MSCI FCA TCFD Aligned Product Report

June 16, 2024

Portfolio Name:	SVS Sanlam Global Gold & Resources
Benchmark Name:	None
As Of Date:	December 29 2023
Currency:	USD

About this report

The contents of this report can be used for disclosure and reporting purposes at the product level in accordance with the United Kingdom's Financial Conduct Authority and are aligned with its Task Force on Climate-Related Financial Disclosures (TCFD) product-level reporting guidance specified in section 2.3 of the Environmental, Social and Governance sourcebook.

This report provides a complete set of metrics and calculations that are aligned with the guidance. The ESG sourcebook sets out rules and guidance concerning a firm's approach to environmental, social and governance matters.

Table of Contents

Carbon Emission Metrics on Investor Allocation

		Portfolio	Coverage
Allocation Base	EVIC		
Financed Emissions Attributed by EVIC tons CO2e Investor Allocation: EVIC	Scope 1+2	2,594.5	95.3%
	Scope 3	10,995.1	95.3%
	Scope 1+2+3	13,589.7	95.3%

Absolute **Financed Emissions** refer to the total amount of GHG emissions financed by a portfolio[1], expressed in tCO2e (metric tonnes of CO2 equivalent). It measures the climate impact that an investor is responsible for by summing up the proportionate GHG emissions of portfolio companies based on the investor's ownership share. The ownership share is calculated based on share of all financing, using Enterprise Value Including Cash (EVIC).

This product report includes Scope 1, Scope 2 and Scope 3 emissions. Scope 1 emissions are direct emissions from sources owned or controlled by the company. Scope 2 emissions are the indirect emissions caused by the generation of electricity purchased by the company. Scope 3 emissions are all indirect emissions (not included in Scope 2) that occur upstream and downstream of the organization value chain.

Financed Emissions are calculated from company-reported or company-specific estimated emissions. The portion of company emissions in the portfolio is represented by the Coverage metric. The remainder of the portfolio is calculated based on the average emission intensity of the covered portion. Accordingly, the Financed Emissions Attributed by EVIC metric is scaled up to the full portfolio value.

More information on this metric can be found in the appendix.

[1] The term "portfolio" used is defined as "fund or investment strategy" for asset owners, "product or investment strategy" for asset managers, and "lending and other financial intermediary business activities" for banks.

Carbon Footprint: Financed Emission Intensity Metrics

From MSCI ESG Research LLC

Portfolio : SVS Sanlam Global Gold & Resources   Currency : USD
Benchmark : None

Carbon Emission Metrics on Investor Allocation

		Portfolio	Coverage
Allocation Base	**EVIC**		
Financed Emissions Intensity Attributed by EVIC tons CO_2e / USD M invested Investor Allocation: **EVIC**	Scope 1+2	83.9	95.3%

Financed Emissions Intensity is the normalized version of Financed Emissions, calculated as the ratio of Financed Emissions and the total value invested in the portfolio, expressed in tCO_2e per millions of reporting currency invested. This metric indicates the climate impact that an investor is responsible for per 1 million investment of the reporting currency.

Financed Emissions Intensity offer a way to compare the carbon footprint of different portfolios on a relative scale.

For Scope 1 and Scope 2, when reported data is not available, company carbon emissions are estimated using MSCI's Scope 1 & 2 estimation model. The portion of company emissions in the portfolio is represented by the coverage metric.

More information on this metric can be found in the appendix.

MSCI Carbon Footprint: Emission Intensity Metrics

Portfolio : SVS Sanlam Global Gold & Resources Currency : USD
Benchmark : None

Weighted Average Carbon Intensity

		Portfolio	Coverage
Corporate constituents tons CO2e / USD M sales	Scope 1+2	249.8	95.3%

Sovereign Emission Intensity

		Portfolio	Coverage
Sovereign constituents tons CO2e / USD M GDP nominal	GHG intensity	N/A	N/A

Weighted Average Carbon Intensity (WACI) can be used to assess a portfolio's relative exposure to carbon intensive companies. The metric gives the weighted average carbon intensity of the companies within the portfolio, normalizing each portfolio constituent's GHG emissions by their revenue, expressed in tonnes CO2e per million revenue of reporting currency.

The Carbon Emissions Revenue Intensity indicates how carbon intensive a company's business model is by measuring the amount of carbon emissions a company emits to generate USD 1 million in revenue and is therefore a climate risk indicator.

Weighted Average Carbon Intensity metric is applicable for corporate constituents within the portfolio. The Coverage refers to the percentage of the portfolio value for which the metric is calculated.

The **Sovereign Emission Intensity** gives the weighted average carbon intensity of the sovereign constituents within the portfolio.

The metric quantifies the portfolio's exposure to carbon-intensive economies by normalizing the production-based GHG emissions of each sovereign constituent against their country's nominal GDP in USD converted to the reporting currency, with results expressed in tonnes of CO2 equivalent per million unit of the reporting currency. The Coverage refers to the percentage of the total portfolio value for which the Sovereign Emission Intensity is calculated.

More information on these metrics can be found in the appendix.

MSCI Temperature Alignment

From MSCI ESG Research LLC

Portfolio : SVS Sanlam Global Gold & Resources   Currency : USD
Benchmark : None

Portfolio

2.6 °C

	Portfolio
Implied Temperature Rise Coverage	95.3%

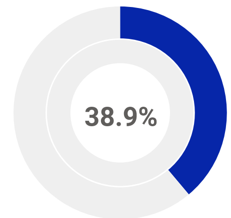
Implied Temperature Rise: Companies with Lowest Temperature Alignment

Company Name	Weight	Implied Temperature Rise
NEWMONT CORPORATION	4.9%	1.3°C
Silvercrest Metals Inc	1.9%	1.3°C
Orla Mining Ltd.	1.7%	1.3°C
IAMGOLD CORPORATION	0.6%	1.3°C
Wheaton Precious Metals Corp.	5.5%	1.4°C
Gold Bullion Securities	4.1%	1.5°C
SSR MINING INC.	1.9%	1.5°C
KINROSS GOLD CORPORATION	5.3%	1.6°C
ROYAL GOLD, INC.	4.9%	1.6°C
DUNDEE PRECIOUS METALS INC.	1.0%	1.6°C

Implied Temperature Rise: Companies with Highest Temperature Alignment

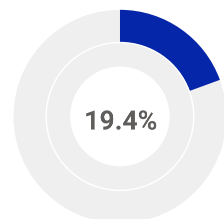
Company Name	Weight	Implied Temperature Rise
VALE S.A.	2.6%	10.0°C
ANGLO AMERICAN PLC	2.3%	5.7°C
VICTORIA GOLD CORP.	0.4%	2.9°C
Aya Or & Argent Inc.	0.0%	2.9°C
K92 Mining Inc	2.5%	2.8°C
ARGONAUT GOLD INC.	0.3%	2.8°C
SOCIETE AURIFERE BARRICK	4.6%	2.6°C
B2GOLD CORP.	3.6%	2.6°C
Equinox Gold Corp.	1.2%	2.6°C
Pan American Silver Corp.	0.5%	2.5°C

≤ 2.0˚C



38.9% of companies within the portfolio (vs. 0% for the benchmark) align with the goal of limiting temperature increase to below 2°C.

≤ 1.5˚C



19.4% of companies within the portfolio (vs. 0% for the benchmark) align with the goal of limiting temperature increase to below 1.5°C.

Portfolio   Benchmark

Implied Temperature Rise metric shows the temperature alignment of portfolios with global temperature goals and can be used for decarbonization targets settings and engagement support on climate risk. **MSCI Implied Temperature Rise (ITR)** is an intuitive, forward-looking metric that provides a portfolio level number in degrees of Celsius demonstrating how aligned the companies in the portfolio are with the ambitions of the Paris Agreement – which is to keep a global temperature rise this century well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 °C.

The portfolio-level ITR uses an aggregated budget approach: it compares the sum of "owned" projected GHG emissions against the sum of "owned" carbon budgets for the underlying fund holdings. The portfolio's estimated carbon budget over-/undershoot is then converted to a degree of temperature rise (°C) using the transient climate response to cumulative emissions

(TCRE). The allocation base used to define ownership is EVIC, to enable the analysis of equity and corporate bond portfolios.

Coverage refers to the percentage of the total portfolio value for which the metric is calculated.

Portfolio : SVS Sanlam Global Gold & Resources Currency : USD
Benchmark : None

Climate Scenario Analysis aims to quantify how climate change may impact future portfolio performance. **MSCI Climate Value-at-Risk (Climate VaR)** is a forward-looking climate risk metric that assesses how a company's valuation could be impacted by transition and physical risks and opportunities. The metric is expressed as a positive or negative percentage to reflect change from a company's or portfolio's current valuation.

The aggregated Climate VaR consists of two main components: Physical Risks and Transition Risks and Opportunities. Transition Risks are further divided into Policy Risks and Technology Opportunity. Physical Risk scenarios consider both chronic risks, such as extreme temperatures, precipitation, wind, and heavy snowfall, and acute risks including tropical cyclones, various types of flooding, wildfires, and river low flow events. These scenarios are evaluated under two probability cases: an average physical risk scenario and an aggressive physical risk scenario. The report accounts for only one of the physical risk scenarios, whether average or aggressive.

In the scenario analysis, we employ phase IV scenarios from the Network for Greening the Financial System (NGFS). The product report includes the 1.5 °C NGFS Orderly, 2 °C NGFS Orderly, 2 °C NGFS Disorderly, and 3 °C NGFS NDC scenarios, which correspond to predefined transitions, ranging from 'orderly' adjustments to a potential 'hothouse world'. Coverage denotes total portfolio coverage across asset classes, not limited to the corporate portion of the portfolio.

Climate Value at Risk

		Orderly Transition		Disorderly Transition	Hothouse world
	Coverage	**1.5° REMIND NGFS Orderly**	**2° REMIND NGFS Orderly**	**2° REMIND NGFS Disorderly**	**3° REMIND NGFS NDC**
	Portfolio	**Portfolio**	**Portfolio**	**Portfolio**	**Portfolio**
Policy Climate Var (Scope 1,2,3)	**95.3%**	-10.7%	-2.5%	-6.2%	-1.7%
Technology Opportunities Climate VaR	**37.4%**	0.0%	0.0%	0.0%	0.0%
Physical Climate VaR Aggressive	**86.4%**	-2.0%	-2.9%	-3.2%	-4.4%
Aggregated Climate VaR		**-12.7%**	**-5.4%**	**-9.4%**	**-6.1%**

Portfolio : SVS Sanlam Global Gold & Resources Currency : USD

Portfolio Weights of Largest Contributor Countries by Time-to-maturity

Country/Duration	Total
Total	**0.00%**

Total includes all other country buckets not listed in the above list.

Portfolio Level Sovereign Climate VaR Results

	Portfolio	Benchmark	Active
1.5° REMIND NGFS Orderly	0.00%	0.00%	0.00%
2° REMIND NGFS Orderly	0.00%	0.00%	0.00%
2° REMIND NGFS Disorderly	0.00%	0.00%	0.00%
3° REMIND NGFS NDC	0.00%	0.00%	0.00%
Coverage	0.00%	0.00%	0.00%

Coverage is 0.00% for the portfolio, 0.00% for the benchmark.

MSCI's Sovereign Climate VaR model estimates the potential impact of climate change and economic decarbonization on sovereign bond portfolios.

Sovereign Climate VaR builds on the framework put forward by the Network for Greening the Financial System (NGFS) and their scenarios for interest rates and inflation under various climate change scenarios (note that only transition risk is considered in the interest rate projections). Based on the NGFS scenarios, MSCI derived potential shocks to sovereign bond yield curves and breakeven inflation curves to account for the market's repricing due to changes in expectations when moving from a climate-agnostic baseline expectation to any other climate scenario. These yield curve changes are then used to stress test the value of local-currency sovereign bonds.

Coverage denotes total portfolio coverage across asset classes, not limited to the sovereign portion of the portfolio.

MSCI Name	Unit	Description	FCA Handbook Metric	Paragraph
Financed Emissions Scope 1+2	Tonnes of CO2 equivalent (tCO2e)	Total amount of Scope 1 and Scope 2 GHG emissions financed by a portfolio for a given year. $$\sum\left(\frac{current\ value\ of\ investment}{issuer's\ EVIC} \times issuer's\ Scope\ 1\&2\ GHG\ emissions\right)$$ Current value of investment = the present value of the position on the analysis date. Enterprise Value Including Cash = most recent available fiscal year-end enterprise value including cash. Scope 1&2 GHG emissions = the issuer's most recently reported or estimated Scope 1+ Scope 2 greenhouse gas emissions. Financed Emissions Scope 1&2 are calculated for covered positions and scaled to the full portfolio value. Short positions, derivate positions with negative market value are considered out-of-scope and won't show up in report and be excluded from the calculation. If a position is not classified as out-of-scope, we consider it as in-scope. Specifically, the following asset types are in scope for the report: corporate equity, corporate bonds, sovereigns, funds. An in-scope position might be considered as covered or uncovered, depending on its data availability.	Scope 1 and Scope 2 greenhouse gas emissions	2.3.9 R
Financed Emissions Scope 3	Tonnes of CO2 equivalent (tCO2e)	Total amount of Scope 3 GHG emissions financed by a portfolio for a given year. $$\sum\left(\frac{current\ value\ of\ investment}{issuer's\ EVIC} \times issuer's\ Scope\ 3\ Estimated\ GHG\ emissions\right)$$ Current value of investment = the present value of the position on the analysis date. Enterprise Value Including Cash = most recent available fiscal year-end enterprise value including cash. Scope 3 GHG emission = issuer's estimated Scope 3 emissions. Scope 3 uses estimated emissions for all 15 categories based on MSCI's Scope 3 estimation model. Financed Emissions Scope 3 are calculated for covered positions and scaled to the full portfolio value. Short positions, derivate positions with negative market value are considered out-of-scope and won't show up in report and be excluded from the calculation. If a position is not classified as out-of-scope, we consider it as in-scope. Specifically, the following asset types are in scope for the report: corporate equity, corporate bonds, sovereigns, funds. An in-scope position might be considered as covered or uncovered, depending on its data availability.	Scope 3 greenhouse gas emissions	2.3.9 R

MSCI Name	Unit	Description	FCA Handbook Metric	Paragraph
Financed Emissions Scope 1+2+3	Tonnes of CO2 equivalent (tCO2e)	Total amount of Scope 1&2, and Scope 3 GHG emissions financed by a portfolio for a given year. $\sum\left(\frac{current\ value\ of\ investment}{issuer's\ EVIC} \times issuer's\ Scope\ 1\&2\ and\ Scope\ 3\ GHG\ emissions\right)$ Current value of investment = the present value of the position on the analysis date. Enterprise Value Including Cash = most recent available fiscal year-end enterprise value including cash. For Scope 1 and Scope 2, when reported data is not available, Scope 1 and Scope 2 carbon emissions are estimated using MSCI"s Scope 1 & 2 estimation model. Scope 3 uses estimated emissions for all 15 categories based on MSCI's Scope 3 estimation model. Financed Emissions Scope 1&2 and Scope 3 are calculated for covered positions and scaled to the full portfolio value. Short positions, derivate positions with negative market value are considered out-of-scope and won't show up in report and be excluded from the calculation. If a position is not classified as out-of-scope, we consider it as in-scope. Specifically, the following asset types are in scope for the report: corporate equity, corporate bonds, sovereigns, funds. An in-scope position might be considered as covered or uncovered, depending on its data availability.	Total carbon emissions	2.3.9 R
Financed Emissions Intensity Scope 1+2	Tonnes of CO2 equivalent per million USD invested (tCO2e / USD M)	Financed Emissions Scope 1&2 normalized by the portfolio value. $\frac{\sum\left(\frac{current\ value\ of\ investment}{issuer's\ EVIC} \times issuer's\ Scope\ 1\&2\ GHG\ emissions\right)}{M\ portfolio\ value\ in\ reporting\ currency}$ Current value of investment = the present value of the position on the analysis date. Enterprise Value Including Cash = most recent available fiscal year-end enterprise value including cash. Scope 1&2 GHG emissions = the issuer’s most recently reported or estimated Scope 1 + Scope 2 greenhouse gas emissions. Portfolio value = the present value of the portfolio of in-scope positions on the analysis date.	Total carbon footprint	2.3.9 R

Portfolio : SVS Sanlam Global Gold & Resources   Currency : USD
Benchmark : None

MSCI Name	Unit	Description	FCA Handbook Metric	Paragraph
Weighted Average Carbon Intensity - Corporate constituents	Tonnes of CO2 equivalent per million USD revenue (tCO2e / USD M revenue)	Portfolio-weighted Scope 1&2 GHG emissions per company revenue. $$\sum\left(\frac{current\ value\ of\ investment}{portfolio\ value}\times\frac{issuer's\ Scope\ 1\&2\ GHG\ emissions}{issuer's\ revenue}\right)$$ The metric includes the corporate issuers and supports equities and bond positions. Current value of investment = the present value of the position on the analysis date. Portfolio value = the present value of the portfolio of in-scope positions on the analysis date. Scope 1&2 GHG emissions = the issuer’s most recently reported or estimated Scope 1+ Scope 2 greenhouse gas emissions. Revenue = most recently available total revenue.	Weighted Average Carbon Intensity	2.3.9 R
Sovereign Emission Intensity	Tonnes of CO2 equivalent per million GDP in USD (tCO2e/ USD M GDP nominal)	The metric measure a portfolio’s exposure to carbon-intensive economies, defined as the portfolio weighted average of sovereigns’ GHG Intensity (sovereign issuer GHG emission / GDP nominal). $$\sum\left(\frac{current\ value\ of\ investment}{portfolio\ value}\times\frac{sovereign\ issuer's\ GHG\ emissions}{sovereign\ issuer's\ \$M\ GDP}\right)$$ The metric includes sovereign bond positions. Current value of investment = the present value of the position on the analysis date. Portfolio value = the present value of the portfolio of in-scope positions on the analysis date. GHG emission = production-based country emission data. This does not account for imports and exports separately, but rather focuses on activity inside a country. Issuer’s GDP data = country-level nominal GDP data (in USD). The most recently updated, publicly available GDP values are used to estimate carbon-intensity values for a country.		

MSCI Name	Unit	Description	FCA Handbook Metric	Paragraph
MSCI Implied Temperature Rise	°C	Implied Temperature Rise metric provides an indication of how companies and investment portfolios align to global climate targets. Key element is the concept of the carbon budget: how much the world can emit and, by extension, how much a company can emit (across scope 1,2 and 3) and remain within the limitations required to meet a 2 °C warming scenario by 2100. The metric is expressed in degrees Celsius (°C), estimates the global implied temperature rise (in the year 2100 or later) if the whole economy had the same carbon budget over-/undershoot level as the company in question. The portfolio-level ITR compares the sum of "owned" projected GHG emissions against the sum of "owned" carbon budgets for the underlying holdings. The portfolio's total estimated carbon budget over-/undershoot is then converted to a degree of temperature rise using the Transient Climate Response to Cumulative Carbon Emissions (TCRE). Implied Temperature Rise metric is not applied for sovereign constituents. MSCI Implied Temperature Rise Methodology: MSCI Implied Temperature Rise Methodology	Implied Temperature Rise	2.3.13 R

Portfolio : SVS Sanlam Global Gold & Resources Currency : USD

MSCI Name	Unit	Description	FCA Handbook Metric	Paragraph
		To understand how climate risk could affect the portfolio in the future, climate scenario analysis developed by Network for Greening the Financial System (NGFS) are used. Four phase IV NGFS scenarios are covered in three categories:		
1.5 °C NGFS Orderly	%	**1.5 °C NGFS Orderly** (Net Zero 2050) – "orderly transition" scenario. This scenario assumes that ambitious climate policies are introduced immediately, worldwide GHG emissions will reach net zero by 2050, and there is a 50% chance that global warming is likely to be below 1.5 °C by the end of the century. Physical risks are relatively low, but transition risks are high.	'orderly transition' scenario	2.3.11 R
2 °C NGFS Orderly	%	**2 °C NGFS Orderly** (Below 2 °C) – "orderly transition" scenario. It assumes climate policies are introduced earlier. Net zero is achieved after 2070. Low transition risk and high physical risk.	'orderly transition' scenario	2.3.11 R
2 °C NGFS Disorderly	%	**2 °C NGFS Disorderly** (Delayed Transition) – "disorderly transition" scenario. The scenario assumes new climate policies are delayed until 2030, and the level of action differs across countries and regions. Emissions continue to rise in the meantime, the transition from fossil fuels to renewables would need to happen from a higher emissions level over a shorter period of time to limit global warming. Higher physical and transition risk than the Net Zero 2050 and Below 2 °C scenarios.	'disorderly transition' scenario	2.3.11 R
3 °C NGFS NDC	%	**3 °C NGFS NDC** (Nationally Determined Contributions) – "hothouse world" scenario. Paris Agreement commitments are not met, emissions decline but temperatures continue to rise associated with moderate to severe physical risk. Transition risks are relatively low.	'hothouse world' scenario	2.3.11 R

MSCI Name	Unit	Description	FCA Handbook Metric	Paragraph
MSCI Climate Value-at-Risk	%	MSCI Climate Value-at-Risk is a forward-looking and return-based valuation assessment to measure climate related risks and opportunities in an investment portfolio. The aggregated Climate Risk is considered of two components, namely Physical Risks and Transition Risks that can be further separated into Policy Risks and Technology Opportunity Risks. The metric is applied for corporates; for sovereign, different methodology is applied. **Physical Risk**: how future physical effects (both chronic and acute in nature) of climate change may be borne out for individual assets belonging to the enterprise. The scenarios address chronic risks (extreme heat, extreme cold, wind gusts, heavy snowfall and heavy precipitation) and acute risks (tropical cyclones, coastal flooding, fluvial flooding, river low flow and wildfires). These scenarios are associated an average physical risk scenario or aggressive physical risk scenario. **Average physical risk scenario** The average potential impact in companies' market value. **Aggressive physical risk scenario** The aggressive scenario explores the severe downside risk within the distribution of physical risk and extreme weather cost. It related to the 95th percentile of the cost distribution. The aggressive scenario can be considered as a worst-case scenario. **Policy Risk**: this component quantifies the direct and indirect costs of climate regulations imposed on companies. Direct policy risk imposes a specific cost on companies' emissions, while indirect policy risks may come in the form of increased input. **Technology Opportunity Risk**: the technology opportunities component accounts for additional profits arising through the development of new technologies serving the transition to a low-carbon economy. MSCI Climate Value-at-Risk methodology document: MSCI Climate VaR Methodology	Climate Value-at-Risk	2.3.13 R

MSCI Name	Unit	Description	FCA Handbook Metric	Paragraph
Sovereign Bond Climate Value-at-Risk	%	MSCI Climate Value-at-Risk coverage is extended to include coverage for sovereign bonds. Sovereign Bond Climate VaR estimates how climate change could affect sovereign bond portfolios. It estimates the change in the sovereign yield curve when market expectations move from a climate-agnostic baseline expectation to any other climate scenario. These yield curve changes are then used to stress test the value of local-currency sovereign bonds. The Sovereign Bond Climate VaR model is based on the set of phase II climate scenarios developed by Network for Greening the Financial System (NGFS). Four scenarios in three categories are covered. **1.5 °C NGFS Orderly** (Net Zero 2050) – "orderly transition" scenario. This scenario assumes that ambitious climate policies are introduced immediately, worldwide GHG emissions will reach net zero by 2050, and there is a 50% chance that global warming is likely to be below 1.5 °C by the end of the century. Physical risks are relatively low, but transition risks are high. **2 °C NGFS Orderly** (Below 2 °C) – "orderly transition" scenario. It assumes climate policies are introduced earlier. Net zero is achieved after 2070. Low transition risk and high physical risk. **2 °C NGFS Disorderly** (Delayed Transition) – "disorderly transition" scenario. The scenario assumes new climate policies are delayed until 2030, and the level of action differs across countries and regions. Emissions continue to rise in the meantime, the transition from fossil fuels to renewables would need to happen from a higher emissions level over a shorter period of time to limit global warming. Higher physical and transition risk than the Net Zero 2050 and Below 2 °C scenarios. **3 °C NGFS NDC** (Nationally Determined Contributions) – "hothouse world" scenario. Paris Agreement commitments are not met, emissions decline but temperatures continue to rise associated with moderate to severe physical risk. Transition risks are relatively low. MSCI Sovereign Climate Value-at-Risk methodology document: MSCI Sovereign Climate VaR Methodology		

ABOUT MSCI FCA TCFD Aligned Product Report

The report features climate change metrics that are informed by the Taskforce on Climate Related Financial Disclosures (TCFD). While the metrics in this report align with the general intent of the recommendations from the TCFD, they may not be an exact one to one match with every element as specified in the updated Guidance on Metrics, Targets, and Transition Plans from October 2021, and are subject to change as MSCI continues to provide both current and forward looking climate change metrics to support reporting under the TCFD framework.
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 redisseminated in whole or in part without prior written permission from MSCI. All rights in the Information are reserved by MSCI and/or its In formation Providers. The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION. Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.
The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy. It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, “Index Linked Investments”). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

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

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

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., client s 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. 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 a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such, provided that applicable products or services from MSCI ESG Research may constitute investment advice. 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. MSCI ESG and climate ratings, research and data are produced by MSCI ESG Research LLC, a subsidiary of MSCI Inc. MSCI ESG Indexes, Analytics and Real Estate are products of MSCI Inc. that utilize information from MSCI ESG Research LLC. MSCI Indexes are administered by MSCI Limited (UK).

Please note that the issuers mentioned in MSCI ESG Research materials sometimes have commercial relationships with MSCI ESG Research and/or MSCI Inc. (collectively, “MSCI”) and that these relationships create potential conflicts of interest. In some cases, the issuers or their affiliates purchase research or other products or services from one or more MSCI affiliates. In other cases, MSCI ESG Research rates financial products such as mutual funds or ETFs that are managed by MSCI's clients or their affiliates or are based on MSCI Inc. Indexes, and for which MSCI may charge asset-based fees. In addition, constituents in MSCI Inc. equity indexes include companies that subscribe to MSCI products or services. MSCI ESG Research has taken a number of steps to mitigate potential conflicts of interest and safeguard the integrity and independence of its research and ratings. More information about these conflict mitigation measures is available in our Form ADV, available at IAPD - Investment Adviser Public Disclosure - Homepage.

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 Standard & Poor's. *Global

Notice & Disclaimer

Contact Us

esgclientservice@msci.com

Americas
+ 1 212 804 5299

Europe, Middle East & Africa
+ 44 20 7618 2510

Asia Pacific
+ 612 9033 9339

About MSCI ESG research products and services

MSCI ESG Research products and services are provided by MSCI ESG Research LLC, and are designed to provide in-depth research, ratings and analysis of environmental, social and governance-related business practices to companies worldwide. ESG ratings, data and analysis from MSCI ESG Research LLC. are also used in the construction of the MSCI ESG Indexes. MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc.

About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 45 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.