

# MSCI World ESG Reduced Carbon Select 20 35 Capped Indexes



msci co



### Introduction



Sector investing strategies have effectively served investors since the 19th century.

Perhaps their greatest appeal is that they simplify the investor decision-making process. Instead of having to choose from among tens of thousands of securities in the global equity universe today, investors can narrow their search to a far more manageable dozen or so groups of similar companies.

Sector investing is also a flexible approach as it may be incorporated into portfolios tactically, to pursue a specific opportunity, or strategically to build the core of a portfolio.

Sectors have evolved over time as economies have developed. We believe that it is now time to take sector investing to a higher level by incorporating ESG and Climate considerations in the construction of sector indexes.

Over the last several years, investors around the world have chosen to embrace sustainability by incorporating their ESG preferences, goals or regulatory requirements into their investment strategy. ESG integration began with core equity regional portfolio building blocks, then extended to fixed income. It too has evolved to encompass the entire asset allocation process, including sector portfolios and indexed funds. This integration is helping to establish ESG investing consistency and to maximize the ESG impact investors can have.



### overview



The MSCI World ESG Reduced Carbon Select 20 35 Capped Indexes are designed to support investors that seek to increase exposure to positive environmental, social and governance (ESG) factors by 20%, and aim to reduce the carbon-equivalent exposure to carbon dioxide (CO2) and other greenhouse gases (GHG), as well as to lower their exposure to potential emissions risk of fossil fuel reserves by 30% relative to the respective sector parent indexes.

The Indexes are constructed from their corresponding free-float adjusted market capitalization weighted sector indexes by excluding securities based on ESG and Climate Change-related criteria and use an optimization-based approach. The optimization-based approach aims to:

- > Minimize ex-ante tracking error relative to the Parent Index
- Increase the weighted average ESG Score by 20%
- Reduce the Carbon Intensity and Potential Emissions per dollar of Market Capitalization by 30%

As a final step, the Indexes are capped in accordance with the MSCI 20/35 Indexes methodology.

For more details, please refer to the complete methodology here

Constructing these sector indexes involves the following seven steps:

#### 1. DEFINING THE PARENT INDEXES

The starting point for these indexes is the MSCI World sector index, as listed below:

Parent Index	Sector ESG Reduced Carbon Select 20 35 Capped Index
MSCI World Communication Services Index	MSCI World Communication Services ESG Reduced Carbon Select 20 35 Capped Index
MSCI World Consumer Discretionary Index	MSCI World Consumer Discretionary ESG Reduced Carbon Select 20 35 Capped Index
MSCI World Consumer Staples Index	MSCI World Consumer Staples ESG Reduced Carbon Select 20 35 Capped Index
MSCI World Energy Index	MSCI World Energy ESG Reduced Carbon Select 20 35 Capped Index
MSCI World Financials Index	MSCI World Financials ESG Reduced Carbon Select 20 35 Capped Index
MSCI World Health Care Index	MSCI World Health Care ESG Reduced Carbon Select 20 35 Capped Index
MSCI World Industrials Index	MSCI World Industrials ESG Reduced Carbon Select 20 35 Capped Index
MSCI World Information Technology Index	MSCI World Information Technology ESG Reduced Carbon Select 20 35 Capped Index
MSCI World Materials Index	MSCI World Materials ESG Reduced Carbon Select 20 35 Capped Index
MSCI World Utilities Index	MSCI World Utilities ESG Reduced Carbon Select 20 35 Capped Index

#### 2. DEFINING THE SECURITY-LEVEL CARBON EXPOSURE

The carbon exposure of a security is measured in terms of its greenhouse gas emissions and its potential carbon emissions from fossil fuel reserves; it leverages MSCI ESG Carbon Metrics data from MSCI ESG Research.

For more information on MSCI ESG Carbon Metrics, please refer to <a href="https://www.msci.com/index-carbon-footprint-metrics">https://www.msci.com/index-carbon-footprint-metrics</a>

#### 3. DEFINING EXCLUSIONS

- > Securities of companies involved in Very Severe business controversies as defined by the MSCI ESG Controversies Methodology.
- > Companies covered by MSCI Business Exclusion Criteria framework: Controversial Weapons, Nuclear Weapons, Civilian Firearms and Tobacco.
- > Thermal Coal, Conventional Weapons and Oil Sands: exclusion linked to the level of revenue associated with these activities.
- > Companies that fail to comply with the United Nations Global Compact Principles.
- > Companies with missing controversy score.
- Companies with missing ESG rating or ESG score.

#### 4. DEFINING THE OPTIMIZATION CONSTRAINTS

To maintain diversification and meet the index objectives, the methodology constrains the weights of securities and countries, while incorporating improvement constraints across carbon and ESG characteristics, relative to the respective Parent Index. It will also include turnover constraints at rebalance dates.

The ESG and carbon emission constraints are as follows:

Parameter	Value
Minimum Increase in the Weighted Average ESG Score relative to the Parent Index	20%
Minimum Reduction in the Weighted Average Carbon Emission Intensity relative to the Parent Index	30%
Minimum Reduction in the Potential Emissions per dollar of market capitalization relative to the Parent Index	30%

#### 5. DETERMINING THE OPTIMIZED INDEX

The Index is constructed using MSCI's Barra® Open Optimizer in combination with the relevant risk model (MSCI Barra Global Equity Model for Long-Term Investors – GEMLTL - Equity Model)

The optimization uses a universe of eligible securities and the specified optimization objective and constraints to determine the constituents of the Index



#### 6. APPLYING THE MSCI 20/35 INDEXES METHODOLOGY

As a final step, the Indexes are capped consistent with the MSCI 20/35 Indexes methodology. The ESG and Carbon targets are not enforced again post 20/35 capping.

For more details on the MSCI Capped Indexes Methodology, please visit www.msci.com/index-methodology

#### 7. REBALANCES

The indexes will be rebalanced on a quarterly basis to coincide with the regular Index Reviews (Semi-Annual Index Reviews in May and November, and Quarterly Index Reviews in February and August) of the MSCI Global Investable Market Indexes. Changes are implemented at the end of February, May, August and November.

At each review, the optimization process as described above will be implemented. This means that at the time of rebalance, the ESG and carbon criteria will be met.





#### PERFORMANCE, RISK AND ESG + CARBON CHARACTERISTICS

We were able to back test the index methodology for all 11 sectors beginning in May of 2015 (except for Communication Services sector). This allows us to compare the risk and return characteristics and ESG profile of each sector index in this range to its relevant parent index.

In these back tests, the Sector ESG
Reduced Carbon Select 20 35 Capped
family of indexes was able to incorporate
its ESG and Carbon Emission criteria. The
following tables show a selection of key
performance and risk indicators, along with
key ESG and carbon emission metrics for
each sector index.

The ESG and carbon criteria are met at rebalance dates (February, May, August and November). In between rebalance dates, the improvement (or reduction) levels will vary.

#### MSCI World Communication Services ESG Reduced Carbon Select 20 35 Capped Index

Risk/Return Metrics	MSCI World Communication Services	MSCI World Communication Services ESG Reduced Carbon Select 20 35 Capped Index
Total Return (%)	6.9	5.9
Total Risk (%)	20.0	18.6
Tracking Error (%)		3.1

Source: MSCI; Data Nov 30, 2018 to Sep 29, 2023.

ESG Metrics	MSCI World Communication Services	MSCI World Communication Services ESG Reduced Carbon Select 20 35 Capped Index
ESG Score	4.7	5.6
ESG Leaders (AAA-AA) (%)	13.5	31.0
ESG Laggards (B-CCC) (%)	19.1	14.1
Global Compact Violations (%)	0.0	0.0
Red Flag Controversies (%)	0.0	0.0

Source: MSCI: as of Sep 29, 2023.

MSCI World Communication Services	MSCI World Communication Services ESG Reduced Carbon Select 20 35 Capped Index
8	5
21	13
13	9
0.0	0.0
0.0	0.0
0.0	0.0
	8 21 13 0.0 0.0



#### PERFORMANCE, RISK AND ESG + CARBON CHARACTERISTICS



#### MSCI World Consumer Discretionary ESG Reduced Carbon Select 20 35 Capped Index

Risk/Return Metrics	MSCI World Consumer Discretionary	MSCI World Consumer Discretionary ESG Reduced Carbon Select 20 35 Capped Index
Total Return (%)	8.3	6.8
Total Risk (%)	19.5	19.7
Tracking Error (%)		2.1

Source: MSCI; Data May 29, 2015 to Sep 29, 2023.

ESG Metrics	MSCI World Consumer Discretionary	MSCI World Consumer Discretionary ESG Reduced Carbon Select 20 35 Capped Index
ESG Score	6.3	7.7
ESG Leaders (AAA-AA) (%)	28.6	65.6
ESG Laggards (B-CCC) (%)	1.4	0.2
Global Compact Violations (%)	0.6	0.0
Red Flag Controversies (%)	0.6	0.0

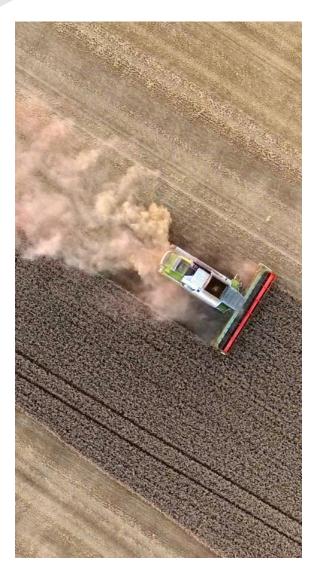
Source: MSCI; as of Sep 29, 2023.

Climate and Carbon Metrics	MSCI World Consumer Discretionary	MSCI World Consumer Discretionary ESG Reduced Carbon Select 20 35 Capped Index
Carbon emissions (t CO2e/\$M invested)	19	17
Carbon intensity (t CO2e/\$M sales)	30	25
Weighted average carbon intensity (t CO2e/\$M sales)	46	26
Potential carbon emissions (t CO2e/\$M invested)	0.0	0.0
Thermal coal mining (%)	0.0	0.0
Unconventional oil & gas extraction (%)	0.0	0.0



# Indexes review

#### PERFORMANCE, RISK AND ESG + CARBON CHARACTERISTICS



#### MSCI World Consumer Staples ESG Reduced Carbon Select 20 35 Capped Index

Risk/Return Metrics	MSCI World Consumer Staples	MSCI World Consumer Staples ESG Reduced Carbon Select 20 35 Capped Index
Total Return (%)	5.0	4.8
Total Risk (%)	12.4	12.2
Tracking Error (%)		2.7

Source: MSCI; Data May 29, 2015 to Sep 29, 2023.

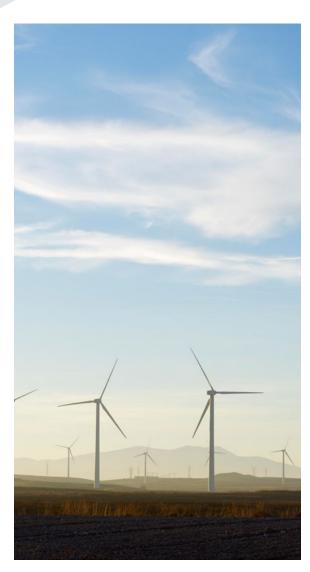
ESG Metrics	MSCI World Consumer Staples	MSCI World Consumer Staples ESG Reduced Carbon Select 20 35 Capped Index
ESG Score	7.5	8.4
ESG Leaders (AAA-AA) (%)	53.7	83.1
ESG Laggards (B-CCC) (%)	1.0	0.0
Global Compact Violations (%)	0.0	0.0
Red Flag Controversies (%)	0.0	0.0

Source: MSCI; as of Sep 29, 2023.

Climate and Carbon Metrics	MSCI World Consumer Staples	MSCI World Consumer Staples ESG Reduced Carbon Select 20 35 Capped Index
Carbon emissions (t CO2e/\$M invested)	34	38
Carbon intensity (t CO2e/\$M sales)	44	32
Weighted average carbon intensity (t CO2e/\$M sales)	41	34
Potential carbon emissions (t CO2e/\$M invested)	0.0	0.0
Thermal coal mining (%)	0.0	0.0
Unconventional oil & gas extraction (%)	0.0	0.0



#### PERFORMANCE, RISK AND ESG + CARBON CHARACTERISTICS



#### MSCI World Energy ESG Reduced Carbon Select 20 35 Capped Index

Risk/Return Metrics	MSCI World Energy	MSCI World Energy ESG Reduced Carbon Select 20 35 Capped Index
Total Return (%)	4.6	3.9
Total Risk (%)	27.1	26.6
Tracking Error (%)		4.1

Source: MSCI; Data May 29, 2015 to Sep 29, 2023.

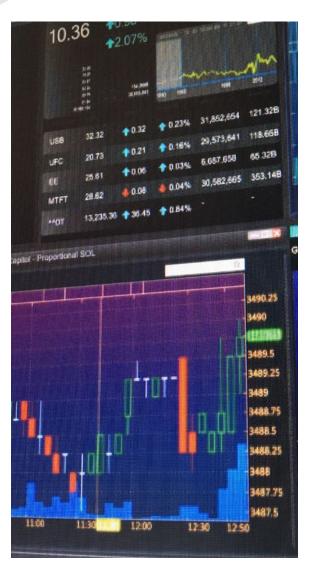
ESG Metrics	MSCI World Energy	MSCI World Energy ESG Reduced Carbon Select 20 35 Capped Index
ESG Score	6.9	7.9
ESG Leaders (AAA-AA) (%)	42.6	77.4
ESG Laggards (B-CCC) (%)	0.0	0.0
Global Compact Violations (%)	0.0	0.0
Red Flag Controversies (%)	0.0	0.0

Source: MSCI; as of Sep 29, 2023.

Climate and Carbon Metrics	MSCI World Energy	MSCI World Energy ESG Reduced Carbon Select 20 35 Capped Index
Carbon emissions (t CO2e/\$M invested)	329	320
Carbon intensity (t CO2e/\$M sales)	303	235
Weighted average carbon intensity (t CO2e/\$M sales)	387	269
Potential carbon emissions (t CO2e/\$M invested)	18,337	13,470
Thermal coal mining (%)	0.6	3.0
Unconventional oil & gas extraction (%)	74.4	50.1



#### PERFORMANCE, RISK AND ESG + CARBON CHARACTERISTICS



#### MSCI World Financials ESG Reduced Carbon Select 20 35 Capped Index

Risk/Return Metrics	MSCI World Financials	MSCI World Financials ESG Reduced Carbon Select 20 35 Capped Index
Total Return (%)	5.3	5.4
Total Risk (%)	19.7	19.9
Tracking Error (%)		1.7

Source: MSCI; Data May 29, 2015 to Sep 29, 2023.

ESG Metrics	MSCI World Financials	MSCI World Financials ESG Reduced Carbon Select 20 35 Capped Index
ESG Score	6.7	8.0
ESG Leaders (AAA-AA) (%)	46.3	83.5
ESG Laggards (B-CCC) (%)	0.6	0.0
Global Compact Violations (%)	0.0	0.0
Red Flag Controversies (%)	0.0	0.0

Source: MSCI; as of Sep 29, 2023.

Climate and Carbon Metrics	MSCI World Financials	MSCI World Financials ESG Reduced Carbon Select 20 35 Capped Index
Carbon emissions (t CO2e/\$M invested)	8	3
Carbon intensity (t CO2e/\$M sales)	13	4
Weighted average carbon intensity (t CO2e/\$M sales)	18	7
Potential carbon emissions (t CO2e/\$M invested)	0.0	0.0
Thermal coal mining (%)	0.1	0.0
Unconventional oil & gas extraction (%)	0.5	0.1



#### PERFORMANCE, RISK AND ESG + CARBON CHARACTERISTICS



#### MSCI World Health Care ESG Reduced Carbon Select 20 35 Capped Index

Risk/Return Metrics	MSCI World Health Care	MSCI World Health Care ESG Reduced Carbon Select 20 35 Capped Index
Total Return (%)	6.6	7.2
Total Risk (%)	14.0	14.2
Tracking Error (%)		1.5

Source: MSCI; Data May 29, 2015 to Sep 29, 2023.

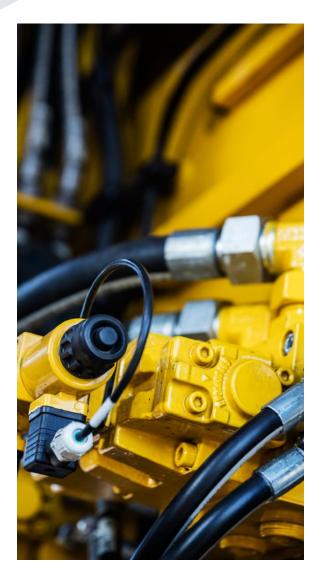
ESG Metrics	MSCI World Health Care	MSCI World Health Care ESG Reduced Carbon Select 20 35 Capped Index
ESG Score	7.1	8.0
ESG Leaders (AAA-AA) (%)	46.3	77.4
ESG Laggards (B-CCC) (%)	0.5	0.0
Global Compact Violations (%)	0.0	0.0
Red Flag Controversies (%)	0.4	0.0

Source: MSCI; as of Sep 29, 2023.

Climate and Carbon Metrics	MSCI World Health Care	MSCI World Health Care ESG Reduced Carbon Select 20 35 Capped Index
Carbon emissions (t CO2e/\$M invested)	5	3
Carbon intensity (t CO2e/\$M sales)	10	7
Weighted average carbon intensity (t CO2e/\$M sales)	15	12
Potential carbon emissions (t CO2e/\$M invested)	0.0	0.0
Thermal coal mining (%)	0.0	0.0
Unconventional oil & gas extraction (%)	0.0	0.0



#### PERFORMANCE, RISK AND ESG + CARBON CHARACTERISTICS



#### MSCI World Industrials ESG Reduced Carbon Select 20 35 Capped Index

Risk/Return Metrics	MSCI World Industrials	MSCI World Industrials ESG Reduced Carbon Select 20 35 Capped Index
Total Return (%)	7.2	7.5
Total Risk (%)	17.9	17.7
Tracking Error (%)		2.7

Source: MSCI; Data May 29, 2015 to Sep 29, 2023.

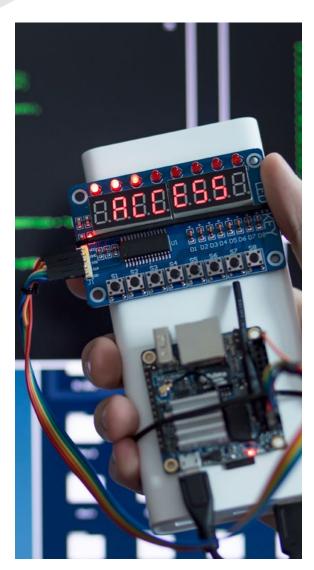
ESG Metrics	MSCI World Industrials	MSCI World Industrials ESG Reduced Carbon Select 20 35 Capped Index
ESG Score	17.2	8.6
ESG Leaders (AAA-AA) (%)	48.5	82.3
ESG Laggards (B-CCC) (%)	0.6	0.2
Global Compact Violations (%)	0.0	0.0
Red Flag Controversies (%)	0.0	0.0

Source: MSCI; as of Sep 29, 2023.

Climate and Carbon Metrics	MSCI World Industrials	MSCI World Industrials ESG Reduced Carbon Select 20 35 Capped Index
Carbon emissions (t CO2e/\$M invested)	53	48
Carbon intensity (t CO2e/\$M sales)	85	69
Weighted average carbon intensity (t CO2e/\$M sales)	95	64
Potential carbon emissions (t CO2e/\$M invested)	0.0	0.0
Thermal coal mining (%)	3.0	3.3
Unconventional oil & gas extraction (%)	0.2	0.1



#### PERFORMANCE, RISK AND ESG + CARBON CHARACTERISTICS



#### MSCI World Information Technology ESG Reduced Carbon Select 20 35 Capped Index

Risk/Return Metrics	MSCI World Information Technology	MSCI World Information Technology ESG Reduced Carbon Select 20 35 Capped Index
Total Return (%)	17.0	17.5
Total Risk (%)	20.0	20.5
Tracking Error (%)		2.4

Source: MSCI; Data May 29, 2015 to Sep 29, 2023.

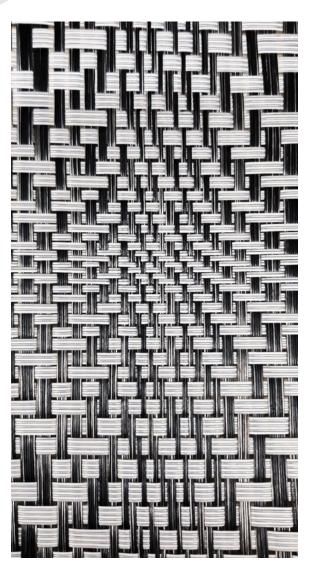
ESG Metrics	MSCI World Information Technology	MSCI World Information Technology ESG Reduced Carbon Select 20 35 Capped Index
ESG Score	7.6	8.7
ESG Leaders (AAA-AA) (%)	58.9	85.8
ESG Laggards (B-CCC) (%)	0.5	0.1
Global Compact Violations (%)	0.0	0.0
Red Flag Controversies (%)	0.0	0.0

Source: MSCI; as of Sep 29, 2023.

Technology	MSCI World Information Technology ESG Reduced Carbon Select 20 35 Capped Index
4	3
26	15
19	15
0.0	0.0
0.0	0.0
0.0	0.0
	4 26 19 0.0 0.0



#### PERFORMANCE, RISK AND ESG + CARBON CHARACTERISTICS



#### MSCI World Materials ESG Reduced Carbon Select 20 35 Capped Index

Risk/Return Metrics	MSCI World Materials	MSCI World Materials ESG Reduced Carbon Select 20 35 Capped Index
Total Return (%)	6.2	4.4
Total Risk (%)	19.9	19.3
Tracking Error (%)		2.6

Source: MSCI; Data May 29, 2015 to Sep 29, 2023.

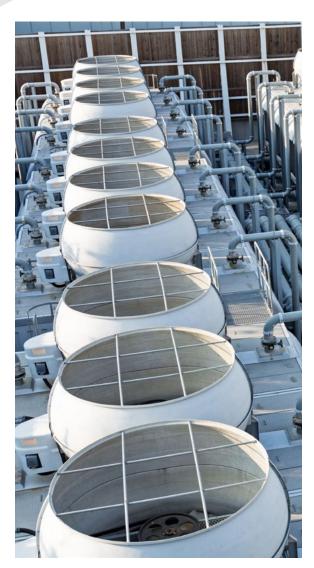
ESG Metrics	MSCI World Materials	MSCI World Materials ESG Reduced Carbon Select 20 35 Capped Index
ESG Score	7.2	8.6
ESG Leaders (AAA-AA) (%)	42.2	85.4
ESG Laggards (B-CCC) (%)	0.0	0.0
Global Compact Violations (%)	10.4	0.0
Red Flag Controversies (%)	10.4	0.0

Source: MSCI; as of Sep 29, 2023.

Climate and Carbon Metrics	MSCI World Materials	MSCI World Materials ESG Reduced Carbon Select 20 35 Capped Index
Carbon emissions (t CO2e/\$M invested)	437	343
Carbon intensity (t CO2e/\$M sales)	531	364
Weighted average carbon intensity (t CO2e/\$M sales)	552	336
Potential carbon emissions (t CO2e/\$M invested)	4,109	141
Thermal coal mining (%)	9.7	0.1
Unconventional oil & gas extraction (%)	3.8	6.2



#### PERFORMANCE, RISK AND ESG + CARBON CHARACTERISTICS



#### MSCI World Utilities ESG Reduced Carbon Select 20 35 Capped Index

Risk/Return Metrics	MSCI World Utilities	MSCI World Utilities ESG Reduced Carbon Select 20 35 Capped Index
Total Return (%)	4.4	4.8
Total Risk (%)	14.2	14.9
Tracking Error (%)		3.5

Source: MSCI; Data May 29, 2015 to Sep 29, 2023.

ESG Metrics	MSCI World Utilities	MSCI World Utilities ESG Reduced Carbon Select 20 35 Capped Index
ESG Score	7.3	8.5
ESG Leaders (AAA-AA) (%)	64.5	94.2
ESG Laggards (B-CCC) (%)	1.1	0.3
Global Compact Violations (%)	0.5	0.0
Red Flag Controversies (%)	0.5	0.0

Source: MSCI; as of Sep 29, 2023.

Climate and Carbon Metrics	MSCI World Utilities	MSCI World Utilities ESG Reduced Carbon Select 20 35 Capped Index
Carbon emissions (t CO2e/\$M invested)	873	302
Carbon intensity (t CO2e/\$M sales)	1137	430
Weighted average carbon intensity (t CO2e/\$M sales)	1525	528
Potential carbon emissions (t CO2e/\$M invested)	133	24
Thermal coal mining (%)	0.5	0.2
Unconventional oil & gas extraction (%)	0.7	0.0

# Potential applications

Indexes in this range have a wide range of possible applications.

Performance Assessment and Attribution	Product Development and Market Accessibility	Research and Deeper Insights
These indexes can be	Asset managers can	Investors can use these
used as performance	license these indexes to	indices and associated
benchmarks for active	create index investment	data to further their stock
managers whose objectives	vehicles, such as ETFs and	level research, in addition
are similar to the index	mutual funds, as well as	to a deeper understanding
objectives in terms of	more complex structured	of performance and risk
sector focus, ESG and	products or segregated	drivers at the portfolio level.
Carbon Emissions.	mandates.	
By using them as market		
reference or benchmark,		
investors can better		
understand if their equity		
investments are delivering		
or falling short on		
expectations.		

### Conclusion

These indexes can be used as performance benchmarks for active managers whose objectives are similar to the index objectives in terms of sector focus, ESG and Carbon Emissions.

By using them as market reference or benchmark, investors can better understand if their equity investments are delivering or falling short on expectations.



#### **About MSCI Inc.**

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process.

To learn more, please visit www.msci.com/esg-investing.

The information contained herein (the "Information") may not be reproduced or disseminated in whole or in part without prior written permission from MSCI. The Information may not be used to verify or correct other data, to create indexes, risk models, or analytics, or in connection with issuing, offering, sponsoring, managing or marketing any securities, portfolios, financial products or other investment vehicles. Historical data and analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. None of the Information or MSCI index is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. The Information is provided "as is" and 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 MSCI INC. OR ANY OF ITS SUBSIDIARIES OR ITS OR THEIR DIRECT OR INDIRECT SUPPLIERS OR ANY THIRD PARTY INVOLVED IN THE MAKING OR COMPILING OF THE INFORMATION (EACH, AN "MSCI PARTY") MAKES ANY WARRANTIES OR REPRESENTATIONS AND, TO THE MAXIMUM EXTENT PERMITTED BY LAW, EACH MSCI PARTY HEREBY EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. WITHOUT LIMITING ANY OF THE FOREGOING AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, IN NO EVENT SHALL ANY OF THE MOSCI PARTIES 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.

©2023 MSCI Inc. All rights reserved | CBR1123