

MSCI WORLD IMPACT ESG SELECT CHILDREN'S RIGHTS INDEX METHODOLOGY

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1 Introduction

The MSCI World Impact ESG Select Children's Rights Index aims to represent the performance of a set of stocks that are determined to derive higher revenue from Sustainable Impact ¹activities. The Index uses an ESG screen to exclude securities of companies with low ESG performance and companies that have Child Labor Rights Score less than 5 based on MSCI ESG Research metrics. The index aims to achieve diversification with country and sector constraints. Taking into account UCITS III investment limits, MSCI applies constraints on the weights of the index. These constraints are applied in line with the MSCI 10/40 Index Methodology.

¹ <https://www.msci.com/esg-sustainable-impact-metrics>

2 MSCI ESG RESEARCH

The MSCI World Impact ESG Select Children's Rights Index uses company ratings and research provided by MSCI ESG Research LLC. The index uses the following MSCI ESG Research products: MSCI ESG Ratings, MSCI ESG Controversies, MSCI Business Involvement Screening Research, and MSCI Climate Change Metrics.

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

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 (formerly known as MSCI 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, please refer to : <https://www.msci.com/documents/10199/acbe7c8a-a4e4-49de-9cf8-5e957245b86b>

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

2.4 MSCI ESG SUSTAINABLE IMPACT METRICS

MSCI ESG Research’s Sustainable Impact Metrics is designed to identify companies that currently offer products or services that address at least one of the major social and environmental challenges as defined by the UN Sustainable Development Goals. Designed as a positive screen, it is designed to highlight companies that are deriving sales from products or services that may have a positive impact on society and the environment under the following categories:

Figure 1 – MSCI Sustainable Impact Taxonomy

Pillar	Themes	Categories
Environmental*	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
Social	Basic needs	<ol style="list-style-type: none"> 6. Nutrition 7. Major Disease Treatment 8. Sanitation 9. Affordable Real Estate
	Empowerment	<ol style="list-style-type: none"> 10. SME Finance 11. Education

* note that the environmental metrics are based on MSCI ESG Research Cleantech Metrics

2.4.1 MSCI SUSTAINABLE IMPACT CATEGORIES

ALTERNATIVE ENERGY

This category includes products, services, or infrastructure projects supporting the development or delivery of renewable energy and alternative fuels, including:

- Generation, transmission, and distribution of electricity from renewable sources including wind, solar, geothermal, biomass, small scale hydro (25 MW), waste energy, and wave tidal.
- Fuels, technology, and infrastructure for the production and distribution of cleaner hybrid fuels, hydrogen, fuel cells, and alternative fuels, including biodiesel, biogas, and cellulosic ethanol. Not eligible under this category: large scale hydroelectric plants (>25 MW installed capacity)

ENERGY EFFICIENCY

This category includes products, services, infrastructure, or technologies that proactively address the growing global demand for energy while minimizing effects on the environment, including:

- Technologies and systems that promote efficiency of industrial operations (e.g., turbines, motors, and engines), industrial automation and controls, and optimization systems (e.g., cloud computing, data optimization systems).
- Infrastructure, technology, and systems that increase the efficiency of power management, power distribution, power storage (e.g., batteries), demand-side management (e.g., wireless sensors, advanced meters, smart grid).
- Technologies and systems focused on reducing fuel consumption of transport vehicles and industrial operations (e.g., hybrid/electric vehicles)
- Sustainable transportation infrastructure including urban mass transit, efficiency improvements of public transportation fleets, electric vehicle charging, improved traffic systems.
- Architectural glass, efficient lighting, insulation, building automation and controls, and devices and systems designed to be utilized in the design and construction of environmentally sustainable buildings.

MSCI ESG Research's Energy Efficiency category does not include:

- Corporate operational energy efficiency efforts, such as efficiency gains in manufacturing, transporting, or distributing standard products or services.
- Energy efficient components of finished goods.

SUSTAINABLE WATER

This category includes products, services, and projects that attempt to resolve water scarcity and water quality issues, including minimizing and monitoring current water

use and demand increases, improving the quality of water supply, and improving the availability and reliability of water, including:

- Infrastructure and engineering projects developing new or repairing existing water and sanitation pipelines, including equipment and technology providers, resulting in improved quality and/or water use efficiency
- Technologies and products that reduce, reuse, or recycle water as a means of conservation (smart metering devices, low-flow equipment, and rainwater harvesting systems)
- Advanced materials, equipment, technologies, and services that filter or chemically treat wastewater for consumer or industrial use, including desalination

MSCI ESG Research's Sustainable Water category does not include:

- Distribution of drinking water without measurable improvements to water quality
- Water efficiency

GREEN BUILDING

This category includes design, construction, redevelopment, retrofitting, or acquisition of 'green' certified properties – subject to local green building criteria, including:

- Properties that are certified as 'green' based on the local country's environmental performance standard (e.g., based on Energy Star, NABERS >3, or equivalent) or environmental design standards (e.g., LEED Certified, BREEAM, or local equivalent).

MSCI ESG Research's Green Building category does not include:

- Building materials, equipment, or supplies that are already included in the other themes. Examples include: Solar panels, energy efficient lighting, advanced materials used in construction, smart grids, etc.

POLLUTION PREVENTION

This category includes products, services, or projects that support pollution prevention, waste minimization, or recycling as a means of alleviating the burden of unsustainable waste generation, including:

- Technologies, systems, and projects aiming to reduce air pollution (environmental IT, conventional pollution control systems, CCS)

- Projects to salvage, use, reuse, and recycle post-consumer waste products
- Waste treatment and environmental remediation projects, including land treatment and brownfield cleanup, soil washing, chemical oxidation, and bioremediation
- Sustainable alternative materials including raw materials, paints, adhesives, etc. used primarily in the construction of environmentally sustainable buildings.

MSCI ESG Research’s Pollution Prevention category does not include:

- Landfill or incineration waste treatment projects without a specific waste-to-energy component.

NUTRITION

This category includes products and services classified under the “basic products” category, as defined by Choices International². According to Choices International, basic products refer to those products that contribute to the daily intakes of essential nutrients while non-basic are not needed to fulfill our daily requirements.

Figure 2 – Examples of “basic” and “non-basic” products

Examples of Basic products	Examples of non-basic products
<ul style="list-style-type: none"> • fruits and vegetables • beans and legumes • sources of carbohydrates • meat, fish, poultry, eggs, and meat substitutes • dairy products • oils, fats and fat-containing spreads • nuts • water • main meals 	<ul style="list-style-type: none"> • soups • sauces • snacks (including pastry, ice cream, and sweet and savoury snacks) • beverages (excluding water) and fruit juices • bread toppings

Source: Choices International, MSCI ESG Research

² For more information on Choices International refer to <http://www.choicesprogramme.org/public/criteria/international-product-criteria-2015-def.pdf>

MAJOR DISEASE TREATMENTS

This category includes drugs and healthcare equipment used to treat the world’s major diseases. Major diseases include those diseases with the highest DALY³ as well as orphan diseases⁴ and tropical neglected diseases⁵.

Figure 3 – Examples of major diseases included in the category’s scope

Major diseases	Neglected diseases	Orphan diseases
<ul style="list-style-type: none"> • Ischaemic heart disease • Lower respiratory infections • Stroke • Diarrhoeal diseases • Chronic obstructive pulmonary disease • HIV/AIDS • Unipolar depressive disorders • Diabetes mellitus • Malaria • Tuberculosis • Trachea, bronchus, lung cancers • Cirrhosis of the liver • Meningitis • Kidney diseases • Anxiety disorders • Endocrine, blood, immune disorders • Asthma • Hypertensive heart disease • Liver cancer • Epilepsy • Hepatitis B and C 	<ul style="list-style-type: none"> • Schistosomiasis • Leishmaniasis • Lymphatic filariasis • Rabies • Dengue • Trypanosomiasis • Onchocerciasis • Chagas disease • Trachoma • Leprosy • Buruli Ulcer • Yaws 	<ul style="list-style-type: none"> • Cystic fibrosis • Wilson’s disease • Gaucher disease • Pompe disease

Source: WHO, MSCI ESG Research

³ The WHO daily adjusted life year (DALY) represents the number of years of life lost due to poor health/disability and earlier death. The sum of these DALYs across the population represents the global burden of disease. More information on DALY can be found here: http://www.who.int/healthinfo/global_burden_disease/metrics_daly/en

⁴ Orphan drugs refer to treatments for orphan diseases which affect about 1 in 1500 people, as defined by the FDA. <http://www.fda.gov/ForIndustry/DevelopingProductsforRareDiseasesConditions/HowtoapplyforOrphanProductDesignation/default.htm>

⁵ More information on neglected diseases can be found here: http://www.who.int/neglected_diseases/diseases/en/

SANITATION

This category includes products and services used for basic sanitation including:

Figure 4 – Example of sanitation products

Examples of basic sanitary products	Examples of non basic sanitary products
<ul style="list-style-type: none"> • soaps • oral care (toothbrush, toothpaste) • detergents • water purifier • sanitary napkins (feminine pad) • toilet paper • diapers (adult, child) • toilet basin • washbasins 	<ul style="list-style-type: none"> • hair oil • deodorants • skin care • color cosmetics • perfumes • air care • fragrance • make up • After shave gel • Sunscreen cream • Fabric softener

Source: MSCI ESG Research

AFFORDABLE REAL ESTATE

This category includes low income residential and commercial properties. Residential properties take the form of homes for reconstruction efforts, affordable residences for the elderly and units devoted to be managed under social rent or purchased through shared equity or shared ownership. Low income commercial properties include commercial spaces for Small and Medium Enterprises (SMEs).

SME FINANCE

This category includes loans provided to small and medium enterprises.

EDUCATION

This category includes revenues coming from educational products and services used in a school environment (i.e. training software, educational books and materials used by students and teachers as part of their education programs). General literature, illustrated books, newspaper, magazines and TV programs were not included in our assessment.

2.4.2 RESEARCH PROCESS FOR MSCI ESG SUSTAINABLE IMPACT METRICS

MSCI ESG Research includes a team of analysts dedicated to covering the companies involved in sustainable impact themes. On an annual basis, MSCI ESG Research analysts conduct a review of MSCI ACWI Index constituents to identify those companies that generate revenues from sustainable impact themes. In addition, MSCI ESG Research conducts data verification by engaging with subject companies in order to confirm public data concerning a company's involvement and the nature of such involvement.

ANNUAL UPDATES

On an annual basis, MSCI ESG Research analysts conduct a review of companies in the MSCI ACWI Index for involvement. The annual update involves:

1. **Identification of Sustainable Impact Universe:** the Sustainable Impact Universe is first defined by MSCI ESG Research. For more information regarding the Sustainable Impact Universe methodology, please refer to MSCI ESG Research Sustainable Impact Metrics methodology.
2. **The review of company's literature:** for those companies included in the Sustainable Impact Universe analysts review the company regulatory filings, annual reports, company websites, and third party sources to identify potential revenues from sustainable impact categories. For each category, analysts assess the company's product pipeline and only take into account revenues coming from products that match the sustainable impact categories definition outlined above.
3. **Company verification:** all companies in the Sustainable Impact Universe are contacted to verify the level of involvement in the sustainable impact categories.

3 Index Construction

The MSCI World Impact ESG Select Children’s Rights Index is constructed from the MSCI World Index (the “Parent Index”).

The following steps are applied at initial construction as well as at subsequent Semi-Annual Index Reviews of the MSCI World Select Sustainable Mega Trends Index:

- ESG Eligibility Criteria
- Sustainable Impact Revenue Criteria
- Additional Screens
- Security Selection
- Security Weighting

3.1 ESG ELIGIBILITY CRITERIA

3.1.1 VALUES- AND CLIMATE CHANGE-BASED EXCLUSIONS

The MSCI World Impact ESG Select Children’s Rights Index uses MSCI ESG Business Involvement Screening Research and MSCI Climate Change Metrics to identify companies that are involved in the following business activities. Companies that meet the below values- and climate change-based criteria are excluded from the MSCI World Impact ESG Select Children’s Rights Index. Please refer to Appendix 3 for details on these criteria.

- Adult Entertainment
- Gambling
- Tobacco
- Controversial Weapons
- Nuclear Weapons
- Conventional Weapons
- Alcohol
- Breast Milk Substitutes

3.1.2 ESG CONTROVERSIES SCORE ELIGIBILITY

The MSCI World Impact ESG Select Children’s Rights Index uses MSCI ESG Controversies Scores to identify companies that are involved in very serious controversies involving the environmental, social, or governance impact of their operations and/or products and services. Companies are required to have an MSCI ESG Controversies Score of 1 or above to be eligible for inclusion in the MSCI World Impact ESG Select Children’s Rights Index.

3.1.3 ESG RATINGS ELIGIBILITY

The MSCI World Impact ESG Select Children’s Rights Index uses MSCI ESG Ratings to rate companies based on the environmental, social, or governance impact of their operations and/or products and services. Companies are required to have an MSCI ESG Ratings of BB or above to be eligible for inclusion in the MSCI World Impact ESG Select Children’s Rights Index

3.1.4 CHILD LABOR RIGHTS SCORE ELIGIBILITY

The MSCI World Impact ESG Select Children’s Rights Index uses MSCI ESG Child Labor Score to identify companies that are involved in child labor controversies. Companies are required to have an MSCI ESG Child Labor Score of above 4 to be eligible for inclusion in the MSCI World Impact ESG Select Children’s Rights Index

3.2 ADDITIONAL SCREENS

3.2.1 LIQUIDITY SCREEN

The remaining securities from above are subsequently screened for 3-month ADTV to be greater than USD 5 Million.

ADTV is defined as Average Daily Traded Volume and is calculated as:

$$ADTV_{3M} = \frac{ATV_{3M}^6}{252}$$

⁶ MSCI Index Calculation Methodology at
https://www.msci.com/eqb/methodology/meth_docs/MSCI_IndexCalcMethodology_Apr2019.pdf
https://www.msci.com/documents/10199/7366222/MSCI_GIMIMethodology_Jun2019.pdf/5dc8116b-6d0f-bdd2-7f51-1882b4470059

3.3 SECURITY SELECTION

The securities from the eligible universe are subsequently filtered to include a single security per issuer. For issuers having multiple securities which are part of the eligible universe, the security with the highest 3-month ADTV is selected. From the securities remaining post screenings, the following steps are followed:

- Step 1
Select the Top 50% securities that have highest contribution of sustainable impact revenue to the total revenue of the company. If two or more securities have the same revenue share, the one with higher total market capitalization is selected.
- Step 2
The selection of constituents from the securities remaining after Step 1 is done using the optimization process.

3.4 WEIGHTING SCHEME

The weights of the securities are an outcome of the optimization process. The optimization relies on factor exposures for all the securities in the remaining universe and the factor covariance matrix of the relevant Barra Equity Model⁷. The optimization is performed using EUR as base currency. The optimization objective is to maximize the alpha score (representative of the exposure to a combination of dividend yield factor and low volatility factor) under various optimization constraints.

CALCULATION OF THE ALPHA SCORE

$$\alpha(i) = 0.75 \cdot F_1(i) + 0.25 \cdot F_2(i)$$

Where,

$F_1(i)$ = Factor exposure of each security i to the target Dividend Yield factor

$F_2(i)$ = Factor exposure of each security i to the target Low Volatility factor

⁷ Please Refer to Appendix II

3.5 OPTIMIZATION CONSTRAINTS

The Index is constructed using MSCI's Barra® Open Optimizer in combination with the Barra Equity Model⁸. The optimization uses the above selected securities in Step 2 as the universe of eligible securities and the specified optimization objective and constraints to determine the MSCI World Impact ESG Select Children's Rights Index.

The Barra Open Optimizer determines the optimal solution, to achieve relatively high exposure to dividend yield factor by maximizing the exposure to the dividend yield factor less a penalty for the common factor and stock-specific risk characteristics of each potential constituent.

At each quarterly rebalance, the following optimization constraints are applied which aim to ensure investability while achieving high dividend yield and low volatility⁹:

No.	Parameter	Constraint
1	Minimum Number of Constituents	70
2	Maximum Number of Constituents	80
3	Maximum weight of a single security	5%
4	Security Weight as a Multiple of its weight in the Parent Index	10000
5	Maximum Weight to a GICS sector	20%
6	Maximum Weight to a Region ¹⁰	70%
7	One Way Turnover	100%
8	The portfolio risk currency	EUR
9	Specific Risk Aversion	0.075
10	Common Factor Risk Aversion	0.0075
11	Active Exposure to Leverage, Earnings Variability, Profit, Earnings Quality, Investment Quality, Book-to-price, growth Barra style factors	(0%, +0.75%)

⁸ Please Refer to Appendix II

⁹ Appendix I

¹⁰ Appendix IV

4 Maintenance of the Index

4.1 SEMI ANNUAL INDEX REVIEWS

The MSCI World Impact ESG Select Children's Rights Index is reviewed on a semi-annual basis. The pro forma index is in general announced nine business days before the rebalance date.

4.2 ONGOING EVENT RELATED CHANGES

The following section briefly describes the treatment of common corporate events within the MSCI World Impact ESG Select Children's Rights 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 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 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 I: Definitions of Dividend Yield and Low Volatility Style Factors in Barra Global Total Market Equity Model for Long Term Investors

These factors are described using MSCI's Barra Global Equity Model for Long-Term Investors (GEMTLT). The precise choice of component factors used to represent each broad factor group is governed by the current model used for the optimization, which may change with a new release of the Barra Equity Model.

Dividend Yield

Definition = $0.5 \cdot \text{DTOP} + 0.5 \cdot \text{DTOPF}$

Where

DTOP = Dividend Yield

Computed by dividing the trailing 12-month dividend per share by the price at the last month end.

DTOPF = Analyst-Predicted Dividend-to-Price

Computed by dividing the 12-month forward-looking dividend per share (DPS) by the current price. Forward-looking DPS are defined as a weighted average between the average analyst-predicted DPS for the current and next fiscal years.

Low Volatility

Definition = $0.4 \cdot \text{BETA} + 0.6 \cdot \text{RESVOL}$

BETA = Historical Beta

Computed as the slope coefficient from a time-series regression of stock excess returns against the cap-weighted excess returns of the estimation universe over a trailing window of 504 trading days, with a 252-day half-life.

The returns are aggregated over four-day windows to reduce the effect of non-synchronicity and auto-correlation.

RESVOL = Residual Volatility = $0.4 \cdot \text{HSIGMA} + 0.4 \cdot \text{DASTD} + 0.2 \cdot \text{CMRA}$

HSIGMA = Historical Sigma

Computed as the volatility of the residual returns from the HBETA regression.

DASTD = Daily Standard Deviation

Computed as the volatility of daily excess returns over the past 252 trading days with a 42-day half-life.

CMRA = Cumulative Range

The cumulative excess log return over the past T months, with each month defined as the previous 21 trading days, is first computed as:

$$Z(t) = \sum_{\tau=0}^{T-1} \ln(1 + r_{t-\tau})$$

Where, r_t is the stock excess return for the month t. The CMRA description is then given by:

$$\text{CMRA}(t) = Z_{\max} - Z_{\min}$$

Where, $Z_{\max} = \max\{Z(T)\}$, $Z_{\min} = \min\{Z(T)\}$ for $T = 1, \dots, 12$.

Appendix II: New Release of BARRA® EQUITY MODEL or BARRA® OPTIMIZER

The methodology presently uses MSCI Barra Global Equity Model for Long-Term Investors (“GEMTL”) for the optimization. A new release of the relevant Barra Equity Model or Barra Optimizer may replace the former version within a suitable timeframe.

Appendix III: Values and Climate Change-Based Exclusion Criteria

The MSCI World Impact ESG Select Children's Rights Index is constructed with an aim to reflect the performance of companies that are consistent with specific values- and climate change-based criteria.

Values-based Exclusions Criteria

- **Adult Entertainment**
 - All companies that have an industry tie to adult entertainment, including the producer, distributor, retailer, or ownership categories. In particular, the screen excludes companies that produce, direct, publish, retail, or distribute adult entertainment materials, as well as have ownership ties.
- **Gambling**
 - All companies that have an industry tie to gambling through the operation, support, licensing, or ownership categories. In particular, the screen excludes companies that own or operate gambling facilities, provide key products or services fundamental to gambling operations, license their company name or brand name to gambling products, or have ownership ties.
- **Tobacco**
 - 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
- **Controversial Weapons**
 - All companies that manufacture cluster munitions, essential components of these products, and delivery platforms capable of carrying and deploying cluster munitions.
 - All companies that manufacture anti-personnel landmines, anti-vehicle landmines, and essential components of anti-personnel landmines.
 - All companies that manufacture weapons, ammunition, and armor made with depleted uranium (DU) and DU alloys.
 - All companies that manufacture biological or chemical weapons, and essential components of these products.

- All companies that manufacture weapons utilizing laser technology to cause permanent blindness.
- All companies that manufacture weapons using non-detectable fragments to inflict injury.
- All companies that manufacture weapons using white phosphorus.
- All companies with ownership of 20% or more of a weapons, components, or delivery platforms producer for the above-mentioned controversial weapons. The minimum limit is raised to 50% for financial companies having an ownership in a company that manufactures controversial weapons, key components, or delivery platforms of controversial weapons
- All companies owned 50% or more by a company involved in weapons, components, or delivery platforms production for the above-mentioned controversial weapons.
- **Nuclear Weapons**
 - 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
 - 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) but can be used in nuclear weapons
 - All companies that manufacture or assemble delivery platforms that were not developed or not significantly modified for the exclusive delivery of nuclear weapons but have the capability to deliver nuclear weapons
 - All companies that manufacture components for nuclear-exclusive delivery platforms

- **Conventional Weapons**

- All companies deriving 5% or more revenue from the production of conventional weapons and components
- All companies deriving 15% or more aggregate revenue from weapons systems, components, and support systems and services

Climate Change-based Exclusions Criteria

- **Thermal Coal Mining**

- All companies deriving more than 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

- **Unconventional Oil & Gas Extraction**

- All companies deriving more than 10% revenue (either reported or estimated) from unconventional oil and gas production. It includes revenue from the production of oil sands, oil shale (kerogen-rich deposits), shale gas, shale oil, coal seam gas, and coal bed methane, as well as revenue from onshore or offshore oil and gas production in the Arctic region. It excludes revenue from conventional oil and gas production including deepwater, shallow water, and other onshore/offshore oil and gas.

- **Conventional Oil & Gas Extraction**

- All companies deriving more than 0% revenue (either reported or estimated) from conventional oil and gas production. It includes revenue from the production of deepwater shallow water, and other onshore/offshore oil and gas. It excludes revenue from unconventional oil and gas production (oil sands, shale oil, shale gas) and onshore/offshore oil and gas production in the Arctic region.

- **Thermal Coal-based Power Generation**

- All companies generating more than 10% of their total electricity from thermal coal in a given year
- All companies that have more than 10% of installed capacity attributed to thermal coal in a given year

- All companies deriving more than 10% revenue (either reported or estimated) from thermal coal-based power generation
- **Oil & Gas-based Power Generation**
 - All companies generating more than 30% of their total electricity from liquid fuel and natural gas in a given year
 - All companies that have more than 30% of installed capacity attributed to liquid fuel and natural gas in a given year
 - All companies deriving more than 30% revenue (either reported or estimated) from liquid fuel- and natural gas-based power generation
- **Nuclear Power-based Power Generation**
 - All companies generating more than 30% of their total electricity from nuclear power in a given year
 - All companies that have more than 30% of installed capacity attributed to nuclear sources in a given fiscal year
 - All companies deriving more than 30% revenue (either reported or estimated) from ownership or operation of nuclear power plants

TIMELINE OF SCREEN ADJUSTMENT

Some criteria from the above-mentioned screens for the MSCI World Select Sustainable Mega Trends Index, including Tobacco, Thermal Coal Mining, Thermal Coal-based Power Generation, and Unconventional Oil & Gas Extraction, will be adjusted between 2020 and 2025 to reflect the adoption of stricter thresholds over time. The changes will be implemented at the November Index Review of the preceding year, so that the index reflects the thresholds for the relevant calendar year.

Screens that will be modified

- **Tobacco**

2019 to 2024	2025 onwards
All companies classified as a “Producer”;	All companies that have an industry tie to tobacco products through the

All companies deriving 5% or more aggregate revenue from the production, distribution, retail and supply of tobacco-related products	distributor, licensor, retailer, supplier, or ownership categories.
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- **Thermal Coal Mining**

2019 to 2021	2022 to 2024	2025 onwards
All companies deriving more than 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.	All companies deriving more than 5% revenue (either reported or estimated) from the mining of thermal coal (including lignite, bituminous, anthracite and steam coal) and its sale to external parties.	All companies deriving more than 0% revenue (either reported or estimated) from the mining of thermal coal (including lignite, bituminous, anthracite and steam coal) and its sale to external parties.

- **Thermal Coal-based Power Generation**

2019 to 2024	2025 onwards
<p>All companies generating more than 10% of their total electricity from thermal coal in a given year;</p> <p>All companies that have more than 10% of installed capacity attributed to thermal coal in a given year;</p> <p>All companies deriving more than 10% revenue (either reported or estimated) from thermal coal-based power generation</p>	<p>All companies generating more than 0% of their total electricity from thermal coal in a given year;</p> <p>All companies that have more than 0% of installed capacity attributed to thermal coal in a given year;</p> <p>All companies deriving more than 0% revenue (either reported or estimated) from thermal coal-based power generation</p>

- **Unconventional Oil & Gas Extraction**

2019 to 2021	2022 to 2024	2025 onwards
All companies deriving more than 10% revenue (either reported or estimated) from unconventional oil and gas production.	All companies deriving more than 5% revenue (either reported or estimated) from unconventional oil and gas production.	All companies deriving more than 0% revenue (either reported or estimated) from unconventional oil and gas production.

Appendix IV: Definition of Regions

For the MSCI World Select Sustainable Mega Trends Index, we define the following 3 custom regions:

No.	Region	Countries
1	USA	USA
2	Europe	Denmark, Netherlands, Austria, Sweden, Portugal, Ireland, United Kingdom, Spain, Norway, Finland, Belgium, Italy, France, Germany, Switzerland, Israel
3	Asia	Australia, Singapore, New Zealand, Hong Kong, Japan

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