

# MSCI WORLD LOW CARBON TARGET INDEX (EUR)

The MSCI World Low Carbon Target Index is based on the MSCI World Index, its parent index, and includes large and mid-cap stocks across 23 Developed Markets (DM) countries\*. The Index is a benchmark for investors who wish to manage potential risks associated with the transition to a low carbon economy. The index aims for a tracking error target of 0.3% (30 basis points) while minimizing the carbon exposure. By overweighting companies with low carbon emissions (relative to sales) and those with low potential carbon emissions (per dollar of market capitalization), the index reflects a lower carbon exposure than that of the broad market. It uses MSCI ESG CarbonMetrics data from MSCI ESG Research Inc.

## CUMULATIVE INDEX PERFORMANCE - NET RETURNS (EUR) (NOV 2010 – MAY 2019)



## ANNUAL PERFORMANCE (%)

Year	MSCI World Low Carbon Target	MSCI World
2018	-4.33	-4.11
2017	7.36	7.51
2016	10.21	10.73
2015	11.05	10.42
2014	19.96	19.50
2013	21.07	21.20
2012	14.93	14.05
2011	-2.15	-2.38

## INDEX PERFORMANCE — NET RETURNS (%) (MAY 31, 2019)

	1 Mo	3 Mo	1 Yr	YTD	ANNUALIZED				Since Nov 30, 2010
					3 Yr	5 Yr	10 Yr		
MSCI World Low Carbon Target	-5.28	1.13	4.49	12.73	8.74	10.06	na	10.89	
MSCI World	-5.23	1.01	4.45	12.58	8.97	9.99	na	10.75	

## FUNDAMENTALS (MAY 31, 2019)

Div Yld (%)	P/E	P/E Fwd	P/BV
2.56	17.62	14.85	2.33
2.59	17.42	14.78	2.31

## INDEX RISK AND RETURN CHARACTERISTICS (NOV 30, 2010 – MAY 31, 2019)

	Beta	Tracking Error (%)	Turnover (%) <sup>1</sup>	ANNUALIZED STD DEV (%) <sup>2</sup>			SHARPE RATIO <sup>2,3</sup>			Since Nov 30, 2010	MAXIMUM DRAWDOWN (%)	Period YYYY-MM-DD
				3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr			
MSCI World Low Carbon Target	1.01	0.39	10.52	10.81	11.98	na	0.87	0.88	na	1.01	21.68	2015-04-15—2016-02-11
MSCI World	1.00	0.00	2.34	10.79	11.92	na	0.89	0.88	na	1.00	21.81	2015-04-15—2016-02-11

<sup>1</sup> Last 12 months      <sup>2</sup> Based on monthly net returns data      <sup>3</sup> Based on ICE LIBOR 1M

\* DM countries include: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the UK and the US.

The MSCI World Low Carbon Target Index was launched on Feb 27, 2015. Data prior to the launch date is back-tested data (i.e. calculations of how the index might have performed over that time period had the index existed). There are frequently material differences between back-tested performance and actual results. Past performance -- whether actual or back-tested -- is no indication or guarantee of future performance.

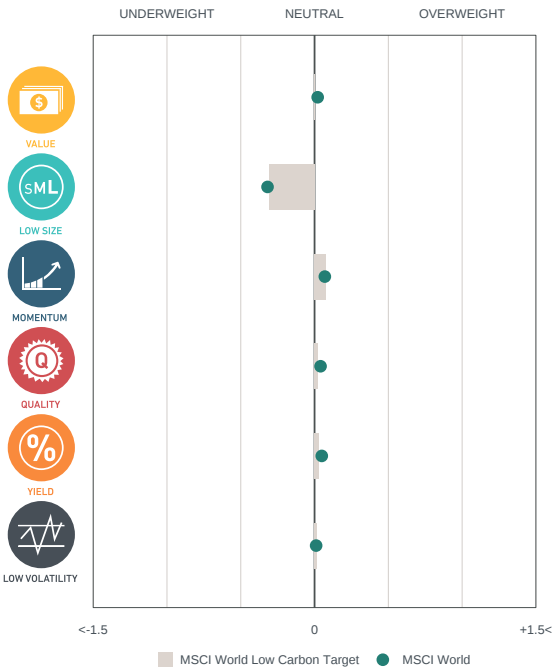
### INDEX CHARACTERISTICS

	MSCI World Low Carbon Target	MSCI World
Number of Constituents	1,311	1,654
	Weight (%)	
Largest	2.35	2.32
Smallest	0.00	0.00
Average	0.08	0.06
Median	0.03	0.03

### TOP 10 CONSTITUENTS

	Country	Index Wt. (%)	Parent Index Wt. (%)	Sector
MICROSOFT CORP	US	2.35	2.32	Info Tech
APPLE	US	2.14	2.13	Info Tech
AMAZON.COM	US	1.94	1.91	Cons Discr
FACEBOOK A	US	1.09	1.09	Comm Srvcs
JOHNSON & JOHNSON	US	0.94	0.90	Health Care
ALPHABET C	US	0.89	0.89	Comm Srvcs
JPMORGAN CHASE & CO	US	0.89	0.89	Financials
ALPHABET A	US	0.86	0.85	Comm Srvcs
NESTLE	CH	0.79	0.78	Cons Staples
VISA A	US	0.77	0.73	Info Tech
<b>Total</b>		<b>12.66</b>	<b>12.51</b>	

### FACTORS - KEY EXPOSURES THAT DRIVE RISK AND RETURN MSCI FACTOR BOX



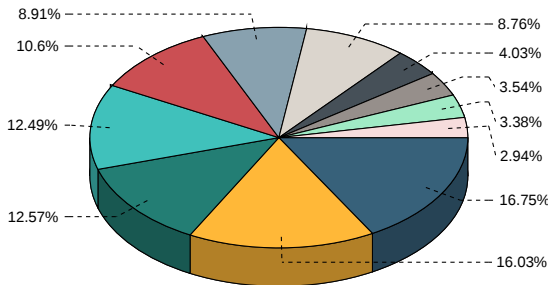
### MSCI FaCS

- VALUE**  
Relatively Inexpensive Stocks
- LOW SIZE**  
Smaller Companies
- MOMENTUM**  
Rising Stocks
- QUALITY**  
Sound Balance Sheet Stocks
- YIELD**  
Cash Flow Paid Out
- LOW VOLATILITY**  
Lower Risk Stocks

MSCI FaCS provides absolute factor exposures relative to a broad global index - MSCI ACWI IMI.

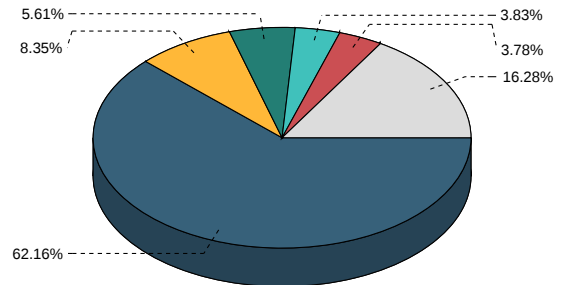
Neutral factor exposure (FaCS = 0) represents MSCI ACWI IMI.

### SECTOR WEIGHTS



- Financials 16.75%
- Information Technology 16.03%
- Health Care 12.57%
- Industrials 12.49%
- Consumer Discretionary 10.6%
- Consumer Staples 8.91%
- Communication Services 8.76%
- Energy 4.03%
- Materials 3.54%
- Real Estate 3.38%
- Utilities 2.94%

### COUNTRY WEIGHTS



- United States 62.16%
- Japan 8.35%
- United Kingdom 5.61%
- Canada 3.83%
- France 3.78%
- Other 16.28%

## INDEX METHODOLOGY

At each semi-annual index review, the MSCI Global Low Carbon Target Indexes are constructed using an optimization process that aims to achieve replicability and investability, subject to the following optimization objective and constraints:

- Minimize the Carbon Exposure subject to a tracking error constraint of 30 basis points relative to the Parent Index
- The maximum weight of an index constituent will be restricted to 20 times its weight in the Parent Index
- The country weights in the MSCI Global Low Carbon Target Index will not deviate more than +/-2% from the country weights in the Parent Index
- The sector weights in the MSCI Global Low Carbon Target Index will not deviate more than +/-2% from the sector weights in the Parent Index, with the exception of the Energy Sector where no constraint is applied

## FACTOR BOX AND FaCS METHODOLOGY

MSCI FaCS is a standard method ([MSCI FaCS Methodology](#)) for evaluating and reporting the Factor characteristics of equity portfolios. MSCI FaCS consists of Factor Groups (e.g. Value, Size, Momentum, Quality, Yield, and Volatility) that have been extensively documented in academic literature and validated by MSCI Research as key drivers of risk and return in equity portfolios. These Factor Groups are constructed by aggregating 16 factors (e.g. Book-to-Price, Earnings/Dividend Yields, LT Reversal, Leverage, Earnings Variability/Quality, Beta) from the latest Barra global equity factor risk model, GEMLT, designed to make fund comparisons transparent and intuitive for use. The MSCI Factor Box, which is powered by MSCI FaCS, provides a visualization designed to easily compare absolute exposures of funds/indexes and their benchmarks along 6 Factor Groups that have historically demonstrated excess market returns over the long run.

## ABOUT MSCI

For more than 40 years, MSCI' research-based indexes and analytics have helped the world' leading investors build and manage better portfolios. Clients rely on our offerings for deeper insights into the drivers of performance and risk in their portfolios, broad asset class coverage and innovative research. Our line of products and services includes indexes, analytical models, data, real estate benchmarks and ESG research. MSCI serves 99 of the top 100 largest money managers, according to the most recent P&I ranking. For more information, visit us at [www.msci.com](http://www.msci.com).

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 or other product or service constitutes an offer to buy or sell, or a promotion or recommendation of, any security, financial instrument or product or trading strategy. Further, none of the Information or any 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 MSCI 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 be by applicable law be excluded or limited.

© 2019 MSCI Inc. All rights reserved.