mar
FX	Mar	Mar	Mar	Jun	Jun	Jun	Sep	Sep	Sep	Dec	Dec	Dec
Bitcoin	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Ethereum	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gasoline	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Heating Oil	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Natural Gas	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Crude Oil	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan



Table 4 - Rolling schedule for each asset

Asset	Rolling Period expressed in [x] number of business days before expiry	Rolling Period expressed in [x] business day of the rebalancing month
Wheat		[6, 7, 8, 9]
Corn		[6, 7, 8, 9]
Soybean		[6, 7, 8, 9]
Soybean Meal		[6, 7, 8, 9]
Soybean Oil		[6, 7, 8, 9]
Lean Hogs		[6, 7, 8, 9, 10]
Live Cattle		[6, 7, 8, 9, 10]
Feeder Cattle		[6, 7, 8, 9, 10]
Gold		[11,12,13,14]
Copper		[11,12,13,14]
Platinium		[13,14,15,16]
Silver		[11,12,13,14]
Aluminium		[13,14,15,16]
Treasuries	[2, 3] days prior to the first position day	
FX	[5, 4, 3, 2]	
Bitcoin	[6, 5, 4]	
Ethereum	[6, 5, 4]	
Gasoline	[15, 14, 13]	
Heating Oil	[14, 13, 12, 11]	
Natural Gas	[15, 14, 13, 12]	
Crude Oil	[6, 5, 4]	

FX include Euro FX, British Pound, Swiss Franc, Canadian Dollar, Mexican Peso, Japanese Yen and Australian Dollar.

Treasuries include 10 Year T-Note, 5 Year T-Note, 2 Year T-Note, US Treasury Bond, Ultra US Treasury Bond and Ultra 10 Year T-Note.

4.2. Unavailability of Input Data

If the futures settlement prices are unavailable for use in the calculation, the Administrator will re-publish the prior day's Index level.

In the event that the previous day Index is republished for more than 3 (three) consecutive Business Days, the Administrator must promptly convene the Oversight Committee to assess available remedial actions.



5. Publication and Restatement Policy

5.1. Benchmark Publication

The CME Group Rolling Futures Indices are published after the publication of the settlement prices of the relevant futures contracts.

The CME Group Rolling Futures Indices are calculated and published to 6 (six) decimal places.

The CME Group Rolling Futures Indices are calculated on each Business Day, in accordance with the CME Globex Trading Schedule. In addition, CBA may, with notification to the market, choose not to publish the CME Group Rolling Futures Indices on any given Business Day.

The CME Group Rolling Futures Indices are published on the CME Group website and on licensed data vendor platforms.

5.2. Restatement Policy

The Administrator takes the utmost care to ensure that input data and calculations are accurate.

In the instance an inaccuracy is not identified and resolved before benchmark calculation and publication, or if input data received is revised retrospectively, the Administrator will review the impact on any affected benchmark and determine if the inaccuracy is material and whether it warrants a re-publication of the benchmark value.

In the event that there is a material inaccuracy in the publication of the benchmark that requires a re-publication of the benchmark value, users will be informed via the CME Globex system utilising the GCC System Alerts and via the publication of a notice to the CBA Notice Page.

The Administrator will take into consideration, without limitation, the below criteria when determining whether a restatement is warranted:

- The time elapsed between the initial publication and the identification of the inaccuracy;
- The number of benchmark levels affected;
- Whether the impacted benchmarks have tradable products referencing them;
- The magnitude of the inaccuracy;
- The impact of restatement on clients relative to the magnitude of the inaccuracy.

Any decisions to amend and/or republish a benchmark value by the Administrator can only be carried out by suitably experienced, qualified staff members who have the authority to make such a decision as part of their function. Instances of restatements will be reported to the Oversight Committee for review retrospectively and will also be reported to the Board of the Administrator. The Administrator will retain all internal records detailing instances of restatement and the rationale for its decision to allow for any ex-post review.



5.3. Publication Alerts

In the event of disruptions to the standard CME Group Rolling Futures Indices publication process, CBA, where it deems necessary, will release publication alerts with respect to issues impacting the availability of the Index. Publication alerts will be made available via the CME Globex system utilising the GCC System Alerts.

5.4. Consultations and Notices

CBA will inform the users and stakeholders of any announcements relating to republication, restatements or consultations via the CBA Notice Page.

In addition, CBA may, at its discretion, release information notices with respect to issues impacting the availability of the CME Group Rolling Futures Indices, via the CBA Notice Page.



Governance

The Administrator operates under a comprehensive Risk and Control Framework, providing clear policies on Governance, Oversight, Benchmark Design and Calculation, Outsourcing, Operations, Reporting of Infringements and Business Continuity.

CBA has in place a "Three Lines of Defence" model, enabling close cross-monitoring of the governance process - this being business, compliance and audit who all have a key role in ensuring that CBA meets its regulatory requirements.

6.1. Oversight Committee

An Oversight Committee is appointed by the Administrator to review the integrity of the benchmark, in accordance with the CBA Terms of Reference for Oversight Committees.

The Oversight Committee will provide independent oversight of, and challenge to the Administrator on all aspects of the Benchmark determination process. The Oversight Committee will escalate to the CBA Board if required.

6.2. Review of the Methodology

The Administrator regularly monitors the Benchmark Methodology and its consistency with the stated objectives. The Benchmark Methodology is reviewed and approved annually by the Administrator and is reviewed annually by the Oversight Committee.

The Oversight Committee reviews proposed material changes to the Benchmark Methodology including, but not limited to, the structure of the Benchmark, input data used and all aspects of the Calculation Methodology.

The Oversight Committee may request the Administrator to consult on any changes to the methodology with stakeholders and the wider market.

6.3. Consultation Process

Where material changes to the Benchmark become necessary, the Administrator will engage stakeholders and users by way of a public consultation.

The Oversight Committee may also direct the Administrator to consult with stakeholders.

Changes to the Methodology are deemed material on the basis of an assessment conducted by the Administrator and submitted to the Oversight Committee for advice and feedback.

The Administrator will publish notice of the consultation on its website, inviting feedback from stakeholders and the wider market. When reasonably possible, notice of a consultation will be posted at least 1 (one) month prior to the deadline for responses.



The notice will include the details of the proposed material change, a description of the key elements of the methodology affected by the change, the timeline and the rationale for the change.

Findings of the consultation process and proposed changes to the Benchmark Methodology, recommended as a result of the consultation, will be presented by the Administrator to the Oversight Committee for its consideration.

Feedback to a consultation is considered confidential. The Administrator will publish an anonymized summary with its conclusions, as soon as is practicable, and before implementation of any changes.

6.4. Cessation

The Administrator regularly monitors the representativeness of the Benchmark. If the Benchmark is deemed to be unrepresentative of the underlying economic reality due to paucity of input data or systemic changes in the related markets, the Administrator will engage the Oversight Committee at the earliest opportunity. These cessation arrangements are designed to mitigate cessation and transition risks.

The Oversight Committee is responsible for reviewing and approving procedures for cessation of the benchmark, to the extent required under BMR, based on the type, complexity, use and vulnerability of the benchmark.

The Oversight Committee may request the Administrator to consult with stakeholders as described in the Consultation Process section above.

As a last resort, if no alternative arrangements are feasible, the Oversight Committee may advise the Administrator to discontinue the Benchmark, providing stakeholders reasonable notice and assistance to explore alternative reference instruments.

The Administrator will endeavour to identify alternative benchmarks; however, this might not always be possible due to regulations, market conditions or a lack of suitable alternatives.

Users of the Benchmark are recommended to ensure that they have adequate fallback policies and procedures in the event of the Benchmark becoming unrepresentative of its economic interest.

6.5. Records Retention

The Administrator has in place policies for the retention of any relevant evidence and documentation related to the determination and dissemination of the Benchmark, either in paper or in electronic format, for at least the mandatory term of 5 (five) years.

6.6. Auditing

An audit process will be undertaken regularly, to ensure adherence to the stated Methodology, the IOSCO principles and regulatory requirements.

6.7. Data Licensing and Distribution

The Benchmark is made available subject to execution of an Information License Agreement (ILA) with CME Inc. together with the appropriate Schedules. Market participants that intend to subscribe to the Benchmark should contact the Administrator at the following email address: CMEDataSales@cmegroup.com.



6.8. Complaints Procedure

The CBA Complaints Procedures set out details on the management of customer complaints to ensure that they are handled fairly and effectively, in a prompt and transparent manner and in accordance with applicable regulatory requirements.

Complaints will be dealt with by a senior member of staff not directly involved with the benchmark calculation and dissemination. Information related to complaints will be stored in a restricted access area and kept for a period of at least 5 (five) years following the date when the complaint was first lodged. Complaints can be submitted at internationalcompliance@cmegroup.com



Appendix I – Key Terms & Definitions

TERM	DESCRIPTION
Administrator	CME Group Benchmark Administration Limited
BMR	UK Benchmark Regulation
Business Day	Business Day in accordance with the CME Globex Trading Schedule
СВА	CME Group Benchmark Administration Limited
DCM	Designated Contract Market
FCA UK	Financial Conduct Authority (UK)
IOSCO	International Organization of Securities Commissions
СВОТ	Chicago Board of Trade
COMEX	The Commodity Exchange
CME	Chicago Mercantile Exchange
NYMEX	New-York Mercantile Exchange



Appendix II – ESG Disclosures

Explanation of how ESG Factors are Reflected in the Key Elements of the Benchmark Methodology					
Item 1	Name of the benchmark administrator.	CME Group Benchmark Administration Limited			
Item 2	Type of benchmark or family of benchmarks.	Other			
Item 3	Name of the benchmark or family of benchmarks.	CME Group Rolling Futures Indices			
Item 4	Does the benchmark methodology for the bench mark or family of benchmarks take into account ESG factors?	No			

