

**METHODOLOGY BOOK FOR:**

- MSCI ACWI EX THERMAL COAL  
ADAPTIVE CAPPED 2X ESG  
UNIVERSAL INDEX**
- MSCI ACWI EX THERMAL COAL  
ADAPTIVE CAPPED 2X ESG  
UNIVERSAL WITH SELECT  
CURRENCIES 100% HEDGED TO  
GBP INDEX**

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## 1 INTRODUCTION

The MSCI ACWI ex Thermal Coal Adaptive Capped 2x ESG Universal Index aims to represent the performance of a strategy that excludes companies that derive a sizeable revenue from select thermal coal related activities and at the same time aims to increase exposure to those companies demonstrating both a robust ESG profile as well as a positive trend in improving that profile, by re-weighting free-float market cap weights based upon certain ESG metrics. The index also controls for concentration, prior to tilting weights based on ESG metrics.

The MSCI ACWI ex Thermal Coal Adaptive Capped 2x ESG Universal with Select Currencies 100% Hedged to GBP Index represents the performance achieved by hedging select currency exposures of the MSCI ACWI ex Thermal Coal Adaptive Capped 2x ESG Universal Index, to the GBP. Select currencies in the index are 100% hedged to the GBP by selling each foreign currency forward at the one-month Forward weight.

## 2 MSCI ESG RESEARCH

MSCI ESG Research provides in-depth research, ratings and analysis of the environmental, social and governance-related business practices of thousands of companies worldwide. It consists of an integrated suite of tools and products to efficiently manage research, analysis and compliance tasks across the spectrum of ESG factors.

The Index uses company ratings and research provided by MSCI ESG Research. In particular, this index uses the following three MSCI ESG Research products: MSCI ESG Ratings, MSCI ESG Controversies Score, and MSCI ESG Business Involvement Screening Research.

For details on MSCI ESG Research's full suite of ESG products, please refer to: [http://www.msci.com/products/esg/about\\_msci\\_esg\\_research.html](http://www.msci.com/products/esg/about_msci_esg_research.html)

### 2.1 MSCI ESG RATINGS

MSCI ESG Ratings provides research, analysis and ratings of how well companies manage environmental, social and governance risks and opportunities.

MSCI ESG Ratings provides an overall company ESG rating - a seven point scale from 'AAA' to 'CCC'. In addition, the product provides scores and percentiles indicating how well a company manages each key issue relative to industry peers.

For more details on MSCI ESG Ratings, please refer to <https://www.msci.com/esg-ratings>.

### 2.2 MSCI ESG CONTROVERSIES

MSCI ESG Controversies (previously known as MSCI ESG Impact Monitor) provides assessments of controversies concerning the negative environmental, social, and/or governance impact of company operations, products and services. The evaluation framework used in MSCI ESG Controversies is designed to be consistent with international norms represented by the UN Declaration of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, and the UN Global Compact. MSCI ESG Controversies Score falls on a 0-10 scale, with "0" being the most severe controversy.

For more details on MSCI ESG Controversies Score, please refer to <https://www.msci.com/esg-integration>.

### 2.3 MSCI ESG BUSINESS INVOLVEMENT SCREENING RESEARCH

MSCI ESG Business Involvement Screening Research (BISR) aims to enable institutional investors to manage environmental, social and governance (ESG) standards and restrictions reliably and efficiently.

For more details on MSCI ESG Business Involvement Screening Research, please refer to [http://www.msci.com/resources/factsheets/MSCI\\_ESG\\_BISR.pdf](http://www.msci.com/resources/factsheets/MSCI_ESG_BISR.pdf).

### 3 CONSTRUCTING THE INDEXES

The MSCI ACWI ex Thermal Coal Adaptive Capped 2x ESG Universal Index and the MSCI ACWI ex Thermal Coal Adaptive Capped 2x ESG Universal with Select Currencies 100% Hedged to GBP Index are constructed from the MSCI ACWI Index (the “Parent Index”).

#### 3.1 ELIGIBLE UNIVERSE SCREENING

Companies which derive a sizeable revenue from certain thermal coal related activities are excluded from the eligible universe.

Please refer to Appendix 1 for more details on the exclusion criteria.

#### 3.2 APPLYING THE MSCI ADAPTIVE CAPPED INDEXES METHODOLOGY

The MSCI Adaptive Capped Indexes Methodology<sup>1</sup> is applied on the eligible universe, with a fixed multiplier of 2.

#### 3.3 APPLYING THE MSCI ESG UNIVERSAL INDEXES METHODOLOGY

The resultant set of securities are then weighted and rebalanced in accordance with the MSCI ESG Universal Indexes Methodology<sup>2</sup> to obtain the MSCI ACWI ex Thermal Coal Adaptive Capped 2x ESG Universal Index.

The following step is then applied to construct the MSCI ACWI ex Thermal Coal Adaptive Capped 2x ESG Universal with Select Currencies 100% Hedged to GBP Index.

#### 3.4 APPLYING THE HEDGING

A selection of currencies from the MSCI ACWI ex Thermal Coal Adaptive Capped 2x ESG Universal Index are 100% hedged to GBP in accordance with the MSCI Hedged Indexes Methodology<sup>3</sup>. The weight of each foreign currency corresponds to the weight of the securities quoted in that currency. The gross variant, calculated as per the MSCI Net Daily Total Return (DTR) Index methodology described in the MSCI Index Calculation Methodology<sup>4</sup> is used. Please refer to Appendix 2 for more details.

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<sup>1</sup> Please refer to the MSCI Adaptive Capped Indexes Methodology, available at <https://www.msci.com/index-methodology>.

<sup>2</sup> Please refer to the MSCI ESG Universal Indexes Methodology, available at <https://www.msci.com/index-methodology>.

<sup>3</sup> Please refer to the MSCI Hedged Indexes Methodology, available at <https://www.msci.com/index-methodology>.

<sup>4</sup> Please refer to the MSCI Index Calculation Methodology, available at <https://www.msci.com/index-methodology>.

## 4 MAINTAINING THE INDEXES

### 4.1 QUARTERLY INDEX REVIEWS

The MSCI ACWI ex Thermal Coal Adaptive Capped 2x ESG Universal Index and the MSCI ACWI ex Thermal Coal Adaptive Capped 2x ESG Universal with Select Currencies 100% Hedged to GBP Index are reviewed on a quarterly basis as described in section 2, coinciding with the May and November Semi-Annual Index Reviews and the February and August Quarterly Index Reviews of the Parent Index.

The pro forma Indexes are in general announced nine business days before the effective date.

In general, MSCI uses MSCI ESG Research data (including MSCI ESG Ratings, MSCI ESG Controversies Scores and MSCI Business Involvement Screening Research) as of the end of the month preceding the Index Reviews. For some securities, such data may not be published by MSCI ESG Research by the end of the month preceding the Index Review. For such securities, MSCI will use ESG data published after the end of month, when available.

### 4.2 ONGOING EVENT RELATED CHANGES

The general treatment of corporate events in the MSCI ACWI ex Thermal Coal Adaptive Capped 2x ESG Universal Index and the MSCI ACWI ex Thermal Coal Adaptive Capped 2x ESG Universal with Select Currencies 100% Hedged to GBP Index aims to minimize turnover outside of index Reviews. The methodology aims to appropriately represent an investor's participation in an event based on relevant deal terms and pre-event weighting of the index constituents that are involved. Further, changes in index market capitalization that occur as a result of corporate event implementation will be offset by a corresponding change in the Variable Weighting Factor (VWF) of the constituent.

Additionally, if the frequency of Index Reviews in the Parent Index is greater than the frequency of Index Reviews in the concerned index, the changes made to the Parent Index during intermediate Index Reviews will be neutralized in the concerned index.

The following section briefly describes the treatment of common corporate events within the MSCI ACWI ex Thermal Coal Adaptive Capped 2x ESG Universal Index and the MSCI ACWI ex Thermal Coal Adaptive Capped 2x ESG Universal with Select Currencies 100% Hedged to GBP Index.

No new securities will be added (except where noted below) to the Index between Index Reviews. For cases where additions are noted below, securities will be added to the index only if added to the parent index.

Parent Index deletions will be reflected simultaneously.

## EVENT TYPE

## EVENT DETAILS

### New additions to the Parent Index

A new security added to the parent index (such as IPO and other early inclusions) will not be added to the index.

### Spin-Offs

All securities created as a result of the spin-off of an existing Index constituent will not be added to the Index at the time of event implementation.

### Merger/Acquisition

For Mergers and Acquisitions, the acquirer's post event weight will account for the proportionate amount of shares involved in deal consideration, while cash proceeds will be invested across the Index.

If an existing Index constituent is acquired by a non-Index constituent, the existing constituent will be deleted from the Index and the acquiring non-constituent will not be added to the Index.

### Changes in Security Characteristics

A security will be removed from the Index if there are changes in its characteristics (country, sector, size segment, etc.) Reevaluation for inclusion in the Index will occur at the subsequent Index Review.

Further detail and illustration regarding specific treatment of corporate events relevant to this Index can be found in the MSCI Corporate Events Methodology book under the sections detailing the treatment of events in Capped Weighted and Non-Market Capitalization Weighted indexes.

The MSCI Corporate Events methodology book is available at:  
<https://www.msci.com/index-methodology>.

## APPENDIX 1 – SCREENING CRITERIA

Companies, whose activities meet the following values based criteria, as determined by MSCI ESG Research, are excluded from the Index:

- Fossil Fuel – Thermal Coal
  - All companies that earn more than or equal to 10% revenue (either reported or estimated) from the mining of thermal coal (including lignite, bituminous, anthracite and steam coal) and its sale to external parties. It excludes: revenue from metallurgical coal; coal mined for internal power generation (e.g. in the case of vertically integrated power producers); intra-company sales of mined thermal coal; and revenue from coal trading.
  - All companies that earn more than or equal to 10% revenue (either reported or estimated) that a company derives from the thermal coal based power generation.



## APPENDIX 2 – HEDGING PARAMETERS

Hedging Currency: GBP

Partially Hedged: Yes

Hedged Exposures:

ISO CURRENCY SYMBOL	CURRENCY NAME
AUD	AUSTRALIAN DOLLAR
CHF	SWISS FRANC
DKK	DANISH KRONE
JPY	YEN
HKD	HONG KONG DOLLAR
SGD	SINGAPORE DOLLAR
NOK	NORWEGIAN KRONE
USD	US DOLLAR
CAD	CANADIAN DOLLAR
SEK	SWEDISH KRONA
MXN	MEXICAN NUEVO PESO
MXN	MEXICAN NUEVO PESO
NZD	NEW ZEALAND DOLLAR
TRY	NEW TURKISH LIRA
TRY	NEW TURKISH LIRA
HUF	FORINT
ILS	SHEKEL
ILS	SHEKEL
PLN	ZLOTY
ZAR	RAND
AED	UAE DIRHAM
CZK	CZECH KORUNA
QAR	QATARI RIAL
EUR	EURO

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Our line of products and services includes indexes, analytical models, data, real estate benchmarks and ESG research.

MSCI serves 98 of the top 100 largest money managers, according to the most recent P&I ranking.

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