

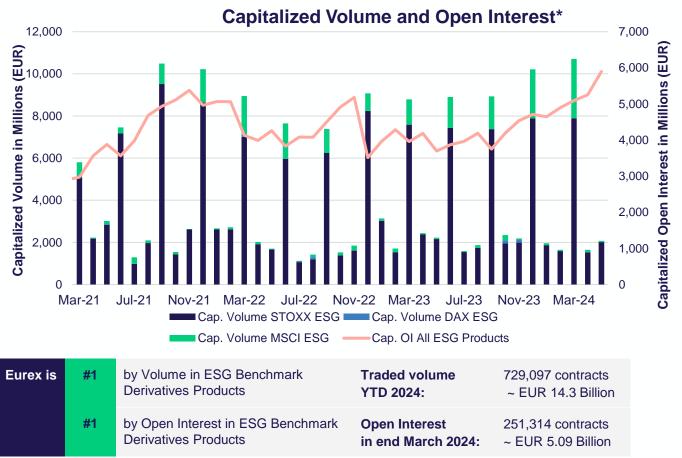


## Derivatives on MSCI ESG Screened Indexes

May 2024

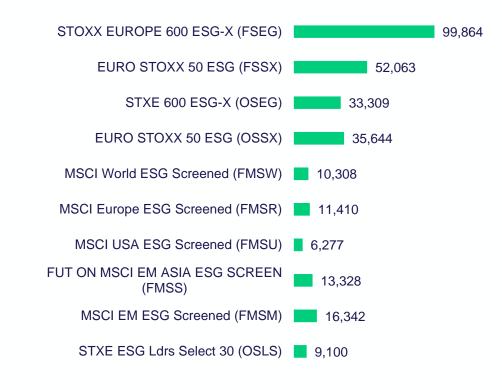
## Eurex ESG Derivatives are leading the way by getting more traction from the buy-side

ESG Screened versions have gained more momentum thus far





#### Open Interest in lots for Eurex ESG Derivatives (Top 10)



Data as of March 28, 2024

**EUREX** 

May 2024

## Eurex has strengthened its ESG offering by launching Derivatives on MSCI ESG Screened Indexes

MSCI ESG Screened Futures Products were launched on March 2, 2020



### **Eurex: The Global Home of MSCI Derivatives**



No. 1by Open Interest with 57% market shareNo. 2by Trading volumes with 27% market share

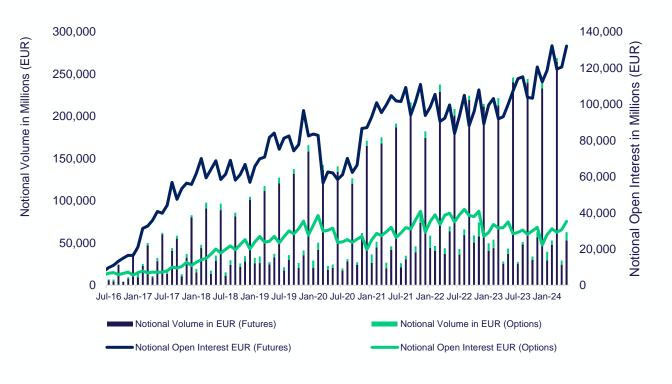
2024 Traded volume EUR 453.8 Billion 7.6 million contracts

CAGR 2016 - 2024: 22%

Open Interest EUR 167 Billion 2.9 million contracts

CAGR 2016 - 2024: 21%

#### **Evolution of Notional Volume and Notional Open Interest**



#### **Open Interest for top MSCI Products**



Open Interest as of May 31, 202

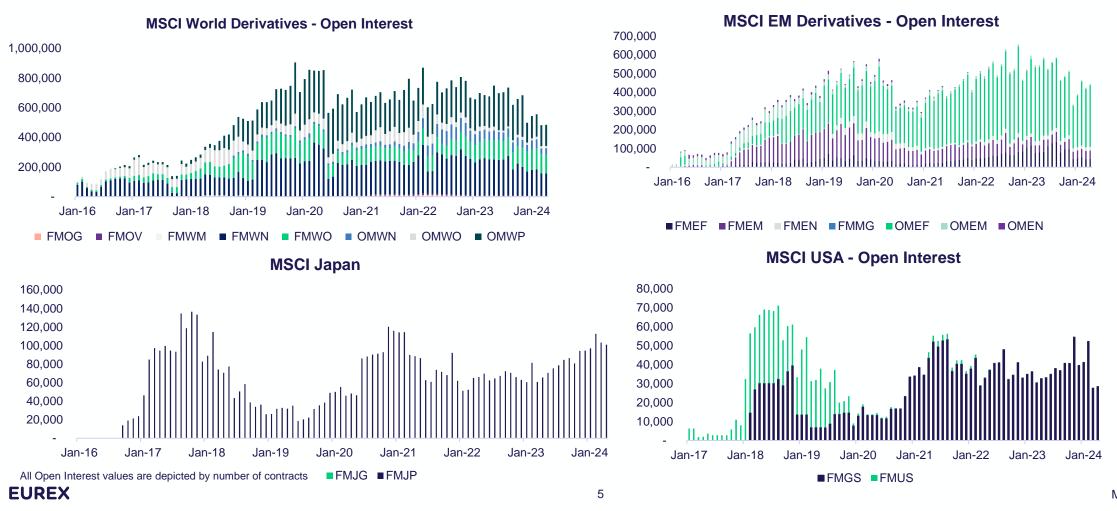
Open Interest Market Share as of Dec 2023, Source: Fla

Statistics do not include Open Interest and Traded Volumes for MSCI ESG & Dividend Product
\* Options not eliqible under SEC no-action relief as of May 31, 2024. For eliqible options, visit: : MSCI Options Snapshot.pd



# ESG Futures on MSCI World, EM and EAFE will complement growth we have seen in these products (1/2)

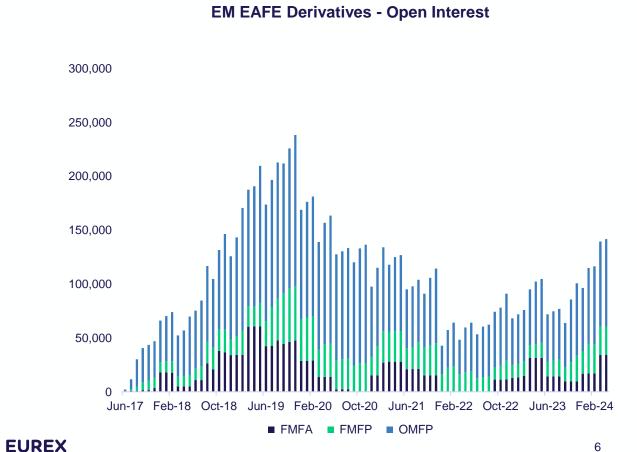
Performance of main benchmarks



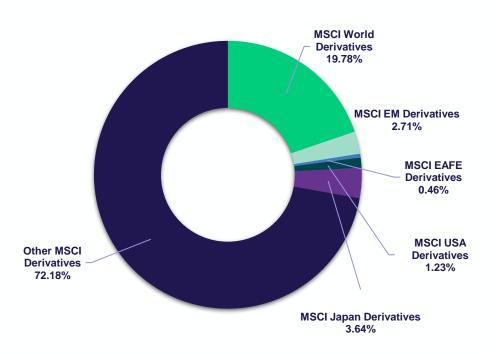
Internal

# ESG Futures on MSCI World, EM and EAFE will complement growth we have seen in these products (2/2)

Performance of main benchmarks



#### **MSCI Volume Distribution 2024**



All Open Interest values are depicted by number of contracts

## MSCI ESG Screened Indexes are closest to benchmark (1/2)

### Easy access to ESG compliance without compromising performance

#### **Product Value**

- Flexible solution for asset managers with strict mandates to achieve ESG compliance
- Based on liquid and successful benchmark indices
- Similar risk and return figures compared to related benchmarks
- Simple and fast integration of the ESG Futures into the existing trading infrastructure
- Portfolio risk based margin (PRISMA) enables margin offsets
- Eurex ESG futures will lower carbon footprint
- Cost efficient way of incorporating ESG into investment strategies and managing undesired sustainability risks

#### **General Facts**

- For the entire ESG offering, the index investment families are covering negative/exclusionary screening, norms-based screening, positive/best-in-class screening and sustainability themed investing
- Stepwise extension to complementary sustainability offerings, further regions and options
- Exclusions can help clients align their portfolios with: social values; financial risk mitigation objectives, regulations, global norms and treaties

#### **Key Values**



## MSCI ESG Screened Indexes are closest to benchmark (2/2)

Easy access to ESG compliance without compromising performance

Why choose MSCI ESG Screened Indexes?

Aims to represent a broad universe of securities with limited exclusions

Provides investors with a transparent, consistent and more efficient option for those seeking to implement exclusions

The MSCI Screened Index leverages MSCI's award-winning ESG Research expertise The MSCI Screened Index can be used as a benchmark or as a basis for financial products

A market cap index with limited exclusions historically resulting in a minimal tracking error

## 2. MSCI ESG Screened Indexes\*

ESG Exclusion (Screening) Criteria for MSCI World, EAFE, EM,EM Asia, Japan & USA



Thermal Coal

Companies deriving 5% or more revenue from mining or thermal coal or 5% or more revenue from thermal coal based power generation

Oil Sands

Companies deriving 5% or more revenue from oil sands extraction

· Palm Oil\*

Companies deriving 5% or more revenue from palm oil production

Arctic Oil & Gas\*

Companies deriving 5% or more revenue from arctic oil & gas extraction

Controversy Thematic Indicators\*

Companies with a controversy score of 1 on the following indicators: "Environment – Land Use and Biodiversity Score" and "Environment – Supply Chain Management Score"

Tobacco

Companies classified as producers or deriving 5% or more aggregate revenue from production, distribution, retail and supply of tobacco-related products

Controversial weapons

Companies with ties to cluster bombs, landmines, depleted uranium weapons, chemical and biological weapons, blinding laser weapons, non-detectable fragments, incendiary weapons

Civilian Firearms

Companies classified as producers of firearms and small arms ammunition for civilian market or deriving 5% or more revenue from distribution of firearms and small arms

Nuclear Weapons

Companies connect with nuclear weapons: Manufacturers, providers of components or auxiliary services related to nuclear warheads and missiles; Assemblers of delivery platforms for nuclear weapons

Carbon intensity reduction target\*
 A carbon intensity reduction target of 30% will be applied to each MSCI ESG Screened Index

UN Global Compact

Companies that are not in compliance with **the United Nations Global Compact** principles

Screens on Very Severe Controversies\*

The existing screens on Very Severe Controversies (i.e, companies with MSCI ESG Controversies Score of zero) and UN Global Compact will be applied on a monthly basis rather than quarterly, with an implementation as of the last business day of each month

## **Derivatives on MSCI World ESG Screened Index**

## CUMULATIVE INDEX PERFORMANCE — NET RETURNS (USD) (MAY 2012 – DEC 2023)



#### ANNUAL PERFORMANCE (%)

Year	MSCI World ESG Screened	MSCI World
2023	26.23	23.79
2022	-19.61	-18.14
2021	22.16	21.82
2020	17.56	15.90
2019	28.15	27.67
2018	-8.60	-8.71
2017	22.49	22.40
2016	7.02	7.51
2015	-0.08	-0.87
2014	5.39	4.94
2013	27.58	26.68

**FUNDAMENTALS (DEC 29, 2023)** 

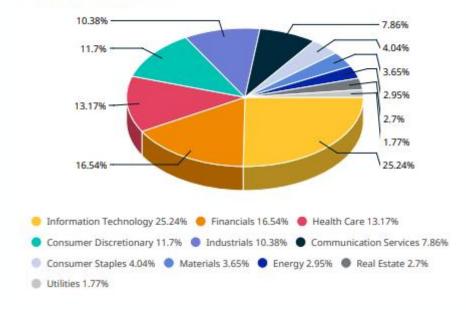
#### INDEX PERFORMANCE - NET RETURNS (%) (DEC 29, 2023)

					ANNUALIZED							
	1 Mo	3 Мо	1 Yr	YTD	3 Yr	5 Yr	10 Yr <sub>N</sub>	Since May 31, 2012	Div Yld (%)	P/E	P/E Fwd	P/BV
MSCI World ESG Screened	5.15	12.12	26.23	26.23	7.43	13.31	8.95	11.31	1.80	21.71	17.88	3.15
MSCI World	4.91	11.42	23.79	23.79	7.27	12.80	8.60	10.92	1.93	20.69	17.40	3.09

#### INDEX RISK AND RETURN CHARACTERISTICS (MAY 31, 2012 - DEC 29, 2023)

				ANNUAL	ANNUALIZED STD DEV (%) 2						MAXIMUM DRAWDOWN		
	Beta	Tracking Error (%)	Turnover (%) 1	3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr	Since May 31, 2012	(%)	Period YYYY-MM-DD	
MSCI World ESG Screened	1.01	0.62	6.01	17.29	18.46	15.15	0.38	0.67	0.56	0.74	33.69	2020-02-12-2020-03-23	
MSCI World	1.00	0.00	2.16	16.99	18.26	14.98	0.37	0.65	0.54	0.72	34.03	2020-02-12-2020-03-23	
	1 Last	12 months	<sup>2</sup> Based o	n monthly	net returns	data 3	Based on	NY FED Ov	ernight SO	FR from Sep	p 1 2021 &	on ICE LIBOR 1M prior that date	

#### SECTOR WEIGHTS



Source: MSCI factsheet (Link on slide 23)

May 2024

## Derivatives on MSCI World ESG Screened Index ESG Metrics

#### Integration, values and norms

	MSCI World Index	MSCI World ESG Screened Index
Integration		
ESG score	6.3	6.3
ESG leaders (AAA-AA) (%)	32.1	33.0
ESG laggards (B-CCC) (%)	5.1	5.2
ESG trend positive (%)	14.9	14.9
ESG trend negative (%)	3.0	3.1
Index ESG rating	Α	Α
Environmental pillar score	5.7	5.8
Social pillar score	4.9	4.9
Governance pillar score	5.5	5.5
Key governance metrics		
Board independence (wtd avg %)	78.6	78.5
Female directors (wtd avg %)	30.4	30.5
Deviation from one share one vote (%)	23.0	23.3
Values and norms		
Tobacco involvement (%)	1.0	0.0
Civilian firearms producers (%)	0.2	0.0
Ties to controversial weapons (%)	0.6	0.0
Global compact compliance violation (%)	1.4	0.0
Red flag controversies (%)	1.8	0.2
Orange flag controversies (%)	30.5	30.5

#### Climate change

	MSCI World Index	MSCI World ESG Screened Index
Climate footprint		
Carbon emissions (t CO2e/\$M invested)	98	67
Carbon intensity (t CO2e/\$M sales)	177	125
Wtd avg carbon intensity (t CO2e/\$M sales)	146	94
Low carbon transition risks		
Low carbon transition score	6.2	6.2
Solutions (%)	7.0	7.4
Product & operational transition (%)	13.3	11.7
Asset stranding (%)	0.1	0.0
Exposure to asset stranding risks		
Potential carbon emissions (t CO2e/\$M invested)	1713	1058
Fossil fuel reserves (%)	4.2	3.3
Thermal coal mining (%)	0.9	0.4
Thermal coal-based power generation (%)	3.2	1.9
Unconventional oil & gas extraction (%)	1.9	1.6
Exposure to clean technology solutions		
Clean technologies solutions (> 20% revenue)	5.1	5.4
Clean technologies solutions revenue (wtd avg %)	4.5	4.6
Green/brown net revenue exposure	2.9	5.2
Other climate metrics		
Exposure to carbon-related assets (%)	5.5	4.1
Climate-related controversies (%, score ≤ 4)	0.6	0.5
Low carbon transition management score (% top quartile)	69.1	69.1

Source: MSCI Data as of September 30, 2020

May 2024

## **Derivatives on MSCI EM ESG Screened Index**

## CUMULATIVE INDEX PERFORMANCE — NET RETURNS (USD) (MAY 2012 – DEC 2023)



#### **ANNUAL PERFORMANCE (%)**

Year	MSCI Emerging Markets ESG Screened	MSCI Emerging Markets
2023	9.50	9.83
2022	-21.09	-20.09
2021	-3.08	-2.54
2020	19.25	18.31
2019	19.06	18.42
2018	-15.16	-14.57
2017	38.25	37.28
2016	10.35	11.19
2015	-14.48	-14.92
2014	-1.58	-2.19
2013	-1.58	-2.60

**FUNDAMENTALS (DEC 29, 2023)** 

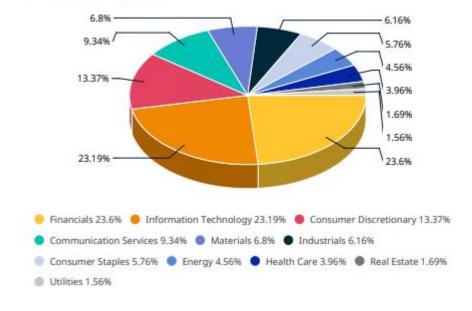
#### INDEX PERFORMANCE - NET RETURNS (%) (DEC 29, 2023)

						ANNU	ALIZED						
	1 Mo	3 Мо	1 Yr	YTD	3 Yr	5 Yr	10 Yr <sub>N</sub>	Since 1ay 31, 2012	Div Yld (%)	P/E	P/E Fwd	P/BV	
MSCI Emerging Markets ESG Screened	3.78	7.77	9.50	9.50	-5.74	3.52	2.62	3.65	2.79	14.69	11.88	1.66	
MSCI Emerging Markets	3.91	7.86	9.83	9.83	-5.08	3.68	2.66	3.54	2.90	14.54	11.74	1.63	

#### INDEX RISK AND RETURN CHARACTERISTICS (MAY 31, 2012 - DEC 29, 2023)

				ANNUALIZED STD DEV (%) 2			SHARPE RATIO 2.3				MAXIMUM DRAWDOWN		
	Beta	Tracking Error (%)	Turnover (%) 1	3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr	Since May 31, 2012	(%)	Period YYYY-MM-DD	
MSCI Emerging Markets ESG Screened	1.00	0.65	8.51	17.49	19.14	17.20	-0.38	0.18	0.16	0.23	40.33	2021-02-17-2022-10-24	
MSCI Emerging Markets	1.00	0.00	5.92	17.39	19.16	17.22	-0.34	0.19	0.16	0.22	39.00	2021-02-17-2022-10-24	
	1 Last	12 months	months <sup>2</sup> Based on monthly net returns data <sup>3</sup> Based on NY F					NY FED Ov	ernight SO	FR from Se	p 1 2021 & c	on ICE LIBOR 1M prior that date	

#### SECTOR WEIGHTS



Source: MSCI factsheet (Link on slide 23)

May 2024

## **Derivatives on MSCI EM ESG Screened Index**

### **ESG Metrics**

Integration,	values	and	norms

	MSCI EM (Emerging Markets) Index	MSCI EM ESG Screened Index
Integration		
ESG score	4.9	5.0
ESG leaders (AAA-AA) (%)	11.7	12.0
ESG laggards (B-CCC) (%)	17.5	16.3
ESG trend positive (%)	15.0	15.1
ESG trend negative (%)	2.8	2.8
Index ESG rating	BBB	BBB
Environmental pillar score	4.8	4.9
Social pillar score	5.0	5.1
Governance pillar score	4.0	4.0
Key governance metrics		
Board independence (wtd avg %)	55.9	55.8
Female directors (wtd avg %)	12.0	12.0
Deviation from one share one vote (%)	44.4	43.6
Values and norms		
Tobacco involvement (%)	0.3	0.0
Civilian firearms producers (%)	0.0	0.0
Ties to controversial weapons (%)	0.1	0.0
Global compact compliance violation (%)	1.7	0.0
Red flag controversies (%)	1.9	0.1
Orange flag controversies (%)	9.7	9.8

#### Climate change

	MSCI EM (Emerging Markets) Index	MSCI EM ESG Screened Index
Climate footprint		
Carbon emissions (t CO2e/\$M invested)	282	192
Carbon intensity (t CO2e/\$M sales)	396	277
Wtd avg carbon intensity (t CO2e/\$M sales)	253	191
Low carbon transition risks		
Low carbon transition score	5.9	6.0
Solutions (%)	2.5	2.4
Product & operational transition (%)	22.8	21.2
Asset stranding (%)	1.1	0.6
Exposure to asset stranding risks		
Potential carbon emissions (t CO2e/\$M invested)	10031	6223
Fossil fuel reserves (%)	7.1	5.0
Thermal coal mining (%)	1.9	0.6
Thermal coal-based power generation (%)	1.7	0.8
Unconventional oil & gas extraction (%)	2.2	2.1
Exposure to clean technology solutions		
Clean technologies solutions (> 20% revenue)	3.3	3.2
Clean technologies solutions revenue (wtd avg %)	3.8	3.8
Green/brown net revenue exposure	2.1	3.3
Other climate metrics		
Exposure to carbon-related assets (%)	6.7	5.8
Climate-related controversies (%, score ≤ 4)	0.0	0.0
Low carbon transition management score (% top quartile)	41.9	42.3

Source: MSCI Data as of September 30, 2020

## **Derivatives on MSCI EAFE ESG Screened Index**

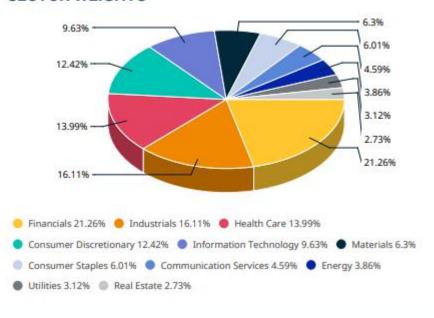
## CUMULATIVE INDEX PERFORMANCE — NET RETURNS (USD) (MAY 2012 – DEC 2023)



#### **ANNUAL PERFORMANCE (%)**

Year	MSCI EAFE ESG Screened	MSCI EAFE
2023	19.11	18.24
2022	-16.13	-14.45
2021	10.90	11.26
2020	9.27	7.82
2019	22.43	22.01
2018	-14.27	-13.79
2017	25.13	25.03
2016	0.09	1.00
2015	-0.04	-0.81
2014	-4.61	-4.90
2013	23.88	22.78

#### SECTOR WEIGHTS



#### INDEX PERFORMANCE - NET RETURNS (%) (DEC 29, 2023)

<b>FUNDAMENTALS</b>	(DEC 29)	,2023)	
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						ANNU	ALIZED					
	1 Mo	3 Мо	1 Yr	YTD	3 Yr	5 Yr	10 Yr <sub>M</sub>	Since lay 31, 2012	Div Yld (%)	P/E	P/E Fwd	P/BV
MSCI EAFE ESG Screened	5.40	10.74	19.11	19.11	3.47	8.19	4.26	7.47	2.93	14.90	13.51	1.75
MSCI EAFE	5.31	10.42	18.24	18.24	4.02	8.16	4.28	7.36	3.04	14.74	13.24	1.76

#### INDEX RISK AND RETURN CHARACTERISTICS (MAY 31, 2012 - DEC 29, 2023)

				ANNUAL	ANNUALIZED STD DEV (%) 2		SHARPE RATIO 2.3				MAXIMUM DRAWDOWN		
	Beta	Tracking Error (%)	Turnover (%) 1	3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr	Since May 31, 2012	(%)	Period YYYY-MM-DD	
MSCI EAFE ESG Screened	1.00	0.67	10.37	17.04	18.08	15.24	0.16	0.42	0.26	0.48	33.72	2018-01-25-2020-03-23	
MSCI EAFE	1.00	0.00	2.89	16.85	18.08	15.24	0.19	0.42	0.26	0.48	34.12	2018-01-25-2020-03-23	
	1 Last	12 months	2 Based o	n monthly	net returns	data 3	Based on	NY FED Ov	ernight SO	FR from Se	1 2021 & o	on ICE LIBOR 1M prior that date	

Source: MSCI factsheet (Link on slide 23)

May 2024

## **Derivatives on MSCI EAFE ESG Screened Index**

## **ESG Metrics**

Integration,	. values	and	norms
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	MSCI EAFE Index	MSCI EAFE ESG Screened Index
Integration		
ESG score	7.0	7.1
ESG leaders (AAA-AA) (%)	45.2	47.7
ESG laggards (B-CCC) (%)	2.9	2.6
ESG trend positive (%)	12.3	11.8
ESG trend negative (%)	4.0	4.1
Index ESG rating	AA	AA
Environmental pillar score	5.9	6.0
Social pillar score	5.2	5.2
Governance pillar score	5.8	5.8
Key governance metrics		
Board independence (wtd avg %)	70.8	70.1
Female directors (wtd avg %)	29.2	29.2
Deviation from one share one vote (%)	27.9	27.0
Values and norms		
Tobacco involvement (%)	1.4	0.0
Civilian firearms producers (%)	0.3	0.0
Ties to controversial weapons (%)	0.0	0.0
Global compact compliance violation (%)	2.4	0.0
Red flag controversies (%)	2.5	0.1
Orange flag controversies (%)	25.6	24.1

#### Climate change

	MSCI EAFE Index	MSCI EAFE ESG Screened Index
Climate footprint		
Carbon emissions (t CO2e/\$M invested)	164	127
Carbon intensity (t CO2e/\$M sales)	179	145
Wtd avg carbon intensity (t CO2e/\$M sales)	135	104
Low carbon transition risks		
Low carbon transition score	6.1	6.1
Solutions (%)	3.6	3.8
Product & operational transition (%)	20.3	18.8
Asset stranding (%)	0.1	0.0
Exposure to asset stranding risks		
Potential carbon emissions (t CO2e/\$M invested)	3140	1669
Fossil fuel reserves (%)	6.6	4.5
Thermal coal mining (%)	2.6	1.4
Thermal coal-based power generation (%)	3.3	2.6
Unconventional oil & gas extraction (%)	2.3	1.7
Exposure to clean technology solutions		
Clean technologies solutions (> 20% revenue)	5.1	5.4
Clean technologies solutions revenue (wtd avg %)	4.2	4.5
Green/brown net revenue exposure	3.0	5.1
Other climate metrics		
Exposure to carbon-related assets (%)	6.5	5.4
Climate-related controversies (%, score ≤ 4)	0.2	0.0
Low carbon transition management score (% top quartile)	72.7	72.1

Source: MSCI Data as of September 30, 2020

## **Derivatives on MSCI Japan ESG Screened Index**

## CUMULATIVE INDEX PERFORMANCE – NET RETURNS (USD) (MAY 2012 – DEC 2023)

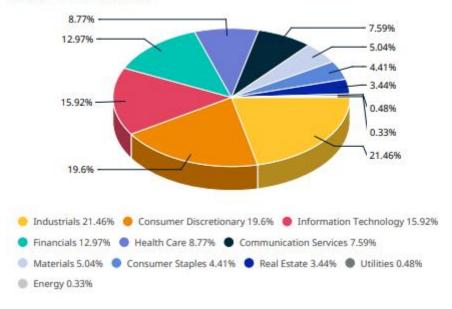


#### **ANNUAL PERFORMANCE (%)**

Year	MSCI Japan ESG Screened	MSCI Japan
2023	19.90	20.32
2022	-17.04	-16.65
2021	1.58	1.71
2020	15.18	14.48
2019	21.02	19.61
2018	-13.48	-12.88
2017	24.83	23.99
2016	3.10	2.38
2015	8.83	9.57
2014	-3.77	-4.02
2013	27.39	27.16

**FUNDAMENTALS (DEC 29, 2023)** 

#### SECTOR WEIGHTS



#### INDEX PERFORMANCE - NET RETURNS (%) (DEC 29, 2023)

					ANNUALIZED								
	1 Mo	3 Мо	1 Yr	YTD	3 Yr	5 Yr	10 Yr <sub>N</sub>	Since lay 31, 2012	Div Yld (%)	P/E	P/E Fwd	P/BV	
MSCI Japan ESG Screened	4.44	8.40	19.90	19.90	0.34	7.09	5.09	7.56	2.18	16.47	14.53	1.42	-
MSCI Japan	4.37	8.19	20.32	20.32	0.66	6.91	4.97	7.36	2.24	15.64	14.08	1.38	

#### INDEX RISK AND RETURN CHARACTERISTICS (MAY 31, 2012 - DEC 29, 2023)

				ANNUAL	IZED STD I	DEV (%) 2		SHARPE F	RATIO 2,3			MAXIMUM DRAWDOWN
	Beta	Tracking Error (%)	Turnover (%) <sup>1</sup>	3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr	Since May 31, 2012	(%)	Period YYYY-MM-DD
MSCI Japan ESG Screened	1.01	0.50	7.09	15.46	15.89	14.18	-0.04	0.39	0.33	0.51	33.70	2021-09-14-2022-10-21
MSCI Japan	1.00	0.00	3.03	15.36	15.72	13.99	-0.02	0.39	0.32	0.50	33.42	2021-09-14-2022-10-21
	1 Last	12 months	2 Based o	n monthly	net returns	s data 3	Based on	NY FED Ov	ernight SO	FR from Sep	1 2021 & c	on ICE LIBOR 1M prior that date

Source: MSCI factsheet (Link on slide 23)

May 2024

# **Derivatives on MSCI Japan ESG Screened Index ESG Metrics**

#### Integration, values and norms

	MSCI Japan Index	MSCI Japan ESG Screened Index
Integration		
ESG score	6.0	6.0
ESG leaders (AAA-AA) (%)	28.0	28.6
ESG laggards (B-CCC) (%)	7.8	7.9
ESG trend positive (%)	18.3	18.8
ESG trend negative (%)	3.1	2.3
Index ESG rating	Α	Α
Environmental pillar score	5.8	5.9
Social pillar score	5.2	5.3
Governance pillar score	4.8	4.8
Key governance metrics		
Board independence (wtd avg %)	41.0	41.0
Female directors (wtd avg %)	11.9	11.8
Deviation from one share one vote (%)	4.9	4.7
Values and norms		
Tobacco involvement (%)	1.5	0.0
Civilian firearms producers (%)	0.0	0.0
Ties to controversial weapons (%)	0.0	0.0
Global compact compliance violation (%)	0.1	0.0
Red flag controversies (%)	0.1	0.0
Orange flag controversies (%)	9.0	7.7

#### Climate change

	MSCI Japan Index	MSCI Japan ESG Screened Index
Climate footprint		
Carbon emissions (t CO2e/\$M invested)	190	119
Carbon intensity (t CO2e/\$M sales)	168	108
Wtd avg carbon intensity (t CO2e/\$M sales)	79	62
Low carbon transition risks		
Low carbon transition score	6.1	6.2
Solutions (%)	4.2	4.3
Product & operational transition (%)	16.9	16.4
Asset stranding (%)	0.0	0.0
Exposure to asset stranding risks		
Potential carbon emissions (t CO2e/\$M invested)	428	408
Fossil fuel reserves (%)	5.1	4.8
Thermal coal mining (%)	4.1	4.1
Thermal coal-based power generation (%)	2.4	1.5
Unconventional oil & gas extraction (%)	0.9	1.0
Exposure to clean technology solutions		
Clean technologies solutions (> 20% revenue)	4.6	4.7
Clean technologies solutions revenue (wtd avg %)	4.8	4.9
Green/brown net revenue exposure	6.0	13.2
Other climate metrics		
Exposure to carbon-related assets (%)	2.0	1.2
Climate-related controversies (%, score ≤ 4)	0.0	0.0
Low carbon transition management score (% top quartile)	72.0	72.4

Source: MSCI Data as of September 30, 2020

## **Derivatives on MSCI USA ESG Screened Index**

## CUMULATIVE INDEX PERFORMANCE – NET RETURNS (USD) (MAY 2012 – DEC 2023)

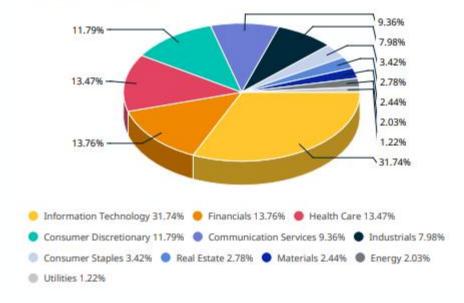


#### ANNUAL PERFORMANCE (%)

Year	MSCI USA ESG Screened	MSCI USA
2023	29.64	26.49
2022	-21.14	-19.85
2021	27.14	26.45
2020	22.20	20.73
2019	31.29	30.88
2018	-4.69	-5.04
2017	21.17	21.19
2016	10.72	10.89
2015	1.48	0.69
2014	13.20	12.69
2013	32.41	31.79

**FUNDAMENTALS (DEC 29, 2023)** 

#### SECTOR WEIGHTS



#### INDEX PERFORMANCE - NET RETURNS (%) (DEC 29, 2023)

							ALIZED						
	1 Mo	3 Мо	1 Yr	YTD	3 Yr	5 Yr	10 Yr <sub>M</sub>	Since lay 31, 2012	Div Yld (%)	P/E	P/E Fwd	P/BV	
MSCI USA ESG Screened	4.94	12.58	29.64	29.64	9.14	15.83	11.85	13.74	1.31	26.28	20.68	4.66	
MSCIUSA	4.67	11.81	26.49	26.49	8.64	15.16	11.36	13.29	1.44	24.88	20.07	4.54	

#### INDEX RISK AND RETURN CHARACTERISTICS (MAY 31, 2012 - DEC 29, 2023)

				ANNUAL	IZED STD I	DEV (%) 2	SHARPE RATIO 2.3				MAXIMUM DRAWDOWN		
	Beta	Tracking Error (%)	Turnover (%) 1	3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr	Since May 31, 2012	(%)	Period YYYY-MM-DD	
MSCI USA ESG Screened	1.01	0.68	5.63	18.04	19.13	15.64	0.46	0.77	0.71	0.87	33.95	2020-02-19-2020-03-23	
MSCIUSA	1.00	0.00	1.94	17.71	18.85	15.40	0.44	0.75	0.69	0.85	34.16	2020-02-19-2020-03-23	
	1 Last	12 months	<sup>2</sup> Based o	n monthly	net returns	data 3	Based on	NY FED Ov	ernight SO	FR from Ser	1 2021 & 0	on ICE LIBOR 1M prior that date	

Source: MSCI factsheet (Link on slide 23)

May 2024

## **Derivatives on MSCI USA ESG Screened Index**

### **ESG Metrics**

Integrat	ion, va	lues and	norms
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	MSCI USA Index	MSCI USA ESG Screened Index
Integration		
ESG score	6.0	6.0
ESG leaders (AAA-AA) (%)	26.4	26.7
ESG laggards (B-CCC) (%)	6.2	6.5
ESG trend positive (%)	16.3	16.6
ESG trend negative (%)	2.3	2.4
Index ESG rating	Α	Α
Environmental pillar score	5.7	5.8
Social pillar score	4.7	4.8
Governance pillar score	5.4	5.4
Key governance metrics		
Board independence (wtd avg %)	81.9	81.9
Female directors (wtd avg %)	30.8	30.9
Deviation from one share one vote (%)	19.1	20.0
Values and norms		
Tobacco involvement (%)	0.8	0.0
Civilian firearms producers (%)	0.2	0.0
Ties to controversial weapons (%)	0.9	0.0
Global compact compliance violation (%)	0.8	0.0
Red flag controversies (%)	1.4	0.3
Orange flag controversies (%)	33.0	33.5

#### Climate change

	MSCI USA Index	MSCI USA ESG Screened Index
Climate footprint		
Carbon emissions (t CO2e/\$M invested)	66	39
Carbon intensity (t CO2e/\$M sales)	170	105
Wtd avg carbon intensity (t CO2e/\$M sales)	144	84
Low carbon transition risks		
Low carbon transition score	6.2	6.3
Solutions (%)	8.7	9.2
Product & operational transition (%)	9.1	7.6
Asset stranding (%)	0.0	0.0
Exposure to asset stranding risks		
Potential carbon emissions (t CO2e/\$M invested)	715	752
Fossil fuel reserves (%)	2.9	2.6
Thermal coal mining (%)	0.1	0.0
Thermal coal-based power generation (%)	3.2	1.7
Unconventional oil & gas extraction (%)	1.4	1.5
Exposure to clean technology solutions		
Clean technologies solutions (> 20% revenue)	5.3	5.5
Clean technologies solutions revenue (wtd avg %)	4.7	4.8
Green/brown net revenue exposure	3.1	5.3
Other climate metrics		
Exposure to carbon-related assets (%)	4.6	3.2
Climate-related controversies (%, score ≤ 4)	0.5	0.6
Low carbon transition management score (% top quartile)	67.8	68.0

Source: MSCI Data as of September 30, 2020

## **Derivatives on MSCI EM Asia ESG Screened Index**

## CUMULATIVE INDEX PERFORMANCE — NET RETURNS (USD) (MAY 2012 – DEC 2023)

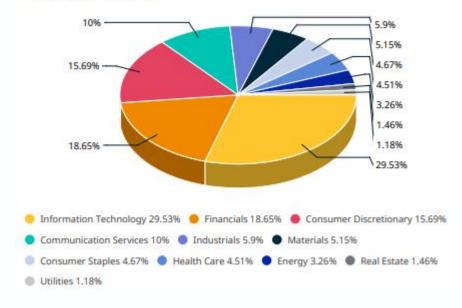


#### **ANNUAL PERFORMANCE (%)**

2023     7.27     7.76       2022     -21.58     -21.11       2021     -5.59     -5.08       2020     29.09     28.38       2019     20.34     19.24       2018     -15.60     -15.45       2017     44.12     42.83       2016     5.87     6.14       2015     -9.00     -9.79
2021     -5.59     -5.08       2020     29.09     28.38       2019     20.34     19.24       2018     -15.60     -15.45       2017     44.12     42.83       2016     5.87     6.14       2015     -9.00     -9.79
2020     29.09     28.38       2019     20.34     19.24       2018     -15.60     -15.45       2017     44.12     42.83       2016     5.87     6.14       2015     -9.00     -9.79
2019     20.34     19.24       2018     -15.60     -15.45       2017     44.12     42.83       2016     5.87     6.14       2015     -9.00     -9.79
2018     -15.60     -15.45       2017     44.12     42.83       2016     5.87     6.14       2015     -9.00     -9.79
2017 44.12 42.83 2016 5.87 6.14 2015 -9.00 -9.79
2016 5.87 6.14 2015 -9.00 -9.79
2015 -9.00 -9.79
2014 5.35 4.89
2013 3.00 1.98

**FUNDAMENTALS (DEC 29, 2023)** 

#### SECTOR WEIGHTS



#### INDEX PERFORMANCE - NET RETURNS (%) (DEC 29, 2023)

						ANNU	ALIZED					
	1 Mo	3 Мо	1 Yr	YTD	3 Yr	5 Yr	10 Yr <sub>M</sub>	Since lay 31, 2012	Div Yld (%)	P/E	P/E Fwd	P/BV
MSCI Emerging Markets Asia ESG Screened	3.09	6.75	7.27	7.27	-7.40	4.29	4.30	5.50	2.38	16.29	12.50	1.63
MSCI Emerging Markets Asia	3.26	6.71	7.76	7.76	-6.90	4.32	4.13	5.22	2.47	16.23	12.41	1.61

#### INDEX RISK AND RETURN CHARACTERISTICS (MAY 31, 2012 - DEC 29, 2023)

				ANNUAL	IZED STD I	DEV (%) 2		SHARPE F	RATIO 2,3		MAXIMUM DRAWDOWN		
	Beta	Tracking Error (%)	Turnover (%) 1	3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr	Since May 31, 2012	(%)	Period YYYY-MM-DD	
MSCI Emerging Markets Asia ESG Screened	1.01	0.48	9.30	19.63	19.86	17.52	-0.41	0.21	0.25	0.33	45.54	2021-02-17-2022-10-24	
MSCI Emerging Markets Asia	1.00	0.00	6.30	19.33	19.63	17.33	-0.39	0.22	0.24	0.32	44.58	2021-02-17-2022-10-24	
	1 Last	12 months	2 Based o	n monthly	net returns	data 3	Based on I	NY FED Ow	ernight SO	FR from Sep	1 2021 & c	on ICE LIBOR 1M prior that date	

Source: MSCI factsheet (Link on slide 23)

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## **Derivatives on MSCI Europe ESG Screened Index**

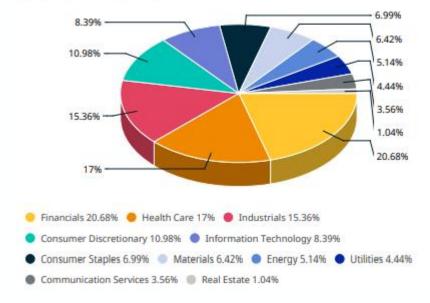
## CUMULATIVE INDEX PERFORMANCE — NET RETURNS (EUR) (MAY 2012 – DEC 2023)



#### **ANNUAL PERFORMANCE (%)**

Year	MSCI Europe ESG Screened	MSCI Europe
2023	17.67	15.83
2022	-11.60	-9.49
2021	24.77	25.13
2020	-1.70	-3.32
2019	25.99	26.05
2018	-10.99	-10.57
2017	10.11	10.24
2016	1.23	2.58
2015	9.40	8.22
2014	7.09	6.84
2013	21.39	19.82

#### SECTOR WEIGHTS



#### INDEX PERFORMANCE - NET RETURNS (%) (DEC 29, 2023)

	FUNDAMENTALS	(DEC 29, 2023)	
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							ALIZED					
	1 Mo	3 Мо	1 Yr	YTD	3 Yr	5 Yr	10 Yr <sub>M</sub>	Since lay 31, 2012	Div Yld (%)	P/E	P/E Fwd	P/BV
MSCI Europe ESG Screened	4.01	7.40	17.67	17.67	9.08	9.96	6.45	8.92	3.03	14.26	13.03	1.98
MSCI Europe	3.71	6.44	15.83	15.83	9.47	9.84	6.46	8.73	3.15	14.23	12.78	1.96

#### INDEX RISK AND RETURN CHARACTERISTICS (MAY 31, 2012 - DEC 29, 2023)

				ANNUAL	IZED STD I	DEV (%) 2		SHARPE F	RATIO 2,3		MAXIMUM DRAWDOWN		
	Beta	Tracking Error (%)	Turnover (%) 1	3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr	Since May 31, 2012	(%)	Period YYYY-MM-DD	
MSCI Europe ESG Screened	1.00	0.89	13.22	14.24	15.97	14.06	0.62	0.66	0.51	0.70	34.67	2020-02-19-2020-03-18	
MSCI Europe	1.00	0.00	3.04	13.87	15.99	14.02	0.66	0.65	0.51	0.69	35.25	2020-02-19-2020-03-18	
	1 Last	12 months	<sup>2</sup> Based o	n monthly	net returns	data 3	Based on	EMMI EURI	BOR 1M f	rom Sep 1 2	021 & on ICE LIBOR 1M prior that date		

Source: MSCI factsheet (Link on slide 23)

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## **Derivatives on MSCI EMU ESG Screened Index**

#### **CUMULATIVE INDEX PERFORMANCE - NET RETURNS (EUR)** (MAY 2012 - DEC 2023)



#### **ANNUAL PERFORMANCE (%)**

Year	MSCI EMU ESG Screened	MSCI EMU
2023	19.71	18.78
2022	-13.42	-12.47
2021	22.46	22.16
2020	-0.08	-1.02
2019	24.89	25.47
2018	-13.41	-12.71
2017	12.26	12.49
2016	4.65	4.37
2015	9.37	9.81
2014	4.88	4.32
2013	23.83	23.36

#### INDEX PERFORMANCE - NET RETURNS (%) (DEC 29, 2023)

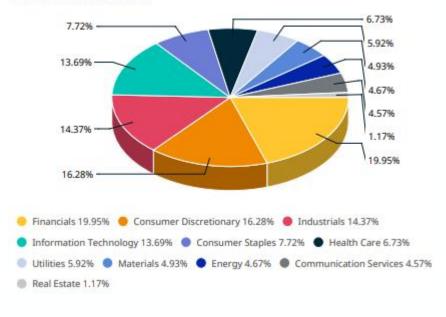
<b>FUNDAMENTALS (</b>	DEC 29, 2023)	
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						ANNU	ALIZED					
	1 Mo	3 Мо	1 Yr	YTD	3 Yr	5 Yr	10 Yr <sub>M</sub>	Since 1ay 31, 2012	Div Yld (%)	P/E	P/E Fwd	P/BV
MSCI EMU ESG Screened	3.16	8.01	19.71	19.71	8.27	9.63	6.33	9.36	3.08	14.56	12.37	1.75
MSCI EMU	3.22	7.75	18.78	18.78	8.29	9.54	6.36	9.35	3.10	14.19	12.16	1.69

#### INDEX RISK AND RETURN CHARACTERISTICS (MAY 31, 2012 - DEC 29, 2023)

				ANNUAL	JZED STD I	DEV (%) 2		SHARPE	RATIO 2.3		MAXIMUM DRAWDOWN				
	Beta	Tracking Turnover Error (%) (%) 1		3 Yr	5 Yr	10 Yr	3 Yr	5 Yr	10 Yr	Since May 31, 2012	(%)	Period YYYY-MM-DD			
MSCI EMU ESG Screened	0.99	0.69	9.87	16.01	18.22	15.94	0.52	0.58	0.46	0.66	37.31	2020-02-19-2020-03-18			
MSCI EMU	1.00	0.00	3.09	15.91	18.46	16.06	0.53	0.57	0.46	0.65	38.07	2020-02-19-2020-03-18			
	1 Last	1 Last 12 months 2 Based on monthly net returns data 3 Based on EMMI EURIBOR 1M from Sep 1 2021 & on ICE LIBOR 1M prior that date													

#### SECTOR WEIGHTS



Source: MSCI factsheet (Link on slide 23)

May 2024

## **MSCI - Product Specifications ESG Derivatives**

	Benchmark Futures								ESG Futures											ESG Options				Options on ETFs			
	MSCI World	MSCI EM	MSCI EAFE	MSCI USA	MSCI Japan	MSCI Europe	MSCI World ESG Screened	MSCI EM ESG Screened	MSCI EAFE ESG Screened	MSCI USA ESG Screened	MSCI Japan ESG Screened	MSCI World ESG Enhance d Focus CTB	MSCI EM ESG Enhance d Focus CTB	MSCI Japan ESG Enhance d Focus CTB	MSCI USA ESG Enhance d Focus CTB	MSCI Europe ESG Enhance d Focus CTB	MSCI EM Asia ESG Screened	MSCI Europe ESG Screened	MSCI EMU ESG Screened	MSCI EM Asia ESG Screened	MSCI EM ESG Screened	MSCI USA ESG Screened	MSCI World ESG Screened	iShares MSCI World ESG Enhance d UCITS	iShares MSCI EM ESG Enhanced UCITS	iShares MSCI USA ESG Enhanced UCITS	iShares MSCI Europe ESG Enhance d UCITS
EUREX Product Code	FMWO	FMEM	FMFA	FMUS	FMJP	FMEU	FMSW	FMSM	FMSF	FMSU	FMSJ	FMFW	FMFE	FMFJ	FMFU	FMFO	FMSS	FMSR	FMSO	OMSS	OMSM	OMSU	OMSW	EEWD	EEDM	EEDS	EMNU
Currency			USD			EUR					USD					EUR	USD	El	UR	USD	USD	USD	USD	l	JSD		EUR
Index Type													NTR														
Bloomberg Prod. Code	ZWPA	ZTSA	FFAA	ZSOA	FMIA	ZRPA	HRLA	HRRA	HRWA	HRIA	HRYA	SJYA	SHRA	SHWA	SICA	SHSA	MUYA	AUEA	UMEA	-	-	-	-	EEWD LN	EEDM LN	EEDS LN	EMNU GY
Bloomberg Index Code	NDDUWI	NDUEEGF	NDDUEAFE	NDDUUS	NDDUJN	MSDEE15N	I NU721415	NU728007	NU728974	NU721417	NU721420	NU723911	NU723916	NU723913	NU723912	NE723914	NU733561	NE721416	NE721421	NU733353	NU728007	NU721417	NU721415	EEWDLN	EEDM LN	EEDS LN	EMNU GY
Reuters Product Code	0#FMWO	0#FMEM	0#FMFA	0#FMUS	0#FMJP	0#FMEU	0#FMSW	0#FMSM	0#FMSF	0#FMSU	0#FMSJ	0#FMFW	0#FMFE	0#FMFJ	0#FMFU	0#FMFO	0#FMSS	0#FMSR	0#FMSO	0#OMSS	0#OMSM	0#OMSU	0#OMSW	EEWD.L	EEDM.L	EEDS.L	EMNU.DE
Contract														Up to	36 months	s: guarterly	months										
months Multiplier	10	100	10	10	10	100	10	10	10	10	10	10	10	10	10	10	20	10	10	10	10	10	10	1000	1000	1000	1000
Tick Size (order book)	1	0.1	1	1	1	0.05	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.01	0.01	0.01	0.01
Tick Value, in currency	10 USD	10 USD	10 USD	10 USD	10 USD	5 EUR	5 USD	5 USD	5 USD	5 USD	5 USD	5 USD	5 USD	5 USD	5 USD	5 EUR	10 USD	5 EUR	5 EUR	10 USD	10 USD	10 USD	10 USD	10 USD	10 USD	10 USD	10 EUR
Minimum Block Trade	100	50	1	10	50	250	100	50	50	100	50	1	1	1	1	1	1	1	1	1	10	10	10	500	500	500	500
Contract value, in currency*	85K	53K	67K	116K	67K	28K	29K	15K	20K	38K	20K	26K	14K	19K	34K	20K	38K	24K	24K	17k	13k	35k	28k	7K	5K	8K	6K
CFTC Approved									Yes														No				
Underlying Factsheet	MSCI World	MSCI EM	MSCI EAFE	MSCI USA	MSCI Japan	MSCI Europe	MSCI World ESG Screened	MSCI EM ESG Screened	MSCI EAFE ESG Screened	MSCI USA ESG Screened	MSCI Japan ESG Screened	MSCI World ESG Enhanced Focus CTB	MSCI Emerging Markets ESG Enhanced Focus CTB	MSCI Japan ESG Enhanced Focus CTB	MSCI USA ESG Enhanced Focus CTB	MSCI Europe ESG Enhanced Focus CTB	MSCI EM Asia ESG Screened	MSCI Europe ESG Screened	EMU ESG Screened	MSCI EM Asia ESG Screened	MSCI EM ESG Screened	MSCI USA ESG Screened	MSCI World ESG Screened	iShares MSCI World ESG Enhanced UCITS	iShares MSCI EM ESG Enhanced UCITS	iShares MSCI USA ESG Enhanced UCITS	iShares MSCI Europe ESG Enhanced UCITS

**EUREX** 23 May 2024



## Thank you!





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