

# MSCI China Tech IMI All Share Stock Connect Filtered Index

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## 1 Introduction

The MSCI China Tech IMI All Share Stock Connect Filtered Index (the 'Index'1) aims to represent the performance of companies that are associated with the development of new products and services from technology innovations leading to breakthroughs in areas such as internet and digitization, mobility, autonomous technology, industrial automation and digital healthcare, while excluding those involved in certain controversial business activities or with relatively low MSCI ESG Controversies scores or MSCI ESG Ratings.

<sup>&</sup>lt;sup>1</sup>The Index is governed by a set of methodology and policy documents ("Methodology Set"), including the present index methodology document. Please refer to Appendix III for more details.



## **2** Constructing the Index

The Index is constructed by selecting stocks from MSCI China Investable Market Index (IMI) (the Parent Index) based on rules explained in the following sections.

The Index selects companies which are assessed to have high exposure to the following technology-related business activities—

Internet	Mobility	Industrials	Health
<ul> <li>Blockchain &amp; P2P</li> <li>Cloud Computing</li> <li>Crowdsourcing</li> <li>Cybersecurity</li> <li>E-commerce</li> <li>Fintech</li> <li>Internet of Things</li> <li>Mobile &amp; Digital Payments</li> <li>Robotics and Artificial Intelligence</li> <li>Social Media</li> </ul>	Batteries     High speed transportation     Sharing Economy     Smart Mobility     Vehicular Automation	<ul> <li>3D Printing</li> <li>Alternate Energy Sources</li> <li>Innovative Materials</li> <li>Smart Infrastructure</li> <li>Space Exploration</li> </ul>	<ul> <li>Automated Diagnostics</li> <li>Bioinformatics</li> <li>Clinical Lab Automation</li> <li>Healthcare Infotech</li> <li>Medical Robotics</li> <li>Telemedicine</li> <li>Medical Device/ Instruments/ Materials</li> </ul>

MSCI may seek input from outside market experts on the ongoing evolution of the themes underlying the Index. However, such input is advisory only in nature. MSCI alone decides whether to use such input at all or to what extent. Receipt of such input, like any other feedback on MSCI indexes, may or may not lead to a change to the Index or index methodology.

## 2.1 Determining the Eligible Universe of the Index

The Eligible Universe of the Index is constructed by selecting all securities from the Parent Index that have a Relevance Score<sup>2</sup> of 25% or more. Further filtering is applied as below.

#### 2.1.1 ESG exclusion criteria

The Index uses company ratings and research provided by MSCI ESG Research<sup>3</sup> to determine eligibility for index construction.

#### Controversial business exclusion criteria

Securities of companies involved in following businesses are excluded from the Eligible Universe:

- Controversial Weapons
- Conventional Weapons
- Nuclear Weapons

<sup>&</sup>lt;sup>2</sup> For details of calculation of Relevance Scores for business activities defined earlier in section 3, please refer to the MSCI Thematic Relevance Score Methodology document (available on <a href="https://www.msci.com/index-methodology">https://www.msci.com/index-methodology</a>).

<sup>&</sup>lt;sup>3</sup> See section 4 for further information regarding ESG and climate data used in the Indexes that MSCI Limited and MSCI Deutschland GmbH source from MSCI ESG Research LLC, a separate subsidiary of MSCI Inc. MSCI ESG Research is solely responsible for the creation, determination and management of such data as a provider to MSCI Limited and MSCI Deutschland GmbH. MSCI Limited and MSCI Deutschland GmbH are the benchmark administrators for the MSCI indexes.



- Civilian Firearms
- Tobacco
- Thermal Coal
- Unconventional Oil & Gas
- Arctic Oil & Gas
- Oil Sands
- UN Global Compact Violators

Please refer to Appendix I for more details on these criteria.

#### **ESG Controversy Score**

ESG Controversy Score = 0 ('Red Flag' companies) – All companies assessed as having
involvement in ESG controversies that are classified as Red Flags (MSCI ESG Controversy
Score of 0) are excluded from the Eligible Universe. A Red Flag indicates an ongoing, Very
Severe ESG controversy implicating a company directly through its actions, products, or
operations.

#### 2.1.2 Liquidity screening criteria

Securities that have a 3-month average daily trading value (3M ADTV) less than 3 million USD are excluded from the Eligible Universe. For the calculation of ADTV, please refer to Appendix II.

#### 2.1.3 Size screening criteria

Securities that have a free-float market capitalization less than 200 million USD are excluded from the Eligible Universe.

#### 2.2 Filtered Universe

The Filtered Universe is constructed by excluding securities from the Eligible Universe which are in the bottom quartile by Industry Adjusted ESG Score<sup>3</sup>.

## 2.3 Security selection

Securities in the Filtered Universe are ranked in descending order of their Relevance Score. If multiple securities have the same Relevance Score, then the security having a higher free float adjusted market capitalization is given a higher rank.

The top N securities from the Filtered Universe are selected where N is determined by:

N= Minimum (Maximum (Securities in the top half of the Ranked Universe, 100), 250)

The top 'N' securities from the Ranked Universe are selected for inclusion in the Index. If the number of securities in the universe is below 100, all the securities in the Ranked Universe are selected for inclusion in the Index.

<sup>&</sup>lt;sup>3</sup> For details, please refer to the MSCI ESG Ratings Methodology document (available on ESG Investing: ESG Ratings - MSCI)



## 2.4 Weighting Scheme

At each rebalancing, all the securities eligible for inclusion after step 3.3 are weighted in proportion of their free float adjusted market capitalization.

## 2.5 Final Universe

These securities are then reweighted in line with the Section 2.3 of MSCI Adaptive Capped Indexes Methodology<sup>4</sup>, applying a fixed multiplier L set to 5. Further capping is applied as described below.

Additionally, Index constituents' weights are capped at 15% at the security level to mitigate concentration risk.

## 2.6 Treatment of Unrated Companies

Companies not assessed by MSCI ESG Research on data for any of the following MSCI ESG Research products are not eligible for inclusion in the Indexes.

- MSCI ESG Ratings
- MSCI ESG Controversies
- MSCI Climate Change Metrics
- MSCI Business Involvement Screening Research (BISR)

<sup>&</sup>lt;sup>4</sup> For details, please refer to the MSCI Adaptive Capped Indexes Methodology available on <a href="https://www.msci.com/index-methodology">https://www.msci.com/index-methodology</a>



## 3 Maintaining the Index

## 3.1 Monthly Review of Controversies

Index constituents are reviewed on a monthly basis for the involvement in ESG controversies<sup>5</sup>. Existing constituents will be deleted if they face controversies as defined as defined by MSCI ESG Controversy Score of 0 ('Red flag' companies). A Red Flag indicates an ongoing, Very Severe ESG controversy implicating a company directly through its actions, products, or operations. Existing Index constituents with missing MSCI ESG Controversy Scores are not deleted during Monthly Review of Controversies.

MSCI uses MSCI ESG Controversies data as of the end of the month preceding the review (e.g., end of June data for the July monthly review). For some securities, such data may not be published by MSCI ESG Research by the end of the month preceding the review. For such securities, MSCI will use ESG data published after the end of month, when available, for the monthly review of the Index.

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

#### 3.2 Semi-Annual Index Review

The Index is reviewed on a semi-annual basis in May and November to coincide with the May and November Index Reviews of the Parent Index, and the changes are implemented at the end of May and November. In general, the pro forma Index is announced nine business days before the effective date.

During the semi-annual Index Review, the Eligible Universe, Filtered Universe and Final Universe are updated.

In general, MSCI uses Relevance Score data as of two business days prior to the rebalancing date for the semi-annual Index Review.

In general, MSCI uses MSCI ESG Research data (including MSCI ESG Ratings, MSCI Climate Change Metrics, 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. This approach aims to capture timely updates to ESG Ratings of the constituents and coincides with the rebalancing of the relevant MSCI Parent Indexes.

## 3.2.1 Security selection buffer rules

To reduce Index turnover and enhance Index stability, a buffer rule of 25% is applied during the ongoing semi-annual Index Reviews. For example, if the Index targets 100 securities, buffers are applied between rank 91 and 110. The securities in the Ranked Universe (as detailed in section 3.3) with a Relevance Score rank at or above 90 will be added to the final Index on a priority basis. The existing constituents that have a Relevance Score rank between 91 and 110 are then successively added until the number of securities in the final Index reaches 100. If the number of securities is

<sup>&</sup>lt;sup>5</sup> The monthly review of ESG controversies is applied within the Index effective July 3, 2023 and is not applicable historically prior to that date.



below 100 after this step, the remaining securities in the Ranked Universe with the highest Relevance Score rank are added until the number of securities in the final Index reaches 100.

## 3.3 Ongoing event-related maintenance

The general treatment of corporate events in the 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.

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. 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 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.		
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.		

Further detail and illustration regarding specific treatment of corporate events relevant to this Index can be found in the MSCI Corporate Events Methodology.

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



## 4 MSCI ESG Research

The Index is a product of MSCI Inc. that utilizes information such as company ratings and research produced and provided by MSCI ESG Research LLC (MSCI ESG Research), a subsidiary of MSCI Inc. In particular, the Index uses the following MSCI ESG Research products: MSCI ESG Ratings, MSCI ESG Controversies, MSCI ESG Business Involvement Screening Research, MSCI Climate Change Metrics, MSCI Impact Solutions, MSCI ESG Ratings, and MSCI ESG Governance Metrics. MSCI Indexes are administered by MSCI Limited and MSCI Deutschland GmbH.

## 4.1 MSCI ESG Ratings

MSCI ESG Ratings aim to measure entities' management of environmental, social and governance risks and opportunities. MSCI ESG Ratings use a weighted average key issue calculation that is normalized by industry to arrive at an industry-adjusted ESG score (0-10), which is then translated to a seven-point scale from 'AAA' to 'CCC', indicating how an entity manages relevant key issues relative to industry peers.

The MSCI ESG Ratings methodology can be found at: <a href="https://www.msci.com/legal/disclosures/esg-disclosures">https://www.msci.com/legal/disclosures/esg-disclosures</a>.

#### 4.2 MSCI ESG Controversies

MSCI ESG Controversies provide assessments of controversies concerning the potential 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.

The MSCI ESG Controversies methodology can be found at: <a href="https://www.msci.com/legal/disclosures/esg-disclosures">https://www.msci.com/legal/disclosures/esg-disclosures</a>

## 4.3 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.

The MSCI Business Involvement Screening Research methodology can be found at: <a href="https://www.msci.com/legal/disclosures/esg-disclosures">https://www.msci.com/legal/disclosures/esg-disclosures</a>

## 4.4 MSCI Climate Change Metrics

MSCI Climate Change Metrics provides climate data and tools to support institutional investors seeking to integrate climate risk and 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.

#### 4.4.1 Fossil Fuel and Power Generation Metrics

MSCI ESG Research identifies companies involved in fossil fuel-related assets and activities including fossil fuel reserves, resource extraction, power generation and generation capacity, revenue from such assets and activities and capital investments in such assets and activities. The metrics are based on disclosed activities, disclosed revenue and estimates of revenue that are extrapolated from company disclosures and eligible third-party sources (such as NGOs).

For more details on MSCI Climate Change Metrics, please refer to <a href="https://www.msci.com/legal/disclosures/climate-disclosures">https://www.msci.com/legal/disclosures/climate-disclosures</a>



## **Appendix I: Controversial Business Exclusion Criteria**

Companies whose activities meet the following values- and climate change-based criteria, as evaluated by MSCI ESG Research, are excluded from the Index.

#### Values-based Exclusions Criteria:

#### Controversial Weapons

 All companies with any tie to Controversial Weapons (cluster munitions, landmines, depleted uranium weapons, biological/chemical weapons, blinding lasers, nondetectable fragments and incendiary weapons), as defined by the methodology of the MSCI Ex-Controversial Weapons Indexes available at <a href="https://www.msci.com/index-methodology">https://www.msci.com/index-methodology</a>.

#### Nuclear Weapons

- o All companies that manufacture nuclear warheads and/or whole nuclear missiles.
- All companies that manufacture components that were developed or are significantly modified for exclusive use in nuclear weapons (warheads and missiles).
- All companies that manufacture or assemble delivery platforms that were developed or significantly modified for the exclusive delivery of nuclear weapons.
- o All companies that provide auxiliary services related to nuclear weapons.
- All companies that manufacture components that were not developed or not significantly modified for exclusive use in nuclear weapons (warheads and missiles).
- All companies that manufacture or assemble delivery platforms that were not developed or not significantly modified for the exclusive delivery of nuclear weapons.
- All companies that manufacture components for nuclear-exclusive delivery platforms.

#### Civilian Firearms

- All companies classified as "Producer" of firearms and small arms ammunitions for civilian markets. It does not include companies that cater to the military, government, and law enforcement markets.
- All companies deriving 5% or more revenue from manufacture and retail of civilian firearms and ammunition.

#### Tobacco

- o All companies classified as a "Producer".
- All companies deriving 5% or more aggregate revenue from the production, distribution, retail and supply of tobacco-related products.

#### Conventional Weapons

 All companies deriving 10% or more revenue from the production of conventional weapons and components.



 All companies deriving 10% or more aggregate revenue from weapons systems, components, and support systems and services.

#### Climate Change-based Exclusions Criteria:

#### Thermal Coal

- All companies deriving 5% or more 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 deriving 5% or more revenue (either reported or estimated) from the thermal coal-based power generation.
- o All companies that are deriving 50% or more power<sup>6</sup> from thermal coal.
- All companies that own thermal coal reserves.

#### Unconventional Oil & Gas

 All companies deriving 5% or more revenues from oil sands, oil shale (kerogen-rich deposits), shale gas, shale oil, coal-seam gas, coal-bed methane as well as Arctic onshore/offshore reserves.

#### Arctic Oil & Gas

- All companies deriving 5% or more revenue from Arctic Oil.
- All companies deriving 5% or more revenue from Arctic Gas.
- All companies with evidence of producing Arctic oil. This factor does not capture revenue from non-extraction activities (e.g. exploration, surveying, processing, refining); ownership of Arctic oil reserves with no associated extraction revenues; revenue from intra-company sales.
- All companies with evidence of producing Arctic gas. This factor does not capture revenue from non-extraction activities (e.g. exploration, surveying, processing, refining); ownership of Arctic gas reserves with no associated extraction revenues; revenue from intracompany sales.

#### Oil Sands

 All companies deriving 5% or more revenue from oil sands extraction, which own oil sands reserves and disclose evidence of deriving revenue from oil sands extraction.
 Companies that derive revenue from non-extraction activities (e.g. exploration, surveying, processing, refining) or intra-company sales are not excluded. Additionally,

 $<sup>^6</sup>$  As per  $\frac{\text{https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5\_chapter7.pdf}}{\text{median lifecycle emissions exceeding 100gCO2/kWh.}}$  thermal coal based power generation has median lifecycle emissions exceeding 100gCO2/kWh.



companies that own oil sands reserves with no associated revenue are also not excluded.

- Global Norms United Nations Global Compact Compliance
  - o All companies that fail to comply with the United Nations Global Compact principles.



## **Appendix II: Calculation of 3-Month Average Daily Traded Value** (ADTV)

$$ADTV = \frac{ATV}{252}$$

#### Where:

- ADTV = 3-month Average Daily Traded Value
- ATV = 3-month Annualized Traded Value

For details on the calculation of ATV, please refer to the MSCI Index Calculation Methodology (<a href="https://www.msci.com/index-methodology">https://www.msci.com/index-methodology</a>).



## **Appendix III: Methodology Set**

The Index is governed by a set of methodology and policy documents ("Methodology Set"), including the present index methodology document as mentioned below:

- Description of methodology set https://www.msci.com/index/methodology/latest/ReadMe
- MSCI Corporate Events Methodology https://www.msci.com/index/methodology/latest/CE
- MSCI Fundamental Data Methodology https://www.msci.com/index/methodology/latest/FundData
- MSCI Index Calculation Methodology https://www.msci.com/index/methodology/latest/IndexCalc
- MSCI Index Glossary of Terms https://www.msci.com/index/methodology/latest/IndexGlossary
- MSCI Index Policies <a href="https://www.msci.com/index/methodology/latest/IndexPolicy">https://www.msci.com/index/methodology/latest/IndexPolicy</a>
- MSCI Global Industry Classification Standard (GICS) Methodology https://www.msci.com/index/methodology/latest/GICS
- MSCI Global Investable Market Indexes Methodology https://www.msci.com/index/methodology/latest/GIMI
- MSCI Global ex Controversial Weapons Indexes Methodology https://www.msci.com/index/methodology/latest/XCW
- MSCI Adaptive Capped Indexes Methodology https://www.msci.com/index/methodology/latest/AdptiveCapped
- MSCI Thematic Relevance Score Methodology https://www.msci.com/index/methodology/latest/ThemRelevScore
- ESG Factors in Methodology\*

The Methodology Set for the Index can also be accessed from MSCI's webpage https://www.msci.com/index-methodology in the section 'Search Methodology by Index Name or Index Code'.

\* 'ESG Factors in Methodology' contains the list of environmental, social, and governance factors considered, and how they are applied in the methodology (e.g., selection, weighting or exclusion). It can be accessed in the Methodology Set as described above.



## **Appendix IV: Changes to this Document**

#### The following sections have been modified as of June 2023:

- Methodology book was updated to reflect the transition of the MSCI Global Investable Market Indexes (GIMI) to Quarterly Comprehensive Index Reviews.
- All references to "Semi-Annual Index Reviews" and "Quarterly Index Reviews" of the MSCI GIMI were replaced with "Index Reviews."
- Clarified the definition in Appendix I for civilian firearms revenue

#### The following sections have been modified as of July 2023:

- ESG Research Section moved to the end (changed from Section 2 to Section 4)
- Section 3.1 added to detail the monthly review of controversies and subsequent sections renumbered.

### The following sections have been modified as of May 2024:

- Threshold for power from thermal coal in Climate Change- based Exclusions Criteria in Appendix I updated
- Missing data treatment for Monthly Review of Controversies clarified in Section 3.1
- Updated the descriptions of MSCI ESG Research products in Section 4
- Added details on the Methodology Set for the Indexes.

#### The following sections have been modified as of February 2025

- The methodology and index names were updated. Effective February 3, 2025, MSCI China Tech IMI all Share Stock Connect ESG Filtered Index will be renamed to MSCI China Tech IMI all Share Stock Connect Filtered Index.
- Section 2.6 Treatment of Unrated Companies.
  - Moved treatment of companies when ratings and research is not available from MSCI ESG Research to a new section.
  - Added the treatment of companies when business involvement screening research or climate change metrics research are not available from MSCI ESG Research.
- Section 4.4: MSCI Climate Change Metrics. Added new section and sub-section under Climate Change Metrics to provide additional details on Fossil Fuels related activities



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