



MSCI Climate Symbols and Definitions

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Introduction

MSCI ESG Research develops and maintains climate assessment and climate data products methodologies. To promote public transparency, MSCI ESG Research provides, in the present document, a description of MSCI ESG Research core climate assessments and core data products that support investors consideration of climate factors.

Climate assessments

MSCI Low Carbon Transition Risk Assessment

MSCI Low Carbon Transition (LCT) Scores and Categories are a quantitative assessment of companies' exposure to and management of climate transition risks and opportunities. Climate transition risks and opportunities arise from changes in demand for products and services due to policy or regulatory action to address climate change. LCT Scores and their corresponding LCT Categories are determined at the company level. Each company is evaluated on the estimated carbon emissions intensity of their disclosed product segments, including scope 1 (direct emissions generated by companies' operations), scope 2 (indirect emissions generated from energy supply), and scope 3 emissions (upstream and downstream emissions generated in the supply chain or through product usage).

MSCI Low Carbon Transition Category Scale

Solutions	Companies in the Solutions LCT Category have a low total carbon emissions footprint and have the potential to benefit from the growth in demand for low-carbon products and services.
Neutral	Companies in the Neutral LCT Category have limited exposure to climate transition risks. Companies in this category may have indirect exposure to climate transition risks through their investment and lending activities.
Operational Transition	Companies in the Operational Transition LCT Category have exposure to climate transition risks through potential increased operational costs arising from carbon costs and/or capital investments in emissions reduction.
Product Transition	Companies in the Product Transition LCT Category have exposure to climate transition risks through potential reduced demand for carbon-intensive products and services.
Asset Stranding	Companies in the Asset Stranding LCT Category have exposure to climate transition risks through potential stranding of physical or natural resource assets due to regulatory, market or technology forces.

MSCI Implied Temperature Rise

MSCI Implied Temperature Rise (ITR) provides a forward-looking quantitative assessment of companies' alignment with global temperature goals, expressed in degrees Celsius. Implied Temperature Rise is calculated at the company level. The Implied Temperature Rise of a company is calculated based on its projected emissions considering disclosed emissions reduction targets and the over- or undershoot in emissions relative to its share of the global carbon budget.

MSCI Implied Temperature Rise Bands

1.5°C Aligned	Companies that are 1.5°C Aligned are aligned with the Paris Agreement's maximal objective of limiting the global mean temperature rise to 1.5°C compared with preindustrial levels.
2°C Aligned	Companies that are 2°C Aligned meet the Paris Agreement's minimum objective of limiting the global mean temperature rise to 2°C compared with preindustrial levels.
Misaligned	Companies that are Misaligned are not aligned with the Paris Agreement goals. Their implied temperature rise falls between 2°C and 3.2°C.
Strongly Misaligned	Companies that are Strongly Misaligned have an implied temperature rise that is greater than 3.2°C, which exceeds even the business-as-usual climate projection.

MSCI Country Scope 1 Emissions Implied Temperature Rise

MSCI Country Scope 1 Emissions Implied Temperature Rise (ITR) provides a forward-looking quantitative assessment of countries' alignment with global temperature goals, expressed in degrees Celsius. Implied Temperature Rise is calculated at the country level. The Implied Temperature Rise of a country is calculated based on its projected Scope 1 emissions considering disclosed emissions reduction targets and the over- or undershoot in emissions relative to its carbon budget, taking into account the country's basic needs and stage of development and a global cost-effectiveness criterion.

MSCI Country Scope 1 Emissions Implied Temperature Rise Bands

1.5°C Aligned	Countries that are 1.5°C Aligned are aligned with the Paris Agreement's maximal objective of limiting the global mean temperature rise to 1.5°C compared with preindustrial levels. They either significantly contribute to mitigating catastrophic climate change, benefit from relatively large needs-based effort-sharing carbon budgets because they are in earlier stages of economic development, or both.
2°C Aligned	Countries that are 2°C Aligned meet the Paris Agreement's minimum objective of limiting the global mean temperature rise to 2°C compared with preindustrial levels. They support a low-carbon transition, benefit from relatively large needs-based effort-sharing carbon budgets because they are in earlier stages of economic development, or both.
Misaligned	Countries that are Misaligned are not aligned with the Paris Agreement goals. Their pace of decarbonization is too slow to mitigate catastrophic climate change. Their implied temperature rise falls between 2°C and 3.2°C, even after any positive adjustments made to their carbon budgets if they are in earlier stages of economic development.
Strongly Misaligned	Countries that are Strongly Misaligned have an implied temperature rise that is greater than 3.2°C, which exceeds even the business-as-usual climate projection, even after any positive adjustments made to their carbon budgets if they are in earlier stages of economic development. Their contribution to catastrophic climate change is higher than that of most countries.

MSCI Carbon Project Ratings

MSCI Carbon Project Ratings are composite ratings that provide an opinion on the integrity and risks of carbon credit projects across multiple criteria, including their impacts on the climate, environment and society. A project with a high rating has a greater likelihood of having a positive emissions impact and a reduced risk of over-estimating its emissions impact. It is also more likely that such an emissions impact will have been implemented in a way that supports positive social and/or environmental outcomes and upholds legal and ethical standards.¹

MSCI Carbon Project Ratings scale

AAA	Projects rated AAA indicate the highest likelihood of delivering at least one tonne of positive CO ₂ e emissions impact, and a range of positive social and/or environmental outcomes while upholding legal and ethical standards.
AA	Projects rated AA indicate a high likelihood of delivering at least one tonne of positive CO ₂ e emissions impact, and a range of positive social and/or environmental outcomes while upholding legal and ethical standards.
A	Projects rated A indicate a moderate to high likelihood of delivering one tonne of positive CO ₂ e emissions impact or a range of positive social and/or environmental outcomes while upholding legal and ethical standards.
BBB	Projects rated BBB indicate a moderate likelihood of delivering one tonne of positive CO ₂ e emissions impact or a range of material positive social and/or environmental outcomes while upholding legal and ethical standards.
BB	Projects rated BB indicate a low likelihood of delivering either one tonne of positive CO ₂ e emissions impact or material positive social and/or environmental outcomes while upholding legal and ethical standards.
B	Projects rated B indicate a very low likelihood of delivering either one tonne of positive CO ₂ e emissions impact or material positive social and/or environmental outcomes while upholding legal and ethical standards.
CCC	Projects rated CCC indicate significant risks of delivering either one tonne of positive CO ₂ e emissions impact or supporting material positive social and/or environmental outcomes while upholding legal and ethical standards.

Climate data products

Climate VaR

Climate Value-at-Risk (Climate VaR) provides a forward-looking and return-based valuation assessment to measure climate-related risks and opportunities. Climate VaR is a quantitative assessment calculated at the company and security level. The aggregated company Climate VaR is calculated as a percentage of market value (from -100% to +100%) for multiple climate scenarios and includes the valuation impacts arising from technology opportunities, policy risks and physical risks.

¹ More information regarding the MSCI Carbon Project Ratings assessment process and an explanation of the criteria assessed are detailed in the overall MSCI Carbon Project Ratings methodology document, "MSCI Carbon Project Ratings and Assessments Methodology."

Carbon emissions estimates and fossil fuels data

Carbon emissions estimates provide a representation of companies' carbon emissions footprint. Carbon emissions estimates are based on a quantitative model to calculate scope 1 (direct emissions generated by companies' operations), scope 2 (indirect emissions generated from energy supply), and scope 3 emissions (upstream and downstream emissions generated in the supply chain or through product usage). Fossil fuel data, power generation data, and associated estimates, including potential carbon emissions from fossil fuel reserves, provide a measure of companies' involvement in fossil fuel ownership and production.

Climate Targets and Commitments data

Climate Targets and Commitments data provides a standardized view on company's decarbonization plans. The quantitative assessment normalizes companies' climate targets and calculates comprehensiveness, ambition and feasibility across a company's decarbonization plans.

Climate indicative mappings

MSCI Paris Aligned Investing Initiative (PAII) Net Zero Investment Framework 2.0 (NZIF 2.0) indicative mapping

MSCI Paris Aligned Investing Initiative (PAII) Net Zero Investment Framework (NZIF) indicative mapping is a metric that maps companies to alignment categories as determined in the PAII NZIF 2.0 guidance, from Not Aligning to Achieving Net Zero. The PAII NZIF 2.0 guidance is a categorical alignment assessment based on a set of criteria (e.g., short- and medium-term science-based targets), released by the PAII.

NZIF 2.0 Alignment categories

Achieving Net Zero	Companies that have previously met all alignment criteria and have an emissions performance at net-zero that can be expected to continue. They are considered to have achieved their low-carbon transition.
Aligned	Companies that have a net-zero goal; science-based targets; a decarbonization plan (except for lower impact companies); and current absolute or emissions intensity at least equal to a relevant net-zero pathway. They are considered to manage transition risk.
Aligning	Companies that have an emissions performance not equal to a contextually relevant net-zero pathway. However, they have a net-zero goal; science-based targets; and a decarbonization plan (except for lower impact companies). They are considered ready to transition.
Committed	Companies that have a net-zero goal. They are considered to have an alignment ambition but lack key transition steps (e.g., science-based targets).
Not Aligning	Companies that do not fall into any other alignment category.



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