

# MSCI CHINA ALL SHARES IMI SELECT BATTERIES INDEX

November 2022

<b>Contents</b>	<b>1</b>	<b>Introduction</b>	<b>3</b>
	<b>2</b>	<b>Constructing the Index</b>	<b>4</b>
	2.1	Eligible Universe	4
	2.2	Weighting scheme	5
	2.3	Selected Universe	6
	2.4	Capping	6
	<b>3</b>	<b>Maintaining the Index</b>	<b>7</b>
	3.1	Semi-Annual Index Review	7
	3.2	Ongoing event-related maintenance	7
		<b>Appendix 1: Parent Index Construction</b>	<b>9</b>
		<b>Appendix 2: Calculation of 3-Month Average Daily Traded Value (ADTV)</b>	<b>9</b>

## 1 Introduction

The MSCI China All Shares IMI Select Batteries Index ('the Index') aims to represent the performance of Shanghai, Shenzhen and Hong Kong listed Chinese stocks, which are associated with the development of new products and services focused on the battery value chain.

## 2 Constructing the Index

The Index is constructed by selecting stocks from MSCI China All Shares IMI J-Series Ex Foreign Listings Index<sup>1</sup> (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 –

- Electro-chemical energy storage technologies
- Mining companies that produce metals used to manufacture batteries

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 Eligible Universe

All stocks in the Parent Index (as described in section 2) with Relevance Score<sup>2</sup> of 25% or more are included in the Eligible Universe. Further filtering is applied as detailed below.

#### 2.1.1 Liquidity Screening

Securities in the bottom quintile of the Parent Index by 3-month average daily trading value (3M ADTV) are excluded from the Eligible Universe. For the calculation of ADTV, please refer to Appendix 2.

#### 2.1.2 GICS<sup>®3</sup> sector and sub-industry filtering

Stocks mapped to the following GICS sub industries are excluded from the Eligible Universe.

<sup>1</sup> Please refer to Appendix 1 for details on Parent Index construction

<sup>2</sup> For details of calculation of Relevance Scores, please refer to the MSCI Thematic Relevance Score Methodology document (available on <https://www.msci.com/index-methodology>). The business activities in scope of the theme are as defined above in section 2.

<sup>3</sup> GICS, the Global Industry Classification Standard jointly developed by MSCI and S&P Global.

No.	GICS Sector	GICS Sub-Industries
1	Energy	<ul style="list-style-type: none"> <li>Oil &amp; Gas Equipment &amp; Services</li> <li>Oil &amp; Gas Refining &amp; Marketing</li> </ul>
2	Industrials	<ul style="list-style-type: none"> <li>Marine</li> <li>Marine Ports &amp; Services</li> <li>Heavy Electrical Equipment</li> </ul>
3	Information Technology	<ul style="list-style-type: none"> <li>Application Software</li> <li>Semiconductor Equipment</li> <li>Semiconductors</li> <li>Electronic Components</li> <li>Communications Equipment</li> </ul>
4	Communication Services	<ul style="list-style-type: none"> <li>Advertising</li> <li>Broadcasting</li> <li>Cable &amp; Satellite</li> <li>Publishing</li> <li>Movies &amp; Entertainment</li> <li>Interactive Home Entertainment</li> <li>Interactive Media &amp; Services</li> </ul>
5	Utilities	<ul style="list-style-type: none"> <li>Independent Power Producers &amp; Energy Traders</li> </ul>
6	Consumer Discretionary	<ul style="list-style-type: none"> <li>Motorcycle Manufacturers</li> </ul>
7	Materials	<ul style="list-style-type: none"> <li>Paper Packaging</li> </ul>

## 2.2 Weighting scheme

Stocks in the Eligible Universe are weighted by the product of Relevance Score and their free float adjusted market capitalization. The weights are then normalized to sum to 100%.

## 2.3 Selected Universe

The top 20 issuers ranked by their weight (as described in Section 2.8) are selected for inclusion in the final index. All eligible securities in the Parent Index from the 20 selected issuers are included in the final index.

If the number of issuers in the Eligible Universe is below 20, all the securities in the universe are selected for inclusion in the Index.

## 2.4 Capping

Constituent weights are capped at the issuer level to mitigate concentration risk in the Index. The issuer weight in the Index is capped at 20% at each Semi-Annual Index Review

Additionally, the Index constituents are also capped on an “as needed” basis to ensure that there are no concentrated positions between Semi-Annual Index Reviews. The Index constituents are capped to 25% at an issuer level at the end of any day on which the issuer capping constraint of 30% (without any buffers) is breached. The re-weighting will take place as of the close of the day when the Index breaches the capping constraints, so that the Index will always be within the constraints before the opening of the following trading day.

## **3 Maintaining the Index**

### **3.1 Semi-Annual Index Review**

The Index is reviewed on a semi-annual basis in May and November to coincide with the May and November Semi-Annual 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, and Selected 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.

### **3.2 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.

<b>EVENT TYPE</b>	<b>EVENT DETAILS</b>
<b>New additions to the Parent Index</b>	A new security added to the Parent Index (such as IPO and other early inclusions) will not be added to the index.
<b>Spin-Offs</b>	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 if the spin-off security is also added to the Parent Index. Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review.
<b>Merger/Acquisition</b>	<p>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.</p> <p>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.</p>
<b>Changes in Security Characteristics</b>	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: <https://www.msci.com/index-methodology>.



## Appendix 1: Parent Index Construction

The Parent Index MSCI China All Shares IMI J-Series ex Foreign Listings Index captures Large-, Mid- and Small-cap representation across China A- shares, B-shares, H-shares, Red-chips, and P-chips. The index aims to reflect the opportunity set of China share classes listed in Hong Kong, Shanghai and Shenzhen.

## Appendix 2: 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 Global Investable Market Indexes Methodology (<https://www.msci.com/index-methodology>).

**The following sections have been updated as of effective December 1, 2022:**

Section 2

- Updated to reference the MSCI Thematic Relevance Score Methodology
- Updated to exclude four additional GICS Subindustries

Section 3

- Updated to reflect the data cutoff date for Relevance Scores

## Contact us

clientservice@msci.com

### AMERICAS

Americas	1 888 588 4567 *
Atlanta	+ 1 404 551 3212
Boston	+ 1 617 532 0920
Chicago	+ 1 312 675 0545
Monterrey	+ 52 81 1253 4020
New York	+ 1 212 804 3901
San Francisco	+ 1 415 836 8800
São Paulo	+ 55 11 3706 1360
Toronto	+ 1 416 628 1007

### EUROPE, MIDDLE EAST & AFRICA

Cape Town	+ 27 21 673 0100
Frankfurt	+ 49 69 133 859 00
Geneva	+ 41 22 817 9777
London	+ 44 20 7618 2222
Milan	+ 39 02 5849 0415
Paris	0800 91 59 17 *

### ASIA PACIFIC

China North	10800 852 1032 *
China South	10800 152 1032 *
Hong Kong	+ 852 2844 9333
Mumbai	+ 91 22 6784 9160
Seoul	00798 8521 3392 *
Singapore	800 852 3749 *
Sydney	+ 61 2 9033 9333
Taipei	008 0112 7513 *
Thailand	0018 0015 6207 7181 *
Tokyo	+ 81 3 5290 1555

\* = toll free

## About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process.

To learn more, please visit [www.msci.com](http://www.msci.com).

*The process for submitting a formal index complaint can be found on the index regulation page of MSCI's website at: <https://www.msci.com/index-regulation>.*

## Notice and disclaimer

This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or disseminated in whole or in part without prior written permission from MSCI. All rights in the Information are reserved by MSCI and/or its Information Providers.

The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

Index returns do not represent the results of actual trading of investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on [www.msci.com](http://www.msci.com).

MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of [www.msci.com](http://www.msci.com).

MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body.

Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P Global Market Intelligence. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's.

MIFID2/MIFIR notice: MSCI ESG Research LLC does not distribute or act as an intermediary for financial instruments or structured deposits, nor does it deal on its own account, provide execution services for others or manage client accounts. No MSCI ESG Research product or service supports, promotes or is intended to support or promote any such activity. MSCI ESG Research is an independent provider of ESG data, reports and ratings based on published methodologies and available to clients on a subscription basis. We do not provide custom or one-off ratings or recommendations of securities or other financial instruments upon request.

For information about how MSCI collects and uses personal data, please refer to our Privacy Notice at <https://www.msci.com/privacy-pledge>.