MSCI China A 50 Connect Low Carbon Tilt Index Methodology

December 2022

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1 Introduction

The MSCI China A 50 Connect Low Carbon Tilt Index (the "Index") is constructed from the MSCI China A 50 Connect Index (the "Parent Index")[1] with the aim to achieve lower Carbon Emission Intensity and higher Green Revenue Exposure relative to the Parent Index.

[1] For details on the MSCI China A 50 Connect Index, please refer to the methodology book, available at https://www.msci.com/index/methodology/latest/ChinaA50Connect

2 MSCI ESG Research

The Index uses research provided by MSCI ESG Research. In particular, the Index uses the following MSCI ESG Research products: MSCI Climate Change Metrics.

For details on MSCI ESG Research's full suite of ESG products, please refer to: https://www.msci.com/esg-investing.

2.1 MSCI CLIMATE CHANGE METRICS

MSCI Climate Change Metrics provides climate data & tools to support institutional investors seeking to integrate climate risk & opportunities into their investment strategy and processes. This includes investors seeking to achieve a range of objectives, including measuring and reporting on climate risk exposure, implementing low carbon and fossil fuel-free strategies, alignment with temperature pathways and factoring climate change research into their risk management processes, in particular through climate scenario analysis for both transition and physical risks.

The dataset spans across the four dimensions of a climate strategy: transition risks, green opportunities, physical risks and 1.5° alignment.

For more details on MSCI Climate Change Metrics, please refer to https://www.msci.com/climate-change-solutions.

3 Index Construction Methodology

The Index construction rules defined in sections 3.1 to 3.4 below are used to construct the Index.

3.1 APPLICABLE UNIVERSE

The Applicable Universe includes all the constituents of the Parent Index. This approach aims to provide an opportunity set with sufficient liquidity and capacity.

3.2 REFERENCE INDEX UNIVERSE

The Reference Index Universe includes all the constituents of the MSCI China A Index (the "Reference Index")[2]. The Reference Index Universe is primarily used for the calculation of universe relative Low Carbon Tilt Multiplier, as defined in section 3.4.

3.3 DEFINING THE SECURITY LEVEL CARBON EXPOSURE

The carbon exposure of a security is measured in terms of its greenhouse gas emissions. The Indexes use MSCI Climate Change Metrics data from MSCI ESG Research.

3.3.1 GREENHOUSE GAS EMISSIONS

MSCI ESG Research collects company-specific direct (Scope 1) and indirect (Scope 2) greenhouse gas (GHG) emissions data from company public documents and/or the Carbon Disclosure Project. If a company does not report GHG emissions, then MSCI ESG Research uses its proprietary methodology to estimate Scope 1 and Scope 2 GHG emissions.

3.4 SECURITY WEIGHTING

All the securities from the Applicable Universe are eligible for inclusion in the Index. The Index constituents are weighted by the product of their market capitalization weight in the Parent Index and the Low Carbon Tilt Multiplier.

[2] For details on the MSCI China A Index, please refer to appendix XVI: 'MSCI China A Indexes' of the MSCI Global Investable Market Indexes (GIMI) Methodology, available at https://www.msci.com/index/methodology/latest/GIMI

The Low Carbon Tilt Multiplier is calculated as defined below across the Reference Index Universe based on the Carbon Emission Intensity[3] and the Green Revenue[4].

	Carbon Emission Intensity (Quartile 1-3)	Carbon Emission Intensity (Quartile 4) - Higher emission intensity
Green Revenue (>= 25%)	2	1
Green Revenue (<25%)	1	0.5

*Weight = Parent Index weight * Low Carbon Tilt Multiplier*

The above weights are then normalized to sum to 100%.

Additionally, constituent weights at the issuer level are capped at 10%.

[3] Carbon Intensity = Scope 1 & 2 Emission / Sales. For the securities where the Emissions Intensity is not available, the average Emissions Intensity of all the constituents of the Reference Index in the same GICS Industry Group in which the security belongs is used. Further, if the Emissions Intensity is still not available, the average Emissions Intensity of all the constituents of the Reference Index in the same GICS Sector in which the security belongs is used.

[4] Green Revenue represents the total of all revenues derived from any of the six environmental impact themes including alternative energy, energy efficiency, green building, pollution prevention, sustainable water, or sustainable agriculture.

4 Maintaining the Index

4.1 QUARTERLY INDEX REVIEW

The Index is rebalanced on a quarterly basis, usually as of the close of the last business day of February, May, August and November, coinciding with the February, May, August and November Index Review of the MSCI Global Investable Market Indexes.

In general, MSCI uses MSCI ESG Research data (including MSCI Climate-change metrics) as of the end of the month preceding the Index Reviews for the rebalancing of the Index.

The pro forma Index is in general announced nine business days before the effective date.

The rules defined in sections 3.1 to 3.4 are applicable at each quarterly index reviews.

4.1.1 BUFFER RULES

To reduce Index turnover and enhance Index stability, buffer rules are applied for the Low Carbon Tilt Multiplier. Please refer to Appendix I for further details.

4.2 ONGOING EVENT RELATED CHANGES

The following section briefly describes the treatment of common corporate events within the 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 in the Index.

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 be added to the Index at the time of event implementation. Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review of the corresponding underlying Index.
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 continue to be an Index constituent if there are changes in characteristics (country, sector, size segment, etc.). Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review of the corresponding Parent Index.

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/latest/CE.

Appendix I: Low Carbon Tilt Multiplier Buffers

The Low Carbon Tilt Multiplier values will be used with buffer application depending on the pro forma Low Carbon Tilt Multiplier value as described in section 3.4 and previous index review Low Carbon Tilt Multiplier value calculated with buffers as described in the illustrative table below:

Previous Index Review Low Carbon Tilt Multiplier	Pro forma Low Carbon Tilt Multiplier (before applying the buffer)	Pro forma Low Carbon Tilt Multiplier (with buffer application)
1	2	1.5
0.5 or 0.75	2	1
1	0.5	0.75
1.5 or 2	0.5	1
2	1	1.5
0.5	1	0.75

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* = toll free

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www.msci.com/index-regulation

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