

FAQ – Understanding MSCI Climate Indexes

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Investor Objectives and MSCI Climate Indexes

What Climate Indexes Does MSCI Offer?

MSCI climate indexes are based on our <u>Climate Analytical Framework</u>. The ultimate objective is to help investors make an efficient allocation of capital toward the most productive assets in the long term by offering relevant benchmarks. These tools can help facilitate a balanced transition toward net-zero emissions by 2050.

To achieve these objectives, MSCI has launched the following four categories of standard climate indexes:

- The MSCI Low Carbon Target and Leaders Indexes focus on reducing carbon-emission intensity and fossil-fuel-reserves exposure.
- The MSCI Climate Change Index reduces exposure to carbon-intensive firms, increases exposure to climate-solutions firms and aligns with the requirements of the EU Climate Transition Benchmark.
- The MSCI Climate Paris Aligned Index reduces exposure to firms with higher physical and transition climate risk and increases exposure to companies pursuing opportunities arising from the transition to a lower-carbon economy. It implements a decarbonization pathway that is designed to exceed the requirements of the EU Paris-aligned Benchmark.
- The MSCI Global Environment Index exclusively focuses on companies that contribute to a more environmentally sustainable economy.

Overall, these indexes may be used to help mitigate climate risks and identify new investment opportunities.

Why Did MSCI Launch Various Climate Indexes?

Investors can embed climate change in their investment objectives in different ways. Some of these investors seek to make their portfolios more climate-resilient, wish to identify novel investment opportunities arising from the energy transition or allocate assets in a way that supports decarbonization while remaining consistent with regulatory developments. MSCI climate indexes are designed to facilitate these heterogeneous objectives. MSCI continuously monitors industry and regulatory developments and is committed to the continued development of our climate-change solutions to meet investor demand.

What Are the MSCI Climate Indexes Used For?

MSCI climate indexes can be used as part of an active or passive investment strategy. They are being used by global investors for various purposes:



- As a policy benchmark to evaluate the performance of investment strategies, including asset allocation.
- To benchmark the performance of active investment strategies.
- As part of an overlay strategy to existing portfolio investment policies by overweighting firms that may benefit from climate opportunities.
- As the underlying index for ETFs, indexed mutual funds or structured products.
- As a tool to engage with invested companies.

How Do the MSCI Climate Indexes Support Corporate Engagement?

Investors can employ MSCI climate indexes to monitor and engage with the companies they are invested in. For instance, the Low Carbon Transition score¹ provides a quantitative and transparent assessment of how effectively firms have managed their climate-transition-related risk exposures. Using this score, investors can identify portfolio companies that have lagged in their climate risk management and prioritize them for engagement through company-level structured talks or voting arrangements.

MSCI climate indexes also promote engagement indirectly by tilting from climate laggards toward climate leaders. Firms that are excluded or underweighted in the climate indexes may find it costlier to raise capital and take corrective actions to improve their climate profile. Such actions include investing more in green technology, making more informative climate disclosures and reducing their exposure to climate risk.

Are the Indexes Better Suited to a Particular Investment Objective?

MSCI climate indexes are designed to be used across various asset-allocation building blocks and help measure and monitor investors' equity allocation.

Some typical investment objectives for each index are highlighted below:

 Data from the MSCI Low Carbon Index and the MSCI ex Fossil Fuel Index may be used in a pure-play approach to minimize short-term portfolio carbon footprint and mitigate long-term stranded-asset risk.

¹ LCT scores are used in the MSCI Climate Change Index and the Paris Aligned Index.



- The MSCI Climate Change Index could be used by investors who want to redeploy capital from heavy emitters to firms better positioned to take advantage of emerging climate opportunities, and implement a long-term decarbonization pathway.
- The MSCI Climate Paris Aligned Index may be adopted to address climate change holistically by aligning investor portfolios to a net-zero world, designed to incorporate TCFD recommendations and to exceed the EU Paris Aligned Benchmark Regulation.
- The MSCI Global Environment Index facilitates investment objectives where investors would like to focus primarily on climate solutions by investing in alternative-energy themes.

How Have the Different Indexes Improved the Climate Profile?

MSCI climate indexes have improved the climate profile of their parent index by selecting, tilting or optimizing exposure to firms that better manage their climate risks and opportunities. For instance, the MSCI Low Carbon Index reduces carbon emission intensity and lowers exposure to fossil-fuel reserves. In addition to this tilting approach, the MSCI Climate Index and Paris Aligned Index impose a decarbonization pathway that is designed to meet regulatory standards. As discussed in an MSCI Product Insight, the Paris Aligned Index further improved the climate profile by decreasing physical risk by at least 50% relative to the underlying market benchmark. The Global Environment Index focuses exclusively on firms that offer climate solutions to improve the climate profile for investors.

What Type of Emissions Are Included?

The MSCI Low Carbon indexes currently use Scope 1 and 2 emissions. The MSCI Climate Change Index and the Paris Aligned Benchmark Index incorporate total emissions computed using Scope 1, 2 and 3 data. Measuring the carbon footprint of the Global Environment index is less relevant because it focuses exclusively on firms that derive more than 50% of their revenue from alternative energy. Please see Appendix 1 of the Global Environment's methodology document for detailed description.

Does MSCI also Offer Climate Indexes for Fixed Income?

Yes, MSCI offers various climate indexes for fixed-income investors. For more information on the MSCI Climate Change Index and Climate Paris Aligned Index for corporate bonds, please refer to this <u>webpage</u>.

Regulatory Landscape and MSCI Climate Indexes



What Is the EU Benchmark Regulation?

The EU Benchmark Regulation was amended to promote transparency on ESG integration by benchmark providers and mitigate greenwashing concerns. Among other standards, it lays down the minimum criteria indexes must meet to be labeled EU Climate Transition Benchmarks (CTB) and EU Paris-aligned Benchmarks (EU PAB). This ensures a significant level of comparability of methodologies across benchmark administrators and provides investors with an appropriate tool that is aligned with improving their climate profile.

How Does the MSCI Paris Aligned Index Meet PAB Requirements?

The MSCI Climate Paris Aligned Index is designed to incorporate and use the EU Paris Aligned Benchmark's (PAB) minimum requirements as a starting point. MSCI supplemented these minimum requirements where relevant, based on additional analysis and datasets. It imposes a 10% annual self-decarbonization rate in order to strictly align with a 1.5 degree Celsius (1.5°C) temperature rise, as compared to the minimum 7% stipulated by the benchmark regulation to align with well below 2°C. It further seeks to reduce the physical risk of extreme weather events by 50% as compared to the underlying market benchmark. Exhibit 1 offers additional insight on how the Paris Aligned Index is designed to exceed the EU PAB requirements. For a more detailed insight on these differences, please refer to Exhibit A1 in the Appendix.



Exhibit 1: Characteristics of the MSCI Climate Paris Aligned Index

ESG	TRANSITION RISK		GREEN OPPORTUNITY	1.5 ALIGNMENT	PHYSICAL RISK
Controversial Weapons	Carbon intensity reduction (Scope 1, 2 and 3)	Neutral exposure to high impact sector	At least double the Green Revenue exposure	EU PAB: Self- decarbonization at 7%	Physical Risk Climate VaR is at least 50% lower
Societal norms violators	Immediate Scope 3 phase-in*	Higher allocation to companies with credible emission reduction targets	Green/fossil fuel- based ratio – 4x higher than parent	MSCI: Self- decarbonization at 10%**	
MSCI ESG Controversy Score	Underweight companies facing transition risk	Significant improvement in Low Carbon Transition (LCT) Score	Overweighting of companies providing solutions	Neutral Aggregate Climate VaR under 1.5°C Scenario	
	Lower fossil fuel exposure	50% minimum reduction in Potential Emissions Intensity			

Minimum requirement by the EU Benchmark Regulation



Additional criteria achieved by the MSCI Climate Paris Aligned Indexes

How Does the MSCI Climate Change Index Meet the Requirements of the EU Benchmark Regulation?

The MSCI Climate Change Index was launched in 2019, but the index methodology was enhanced in June 2021 to incorporate the minimum criteria required by the EU Climate Transition Benchmark (CTB), which requires constituent firms to have, in aggregate, a 30% reduction in carbon-emissions intensity as well as a 30% reduction in potential emissions intensity relative to the parent index. Carbon emissions are computed as the sum of Scope 1, 2 and 3 emissions (see Exhibit 2).

^{*} Scope 3 emissions phased in from May 2020 index review. To view the complete methodology, please <u>click here</u>. ** MSCI Climate Paris Aligned Index requires a 10% self-decarbonization trajectory, which is in excess of the EU PAB's minimum of 7%.



Exhibit 2: Characteristics of the MSCI Climate Change Index

ESG	TRANSITION RISK		GREEN OPPORTUNITY	1.5 ALIGNMENT
Controversial Weapons	At least 30% Carbon intensity reduction (Scope 1, 2 and 3)	Neutral exposure to high-impact sector	Green/fossil fuel- based ratio – equivalent to parent index	Self- decarbonization at 7%
Societal norms violators	Immediate Scope 3 phase-in*	Higher allocation to companies with credible emission- reduction targets	Overweighting of companies providing solutions	
MSCI ESG Controversy Score	Underweight companies facing transition risk	30% minimum reduction in Potential Emissions Intensity		
	Lower fossil fuel exposure			
	Minimum requirement by the EU Benchmark Regulation		iteria achieved by the e Change Indexes	

Note that MSCI also offers MSCI EU PAB and CTB Overlay Indexes that are designed for investors who want a strict application of the minimum EU requirements, as stand-alone indexes or as overlays for ESG and factor custom indexes.

What Are the Recommendations of the TCFD?

The Financial Stability Board created the Task Force on Climate-related Financial Disclosures (TCFD) in 2015 to support the goals of the Paris Agreement. It is a voluntary disclosure platform to help financial-market participants understand, manage and disclose their exposure to climate risk (physical and transition) and climate opportunities.

The TCFD recommends that firms enhance their climate disclosures along four dimensions: 1) the role of the board of directors in assessing and managing climate risks and opportunities (Governance); 2) identifying the types of risks and opportunities posed by climate change (Strategy); 3) disclosing firm processes surrounding core risk management steps (Risk Management); and 4) disclosing climate metrics and targets used to identify climate risks and opportunities (Metrics and Targets).



Firms are particularly encouraged to describe the resilience of their strategy by stress testing portfolios to estimate the financial impact of different climate-related scenarios, including assessing the impact of limiting global warming to 2°C or lower relative to pre-industrial levels.

How Are the Climate Indexes Aligned with TCFD Recommendations?

The recommendations of the TCFD fall into three broad categories: managing exposure to climate transition risk, managing exposure to physical climate risk and taking advantage of climate opportunities. MSCI climate indexes aim to help investors align with these recommendations to varying degrees, as shown in Exhibit 3. Investors can seek to achieve their desired investment objectives by replicating the relevant indexes. For instance, the MSCI Low Carbon Indexes can limit investors' transition risk by reducing their carbon footprint, while the MSCI Climate Change Index helps them account for transition risk as well as climate opportunities. The MSCI Climate Paris Aligned Index is designed to comprehensively account for all elements of the TCFD recommendations by limiting exposure to physical and transition risk, as well as increasing exposure to climate opportunities. Finally, the MSCI Global Environment Index focuses exclusively on climate opportunities.

Exhibit 3: TCFD Alignment and MSCI Climate Indexes

MSCI Indexes	Climate	Climate	
WSCI IIIuexes	Transition Risk	Physical Risk	Opportunities
Low Carbon Indexes	✓		
Climate Change Indexes	✓		✓
Paris Aligned Indexes	✓	✓	✓
Global Environment Index			✓

Is the MSCI Climate Paris Aligned Index Aligned with 1.5°C or 2°C?

To tackle climate change, the global economy has to decarbonize and transition away from fossil fuels.² The MSCI Climate Paris Aligned Index aligns with a 1.5°C scenario by imposing a 10% annual decarbonization trajectory and a neutral

² According to the MSCI Net Zero Tracker, publicly listed companies are likely to deplete their share of global emissions budget to limit global temperature rise below 1.5°C in less than six years. Imposing a 7% decarbonization on the investable universe is only sufficient to limit global warming to below 2°C. By contrast, the 10% decarbonization pathway imposes a more stringent reduction in carbon emissions to achieve the 1.5°C global warming potential.



aggregate Climate VaR under the 1.5°C scenario. For more information, please see Exhibit A1 in the Appendix.

Note: The aggregate index is aligned with a 1.5°C temperature rise but individual constituents may have varying trajectories.

Which MSCI Indexes Use Forward-Looking Data?

Multiple sources of forward-looking data are employed in the MSCI Climate Change and Climate Paris Aligned Indexes. First, these indexes use Low Carbon Transition scores, which use forward-looking data by measuring companies' exposure to and management of risks and opportunities related to a low-carbon transition. This includes assessing their policies and commitments to mitigate transition risk.

Second, these indexes also explicitly make a greater allocation to companies that have disclosed their future decarbonization targets.

Finally, the MSCI Climate Paris Aligned Index adopts a forward-looking Climate VaR model. Climate VaR reflects costs related to specific climate risks in the future. Please refer to Appendix II of the MSCI Climate Paris Aligned Index methodology for more details.

How Are Companies' Targets Reflected in the MSCI Climate Paris Aligned Index?

In aggregate, the weight of companies setting targets is increased by a minimum of 20% in the MSCI Climate Paris Aligned index relative to the underlying market-cap index. Company targets are identified as

- 1. Companies publishing emissions-reduction targets
- 2. Companies publishing their annual emissions
- 3. Companies reducing their GHG intensity by 7% over each of the last three years

Additional Questions

How Often Are the MSCI Climate Indexes Rebalanced?

The MSCI ex Fossil Fuel and MSCI Global Environment Indexes are rebalanced quarterly, as of the close of the last business day of February, May, August and November.

The remaining categories of climate indexes (MSCI Climate Index and MSCI Climate Paris Aligned Index) are rebalanced on a semiannual basis, as of the close of the last business day of May and November.



Where Can One Find the Daily Performance Data?

The Index performance is available at https://www.msci.com/end-of-day-data-search

More information about MSCI Climate Indexes can be found at https://www.msci.com/our-solutions/climate-investing/climate-indexes

Can the Indexes Be Customized?

Yes, the indexes' methodology can be customized. For instance, the MSCI Climate Paris Aligned Index can be seen as a framework of the various dimensions of climate that investors may wish to address. The index is built using the MSCI's Barra® Optimizer and can therefore accommodate a large range of customization for investors with specific objectives or constraints — e.g., by modifying the rules for exclusions, the pace and rate of decarbonization or adjusting the tracking error.

Is the Implied Temperature Rise Metric Used in the Construction of the MSCI Climate Paris Aligned Index?

As of October 2021, the Implied Temperature Rise metric is not part of the index methodology as the metric was launched on Sept. 14, 2021, while the indexes were first launched in October 2020. MSCI Index Research will study the new metric and in due course provide details on how the metric will be used in indexes.



Appendix

Exhibit A1: Comparison Between the EU PAB Minimum Standards and the MSCI Climate Paris Aligned Index

Criteria	Minimum Standards EU PAB	MSCI Climate Paris Aligned Index
Climate Risk Standards:		
Minimum Scope 1+2 (+3) GHG intensity reduction relative to parent Index	-50%	-50%
Scope 3 phase-in	Up to 4 years	Immediate
Baseline exclusions	Controversial-weapons and	Controversial-weapons and
	societal-norms violators	societal-norms violators (environmental harm, tobacco and ESG controversies)
Activity exclusions	Coal (1%+ revenues),	Coal (1%+ revenues),
	oil (10%+ revenues),	oil (10%+ revenues),
	natural gas (50%+ revenues),	natural gas (50%+ revenues), electricity
	electricity generation with GHG intensity > 100 gC02e/kWh (50%+ revenues)	generation with GHG intensity > 100 gCO2e/kWh (50%+ revenues)
Climate Opportunity Standards:		
Year-on-year self-decarbonization of the benchmark	At least 7%	At least 10%
Minimum green share / fossil-fuel-based share ratio compared to investable universe	Voluntary, but suggested to be significantly larger (X 4)	Significantly larger (X 4)
Exposure constraints	At least same exposure to high-climate-impact sector relative to parent index	At least same exposure to high-climate- impact sector relative to parent index
Corporate target setting	May increase weight of companies setting targets	At least 20% increase in aggregate weight of target setting firms
Disqualification from label if two consecutive years of misalignments with trajectory	Immediate	-
Additional Climate Criteria in the MSCI Climat	e Paris Aligned Index:	
Physical risk		At least 50% reduction in extreme-weather Climate VaR relative to underlying index



[Continued below] Aggregate climate risk	>= Max (0, Aggregate Climate VaR ³ of parent index under 1.5°C scenario)
Climate opportunities	Minimum 100% increase in weighted average green revenue relative to the parent index
	At least 10% increase in weighted average LCT score that increases weight of firms providing solutions and decreases weights for firms facing greater transition risk
Potential emissions	Minimum 50% reduction in weighted average potential emissions intensity relative to parent index

 $^{^{3}}$ For more details on Climate Value-at-Risk, please refer to Appendix II of the MSCI Climate Paris Aligned Indexes methodology document.



Exhibit A2: Comparing the EU CTB Minimum Standards and MSCI Climate Change Index

Criteria	Minimum Standards EU CTB	MSCI Climate Change Index		
Climate Risk Standards:				
Minimum Scope 1+2 (+3) GHG intensity reduction relative to parent index	-30%	-30%		
Scope 3 phase-in	Up to 4 years	Immediate		
Baseline exclusions	Controversial-weapons and societal-norms violators	Controversial-weapons and societal-norms violators (environmental harm, tobacco and ESG controversies)		
Activity exclusions	N/A	Coal mining (> 1% revenues)		
Climate Opportunity Standards:				
Year-on-year self-decarbonization	At least 7%	At least 7%		
Minimum green share / fossil-fuel-based share ratio compared to investable universe	Voluntary, but suggested to be at least equivalent	At least equivalent		
Exposure constraints	At least same exposure to high- climate-impact sector relative to parent index	At least same exposure to high- climate-impact sector relative to parent index		
Corporate target setting	May increase weight of companies setting targets	Higher allocation to companies that set targets		
Disqualification from label if two consecutive years of misalignments with trajectory	Immediate	-		
Additional Standards Imposed by MSCI Climate	Change Index:			
Climate risk and opportunities		LCT weight tilt that underweights companies facing transition risk and overweights companies providing solutions		
Potential emissions		Minimum 30% reduction in Weighted Average Potential Emissions Intensity relative to Parent Index		



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