

MSCI ACWI IMI Clean Energy Infrastructure Index

November 2022

Contents	1	Introduction	3
	2	MSCI ESG Research	4
	2.1	MSCI Sustainable Impact Metrics	4
	2.2	MSCI Impact Solutions: SDG Alignment	5
	2.3	MSCI ESG Business Involvement Screening Research	5
	3	Constructing the Index	6
	3.1	Determining the components of the Index	6
	3.2	Determining the Eligible Universe of the Index	7
	3.3	Determining the Selected Universe of the Index	8
	3.4	Weighting Scheme	9
	4	Maintaining the Index	10
	4.1	Semi-Annual Index Review	10
	4.2	Ongoing event-related maintenance	10
		Appendix 1: Thematic Framework for constructing the Batteries, Smart Grids and Future Fuels & Tech Components	12
	5.1	Selected Universe for each thematic component	12
	5.2	Weighting scheme	13

1 Introduction

The MSCI ACWI IMI Clean Energy Infrastructure Index (the 'Index') aims to represent the performance of a set of companies that are associated with the development of new products and services focused on one or more of the following components, based on the Index methodology criteria described below.

- Batteries
- Smart Grids
- Future Fuels and Technology
- Alternative Energy
- Energy Efficiency

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 MSCI Impact Solutions and MSCI ESG Business Involvement Screening Research.. For details on MSCI ESG Research’s full suite of ESG products, please refer to: <https://www.msci.com/esg-investing>.

2.1 MSCI Sustainable Impact Metrics

MSCI Sustainable Impact Metrics Taxonomy

Pillar	Themes	Categories
Environmental Impact	Climate Change	<ol style="list-style-type: none"> 1. Alternative energy 2. Energy efficiency 3. Green building
	Natural Capital	<ol style="list-style-type: none"> 4. Sustainable water 5. Pollution prevention and control 6. Sustainable agriculture
Social Impact	Basic needs	<ol style="list-style-type: none"> 7. Nutrition 8. Major disease treatments 9. Sanitation 10. Affordable real estate
	Empowerment	<ol style="list-style-type: none"> 11. SME finance 12. Education 13. Connectivity - Digital divide

Under each of the actionable social and environmental impact themes, MSCI ESG Research has identified specific categories of products and services that it has determined companies can offer as potential solutions to environmental and social challenges.

More detailed taxonomy for each category can be found in Section 2.4 of the MSCI ACWI Sustainable Impact Index Methodology available at <https://www.msci.com/index-methodology>.

2.2 MSCI Impact Solutions: SDG Alignment

MSCI Impact Solutions' SDG Alignment is designed to provide a holistic view of companies' net contribution – both positive and negative – towards addressing each of the 17 UN Sustainable Development Goals (SDGs). SDG Alignment assessments and scores include analysis of companies' operations, products and services, policies, and practices and their net contribution – positive and adverse – to addressing key global challenges.

The MSCI SDG Alignment framework provides 17 SDG Net Alignment scores and 17 SDG Net Alignment assessments (including Strongly Aligned, Aligned, Neutral, Misaligned and Strongly Misaligned) for each of the 17 global goals. In addition, the model offers assessments and scores for two dimensions, product alignment and operation alignment, for each company and for each of the 17 goals.

For more details on MSCI Impact Solutions including MSCI SDG Alignment, please refer to <https://www.msci.com/our-solutions/esg-investing/impact-solutions>.

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.

3 Constructing the Index

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

3.1 Determining the components of the Index

The Index is constructed by combining stocks from the following components using the rules described below:

- **Batteries** Component: This theme aims to measure the performance of a set of companies that are associated with development of new products and services focused on the battery value chain. It aims to select companies which have been assessed to have high exposure to business activities in –
 - Electro-chemical energy storage technologies
 - Mining companies that produce metals used to manufacture batteries
- **Smart Grids** Component: This theme aims to measure the performance of a set of companies that are associated with the development of new products and services focused on enabling two-way flow of data and electric power. It aims to select companies which have been assessed to have high exposure to business activities in –
 - Grid and energy management, including microgrids
 - Smart metering
- **Future Fuels & Tech** Component: This theme aims to measure the performance of a set of companies that are associated with the development of new products and services focused on future sources of energy and technologies for conduit industries. It aims to select companies which have been assessed to have high exposure to business activities in-
 - The Hydrogen fuel value chain
 - Concentrated Solar Power
 - Ground source heating
- **Alternative Energy** (including hydropower) Component¹

¹ Please refer to <https://www.msci.com/index-methodology> for the MSCI ACWI Sustainable Impact Index methodology for details of the calculation of the Alternative Energy component and the Energy Efficiency component.

- **Energy Efficiency** Component²

3.2 Determining the Eligible Universe of the Index

In order to construct the Eligible Universe, a combined relevance score for each security in the Parent Index is calculated as follows:

Combined relevance score = minimum (100%, {A + B + C + D+E}).

Value	Definition
A	Relevance score from the Batteries component if greater than 50%, 0 otherwise
B	Relevance score from the Smart Grids component if greater than 50%, 0 otherwise
C	Relevance Score from the Future Fuels & Tech component
D	Revenue percentage from Alternative Energy (including hydropower) component
E (Nov 2020 SAIR onwards)	Revenue percentage from Energy Efficiency <i>less</i> sum of revenue percentages from its following sub-categories: <ul style="list-style-type: none"> • IT Optimization Services and Infrastructure Solutions • Hybrid Vehicles • Zero Emission Vehicles
E (Prior to Nov 2020 SAIR)	Revenue percentage from Energy Efficiency component

Please refer to Appendix 1 for details of construction and Relevance Score calculation of the Batteries, Smart Grids and Future Fuels & Tech components.

The Eligible Universe of the Index is obtained by selecting all securities from the Parent Index whose combined relevance score is greater than or equal to 25%.

² Please refer to <https://www.msci.com/index-methodology> for the MSCI ACWI Sustainable Impact Index methodology for details of the calculation of the Alternative Energy component and the Energy Efficiency component.

3.3 Determining the Selected Universe of the Index

Further filtering to securities in the Eligible Universe is applied based on the criteria below to form the Selected Universe.

3.3.1 GICS^{®3} sector and sub-industry filtering

Securities mapped to the following GICS[®] sectors and sub-industries are excluded from the Selected Universe.

S. No.	GICS [®] Sectors	GICS [®] Sub-industries
1	Consumer Staples	All
2	Healthcare	All
3	Financials	All
4	Real Estate	All
5	Communication Services	All
6	Utilities	Gas Utilities Water Utilities
7	Information technology	Internet Software & Services
		IT Consulting & Other Services
		Data Processing & Outsourced Services
		Internet Services & Infrastructure
		Application Software
		Systems Software
8	Materials	Fertilizers & Agricultural Chemicals
		Construction Materials
		Metal & Glass Containers
9	Industrials	Trading Companies & Distributors
		Human Resource & Employment Services
		Research & Consulting Services
		Commercial Printing
		Office Services & Supplies
		Diversified Support Services
		Security & Alarm Services

³ GICS, the global industry classification standard jointly developed by MSCI and S&P Global.

3.3.2 ESG exclusion criteria

Controversial business exclusion criteria

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

- **Thermal Coal Mining:** All companies deriving 1% 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), intracompany sales of mined thermal coal, and revenue from coal trading (either reported or estimated)
- **Oil & Gas related activities:** All companies deriving 10% or more revenue from oil and gas related activities, including distribution / retail, equipment and services, extraction and production, petrochemicals, pipelines and transportation and refining but excluding biofuel production and sales and trading activities.
- **Power Generation:** All companies deriving 50% or more revenue from thermal coal-based power generation, liquid fuel-based power generation and natural gas based power generation.

3.3.3 SDG Net Alignment Screening

Securities which are classified as 'Misaligned' or 'Strongly Misaligned' with SDG 7 (Clean and Affordable Energy) or SDG 13 (Climate Action) on net alignment are excluded from the Selected Universe. Securities with missing data on net alignment for these SDGs are not excluded from the Selected Universe.

3.4 Weighting Scheme

Stocks included in the Index are weighted by the product of their combined relevance score and their float adjusted market capitalization. The weights are then normalized to 100%. Additionally, constituent weights are capped at the issuer level to mitigate concentration risk in the component. The issuer weight in the Index is capped at 5% at each rebalance.

4 Maintaining the Index

4.1 Semi-Annual Index Review

The Index is reviewed on a Semi-Annual basis in May and November 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 the 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.

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.

4.2 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.

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: <https://www.msci.com/index-methodology>.

Appendix 1: Thematic Framework for constructing the Batteries, Smart Grids and Future Fuels & Tech Components

5.1 Selected Universe for each thematic component

Stocks from the Parent Index that have a Relevance Score of 25% or more are included in the Selected Universe of that thematic component. For details of calculation of Relevance Scores, please refer to the MSCI Thematic Relevance Score Methodology document⁴. The business activities in scope of the theme are as defined in section 3.1.

Further filtering is applied to the Selected Universe as detailed below.

5.1.1 GICS® sector and sub industry filtering

Stocks in the corresponding component mapped to the following GICS sub industries are excluded from the Selected Universe for each thematic component.

Smart Grids Component

No.	GICS Sector	GICS Sub Industries
1	Consumer Staples	<ul style="list-style-type: none"> All Sub Industries
2	Healthcare	<ul style="list-style-type: none"> All Sub Industries
3	Consumer Discretionary	<ul style="list-style-type: none"> All Sub Industries
4	Industrials	<ul style="list-style-type: none"> Construction Machinery & Heavy Trucks Commercial Printing Office Services & Supplies
5	Information Technology	<ul style="list-style-type: none"> IT Consulting & Other Services Data Processing & Outsourced Services
6	Materials	<ul style="list-style-type: none"> Construction Materials

⁴ Please see https://www.msci.com/eqb/methodology/meth_docs/Relevance_Score_Calculation_Methodology.pdf

Batteries Component

No.	GICS Sector	GICS Sub Industries
1	Energy	<ul style="list-style-type: none"> Oil & Gas Equipment & Services Oil & Gas Refining & Marketing
2	Industrials	<ul style="list-style-type: none"> Marine Marine Ports & Services Heavy Electrical Equipment
3	Information Technology	<ul style="list-style-type: none"> Application Software Semiconductor Equipment
4	Communication Services	<ul style="list-style-type: none"> Advertising Broadcasting Cable & Satellite Publishing Movies & Entertainment Interactive Home Entertainment Interactive Media & Services
5	Utilities	<ul style="list-style-type: none"> Independent Power Producers & Energy Traders

5.2 Weighting scheme

Stocks included in the thematic component are weighted by the product of Relevance Score and their float adjusted market capitalization. The weights are then normalized to 100%.

The following sections have been modified effective December 1, 2022:

- Appendix 1 has been updated to reference the MSCI Thematic Relevance Score Methodology
- Section 4 has been updated to reflect the data cutoff date for Relevance Scores

Contact us

[msci.com/contact-us](https://www.msci.com/contact-us)

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.

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 be 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.

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.

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 S&P Global Market Intelligence.

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.

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