

STOXX

Eurex ESG Derivatives

July 2020

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STOXX Europe ESG Leaders Select 30
EUR

Introduction

STOXX is now Part of Qontigo...

A new financial intelligence driver, modernizing investment management



Index

STOXX & DAX

World-class indices that are licensed to more than 500 companies, including the world's largest financial product issuers, capital owners and asset managers.



Analytics

AXIOMA

Best of breed portfolio construction and risk analytics tools.

Deutsche Börse Sustainability

Accelerating sustainable finance

Deutsche Börse Sustainability

- Deutsche Börse Group launched the Accelerating Sustainable Finance Initiative in May 2017.
- The initial objective of the original 23 signatories of the “Frankfurt Declaration” was to define a framework for a sustainable financial sector and launch specific initiatives in the financial center of Frankfurt.

Eurex & STOXX

- In 2018 two Deutsche Börse Group entities (Eurex and STOXX) reached out jointly to market participants in order to assess demand for listed **ESG Derivatives**.
- Based on the positive feedback from market participants Eurex decided to launch their first ESG Derivatives on **Feb. 14, 2019**.
- October 2019 and February 2020 saw the extension of the suite including the launch of exchange-traded options.

Eurex derivatives based on ESG indices derived on Europe’s key benchmarks provide new tools to the ESG market with the ambition to **increase liquidity** and **lower the cost of trading**

Feedback From Market Participants

Strong demand for ESG Derivatives on STOXX benchmarks

General feedback

- Strong demand for ESG versions of STOXX benchmarks
- Focus on liquidity and lower the cost of trading ESG indices
- Keep it simple
- Similar risk-return profile as STOXX benchmarks
- Tier-1 ESG data provider (like Sustainalytics, CDP)
- Aligned with upcoming EU Commission regulation
- Easy to implement

Market participants Europe



Product specific feedback

- Asset managers are looking for “ESG compliant” version of STOXX Europe 600 with “standardized” set of exclusions (UN Global compact, controversial weapons, tobacco, coal)
- Insurance companies showed strong interest in low carbon version of EURO STOXX 50
- Positive feedback on STOXX Europe 600 aligned with “positive carbon impact benchmark” definition EU commission

- Eurex launched¹ their first ESG Derivatives with underlyings linked to ESG versions of STOXX European flagship indices **February 2019**.
- **October 2019** saw the extension of the suite including the launch of exchange-traded options.
- **February 2020** saw the launch of futures contracts on the STOXX USA 500 ESG-X Index

1) <https://www.eurexchange.com/exchange-en/resources/circulars/Equity-index-derivatives--Introduction-of-futures-on-STOXX--ESG-X--Low-Carbon-and-Climate-Impact-indexes/3569322>

Eurex ESG Derivatives on STOXX Indices

Different ESG versions of STOXX flagship indices

STOXX Europe 600 ESG-X & STOXX USA 500 ESG-X

- Based on exclusion criteria of responsible policy of leading asset owners
- Norm-based screening (Global Compact) including Human and Labour rights, Environment and Business Ethics and Corruption
- Product Involvement screening, including controversial weapons, tobacco and thermal coal
- Aimed to reduce market risk and reputational risks
- Similar risk-return profile as benchmark

EURO STOXX 50 Low Carbon

- New tool to address climate risks
- Lowering carbon footprint of EURO STOXX 50 with approx. 50%
- Transparent weighting scheme lowering the carbon footprint by applying carbon intensity Z-scores, no exclusions
- Aligned with “Low Carbon Benchmark” definition (article 23a) provided in proposal of EU Commission amending regulation 2016/1011
- Similar risk-return profile as EURO STOXX 50

STOXX Europe Climate Impact

- Next generation of Low Carbon indices
- Evaluates companies progress towards transitioning to low carbon economy
- Integrated CDP climate scoring methodology which includes forward-looking metrics such as carbon pricing and science-based targets
- Addressing climate risks with additional ESG screens: UN Global Compact, Controversial Weapons, Tobacco and Coal

STOXX Europe ESG Leaders Select 30 EUR

- By applying a screening to exclude high volatility stocks, the methodology targets those low volatility stocks generating higher returns than its higher volatility peers
- It also reduces the risk to select those stocks whose dividend yield is high as a consequence of a share price drop

Eurex ESG Derivatives

Product suite

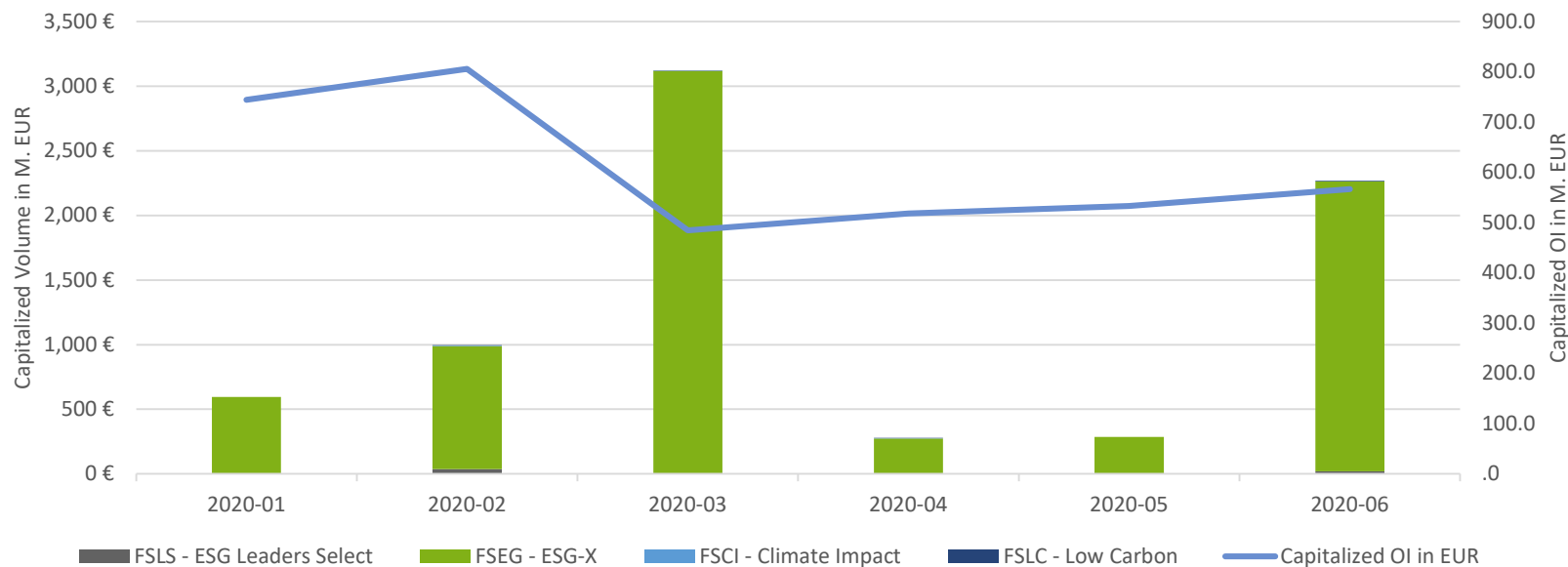
Index name	Curr	Index type	US allowed	Index code	Bloomberg	Eurex product ID	Multiplier	Minimum Block Trade Size	Tick Size	Tick Value	Calendar Tick/Value	Contract value*	
STOXX Europe ESG Indices													
EURO STOXX 50 Low Carbon	EUR	Price	y	SXE5LCEP	SXE5LCEP	FSLC	up to 9 months	100	50	0.1	10	n.a.	15,298
STOXX Europe Climate Impact Ex Global Compact Controversial Weapons & Tobacco	EUR	Price	y	SXECITEP	SXECITEP	FSCI	up to 9 months	100	50	0.1	10	n.a.	12,245
STOXX Europe 600 ESG-X	EUR	Price	y	SXXPESGX	SXXPESGX	FSEG	up to 9 months	100	50	0.1	10	n.a.	13,446
STOXX USA 500 ESG-X	USD	Price	y	SU5LESGX	SU5LESGX	FSUS	up to 9 months	100	50	0.05	5	n.a.	22,880
STOXX Europe ESG Leaders Select 30	EUR	Price	y	SEESGSEP	SEESGSEP	FSLS	up to 9 months	100	50	0.1	10	n.a.	12,057
Related product benchmarks													
STOXX Europe 600 (Benchmark)	EUR	Price	Y	SXXP		FXXP		50	100	0.1	5	0.02/€1	18,017
EURO STOXX 50 (Blue-Chip)	EUR	Price	y	SX5E		FESX		10	1000	1	10		32,341

*as of Jun 30, 2020; expected for ESG-X

Eurex ESG Futures

Volume distribution from Jan to Jun 2020¹⁾

ESG Futures	593,606 contracts traded
ESG Options	4,000 contracts traded
Open Interest	615 M. EUR in Open Interest



1) <https://www.eurexchange.com/exchange-en/products/esg>

ESG-X Methodology

Norms-based Screening

Global Standard Screening as provided by Sustainalytics



Product Involvement Screening (I)

Controversial weapons

Controversial weapons

International conventions prohibit companies' involvement in the development, production, maintenance, use, distribution, stockpiling, transport or trade of banned weapons or their key components. This includes:

- **Anti-personnel mines and cluster bombs**
- **Nuclear weapons and depleted uranium weapons**
- **Biological and chemical weapons**
- **White phosphorous**

Swiss Sustainable Finance coordinates an investor initiative for an "Open letter to global index providers" to exclude controversial weapons from mainstream indices.*

During the week of 4 February 2019, SSF began engaging with large index providers, sharing with them background on the initiative, a list of current co-signatories and an invitation to enter into discussions.

Latest figures (as of May 19, 2020)

- *175 signatories*
- *USD 9.7 trillion*

Source: Swiss Sustainable Finance, July 2020

Product Involvement Screening (II) and (III)

Tobacco and thermal coal

Product involvement

Screening of companies that manufacture and/or sell products or services that risk harming people or the environment. These include the following:

- **Tobacco production**
- **Thermal coal**
 - **Mining and exploration**
 - **Power generating capacity**

Tobacco and coal have long been among the exclusions in ethical investors' portfolios. More recently, investors are looking to exclude these companies for mitigating long term business risks.

Examples

Leading asset owners worldwide announced publicly to exclude companies involved in Tobacco and/or Coal, for example:

- Pension funds: Norwegian SWF, Fonds de Réserve pour les Retraites (FRR), PGGM, APG, AP Funds, California Public Employees Retirement, NZ Super, Calpers
- Insurance companies: Allianz, AX, MunichRe, Swiss Life, Zurich
- Retail networks: ABN AMRO

STOXX ESG-X Indices

Index methodology



- The STOXX® Benchmark ESG-X Indices are based on a selection of STOXX® Benchmark Indices
- Exclusion criteria:
 - Global Standard Screening
 - Involvement in controversial weapons
 - Anti-personnel mines, biological and chemical weapons, cluster weapons, depleted uranium, nuclear weapons and white phosphorus
 - Tobacco producers (0% revenue threshold)
 - Thermal coal
 - >25% revenue threshold from thermal coal mining and exploration
 - >25% power generating capacity (coal-fired electricity, heat or steam generation capacity / thermal coal electricity production)
- Free-float market cap
- In case a company increases its ESG Controversy Rating to Category 5 and becomes non-complaint based on the Sustainalytics Global Standards Screening assessment, the company is deleted on the third dissemination day

STOXX Europe 600 ESG-X

STOXX Europe 600 ESG-X

Risk and return characteristics

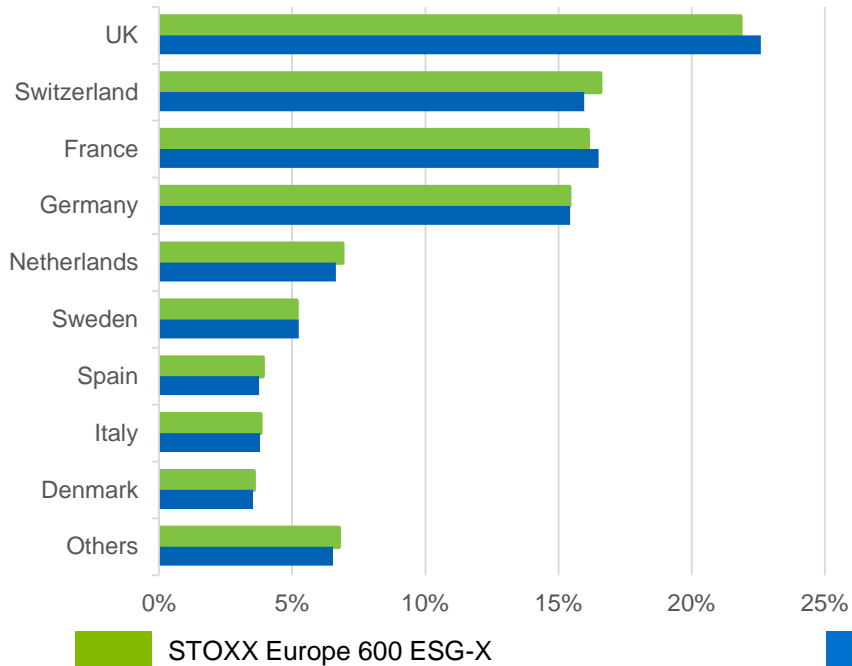
	STOXX Europe 600 ESG-X EUR GR	STOXX Europe 600 EUR GR
Perf. overall (annualized)	7.38%	7.20%
Perf. (1Y)	-3.66%	-3.87%
Perf. (3Y) (annualized)	1.53%	1.51%
Perf. (5Y) (annualized)	2.08%	2.20%
Vol. overall (annualized)	16.80%	16.77%
Volatility (1Y) (annualized)	26.66%	26.80%
Volatility (3Y) (annualized)	18.00%	18.06%
Volatility (5Y) (annualized)	18.36%	18.38%
Sharpe ratio (overall)	0.52	0.51
Sharpe ratio (5Y)	0.22	0.23
Tracking error (overall)	0.52%	
Tracking error (5Y)	0.51%	
Dividend yield (overall)	4.61%	4.57%
Maximum drawdown	35.24%	35.34%
Constituents	580	600



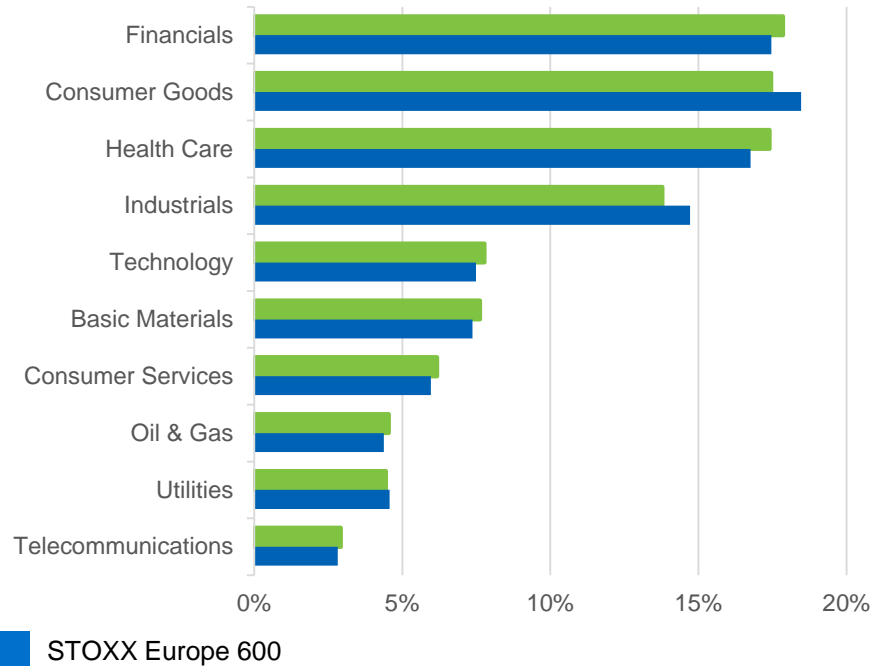
- 1) Source: STOXX, daily data. Relative figures calculated against Benchmark
- 2) EONIA used as a proxy for riskless returns
- 3) STOXX Data Mar 19, 2012 – June 30, 2020; EUR GR

STOXX Europe 600 ESG-X

Country allocation¹⁾



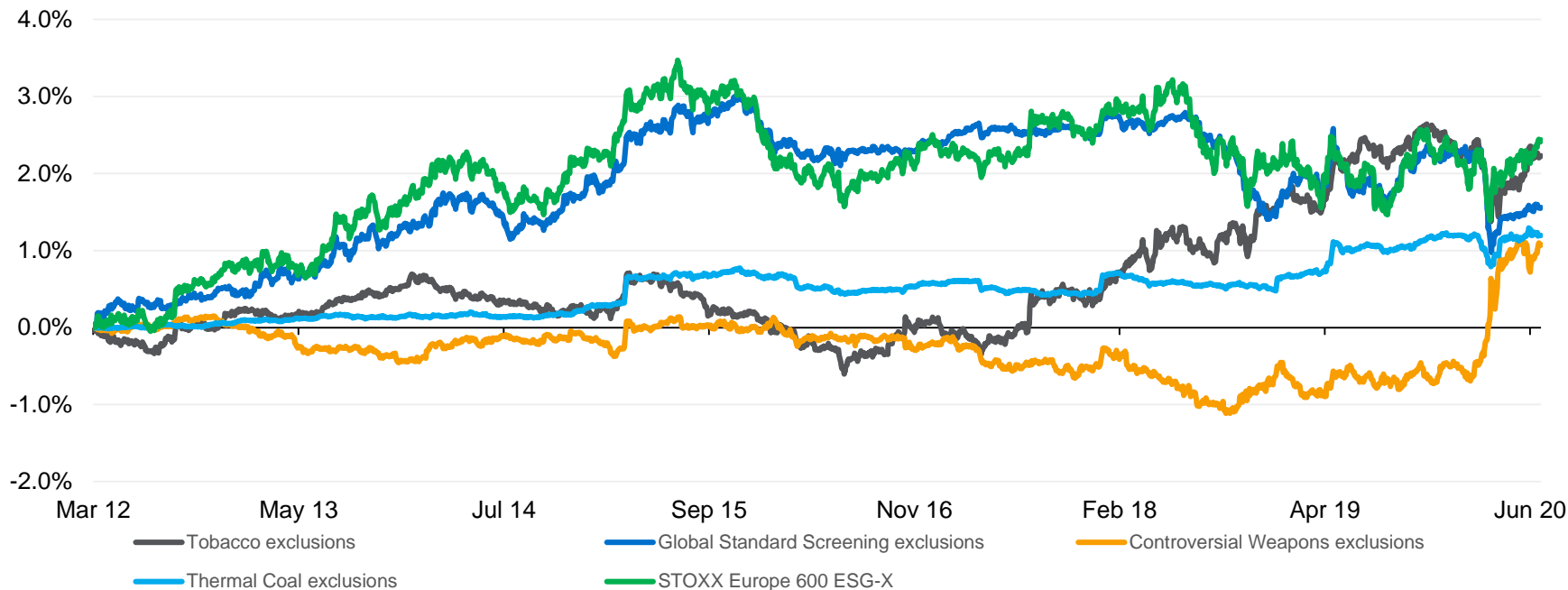
Industry allocation¹⁾



1) Source: STOXX. Data as of June 30, 2020.

STOXX Europe 600 ESG-X

Cumulative impact of exclusions on total returns

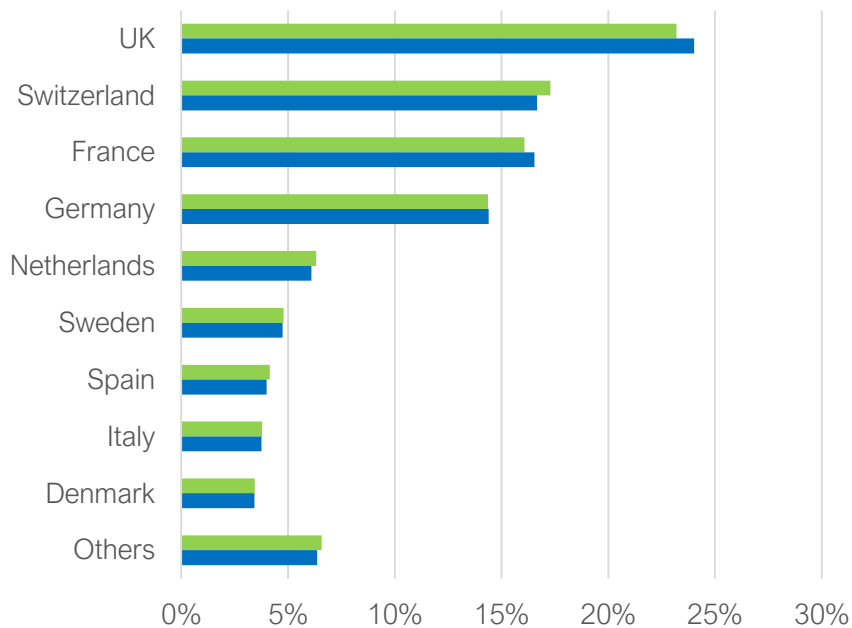


1) Source: STOXX. EUR GR, Data as of June 30, 2020; Delta to STOXX Europe 600 index

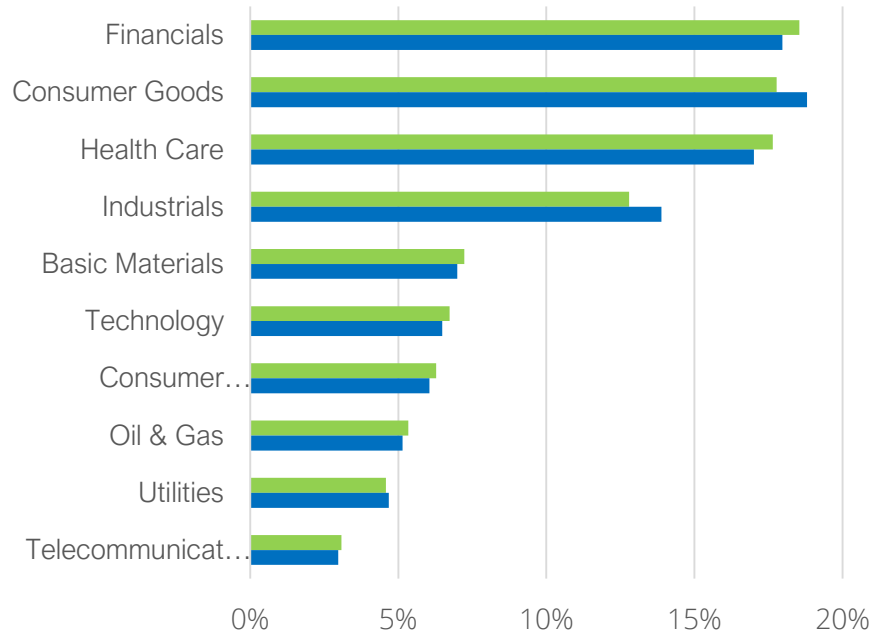
2) Please refer to the research paper: [STOXX® Europe 600 ESG-X Index - Analyzing ESG Exclusions](#)

STOXX Europe 600 ESG-X

Country allocation¹⁾



Industry allocation¹⁾



STOXX Europe 600 ESG-X
 STOXX Europe 600

¹⁾ Source: STOXX. Data as of Jun 30, 2020.

STOXX Europe 600 ESG-X

Ticker	ISIN	Type	Currency	Bloomberg	Reuters
SXXPESGX	CH0445431064	Price	EUR	BBG00MJ26LC0	.SXXPESGX
SXXRESGX	CH0445431056	Net Return	EUR	BBG00MJ26LB1	.SXXRESGX
SXXWESGX	CH0445431072	Gross Return	EUR	BBG00MJ26L94	.SXXWESGX
SXXLESGX	CH0445431023	Price	USD		.SXXLESGX
SXXVESGX	CH0445431031	Net Return	USD		.SXXVESGX
SXXZESGX	CH0445431049	Gross Return	USD		.SXXZESGX

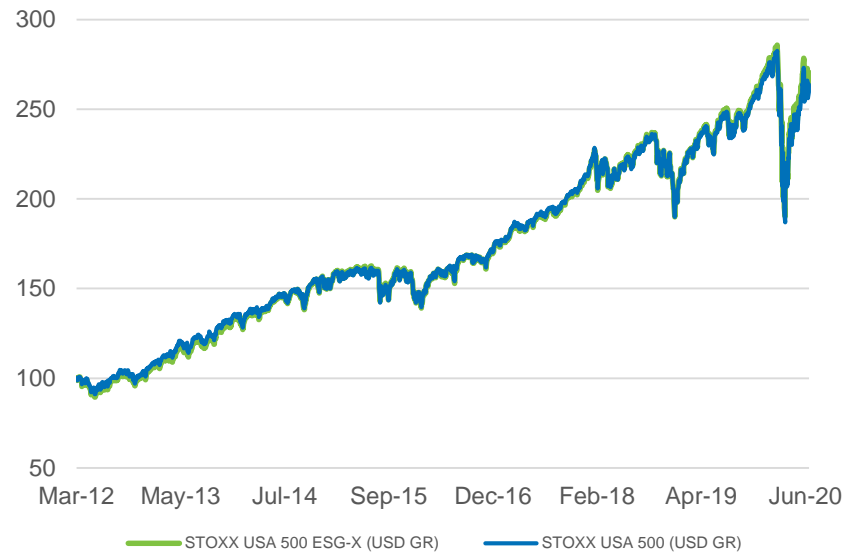
The STOXX Europe 600 ESG-X index was launched on Nov 14, 2018, with base value of 100 on Mar 19, 2012.

STOXX USA 500 ESG-X

STOXX USA 500 ESG-X

Risk and return characteristics

	STOXX USA 500 ESG-X (USD GR)	STOXX USA 500 (USD GR)
Perf. overall (annualized)	12.87%	12.52%
Perf. (1Y)	11.55%	9.29%
Perf. (3Y) (annualized)	12.68%	11.50%
Perf. (5Y) (annualized)	11.46%	11.04%
Vol. overall (annualized)	17.10%	16.85%
Volatility (1Y) (annualized)	33.77%	33.62%
Volatility (3Y) (annualized)	22.78%	22.55%
Volatility (5Y) (annualized)	19.65%	19.40%
Sharpe ratio (overall)	0.75	0.74
Sharpe ratio (5Y)	0.59	0.58
Tracking error (overall)	1.02%	
Tracking error (5Y)	0.93%	
Dividend yield (overall)	4.34%	4.30%
Maximum drawdown	33.45%	33.82%
Constituents	467	500

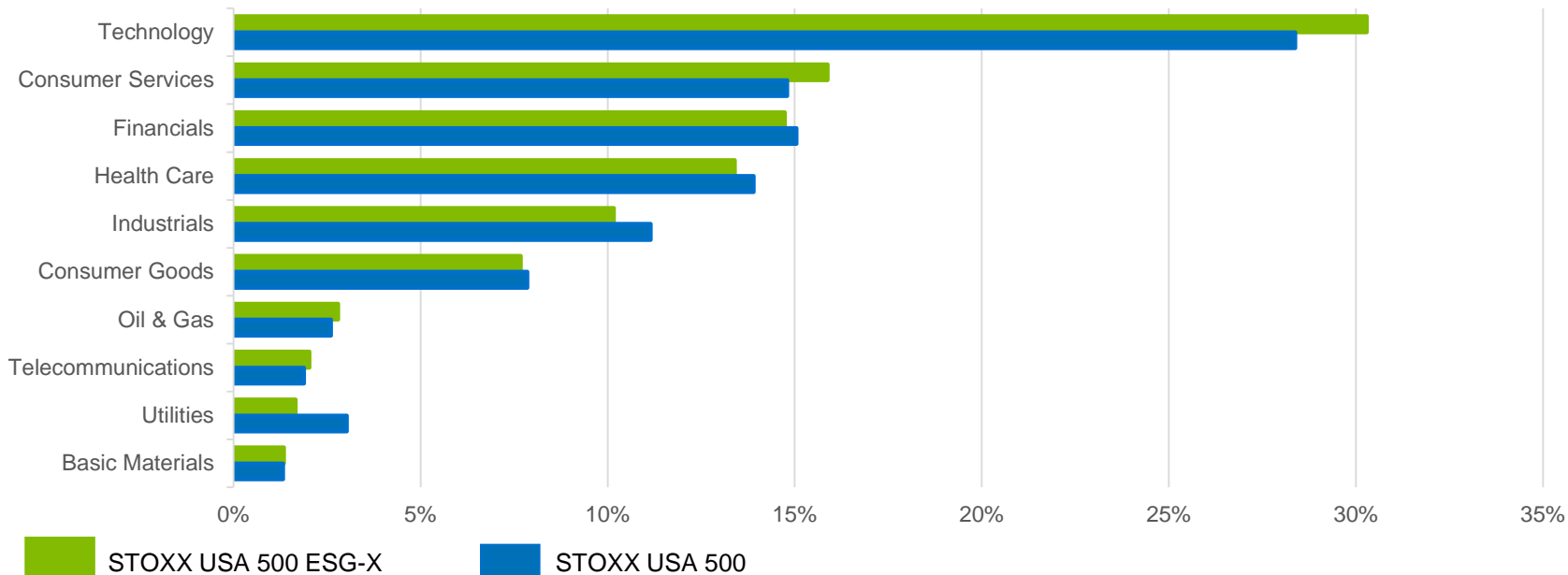


- 1) Source: STOXX, daily data. Relative figures calculated against Benchmark
- 2) LIBOR used as a proxy for riskless returns
- 3) STOXX Data Mar 19, 2012 – Jun 30, 2020

STOXX USA 500 ESG-X

Maintains diversification across industries

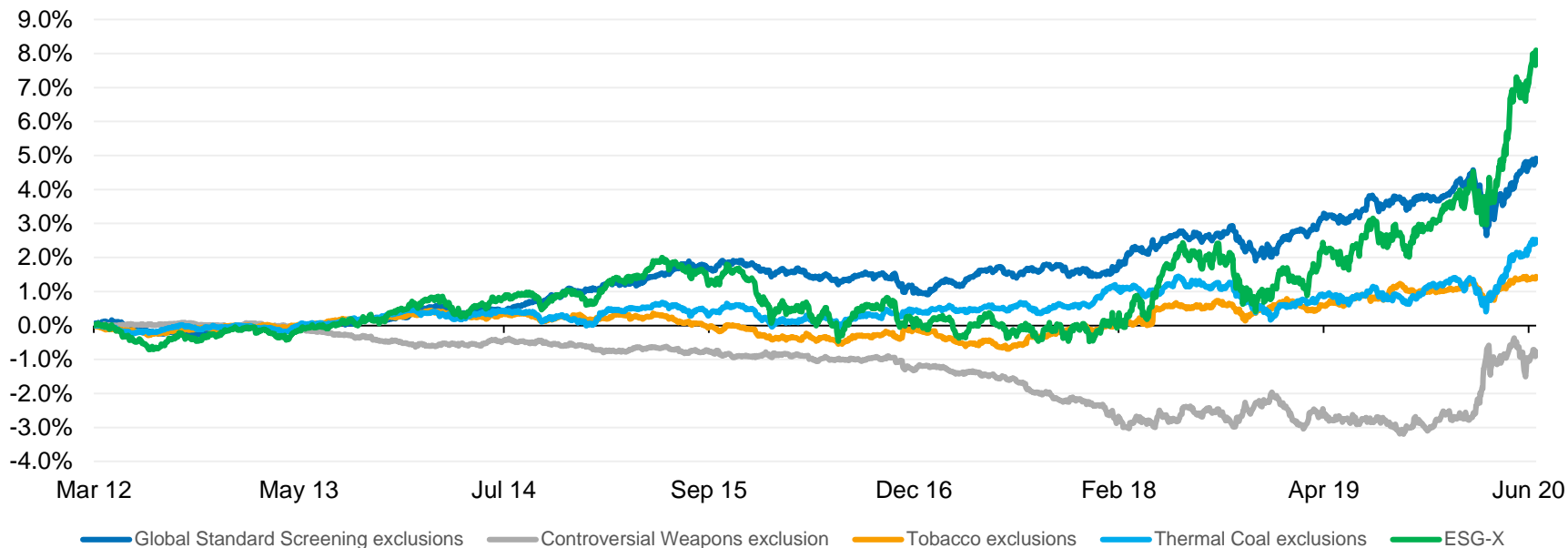
Industry allocation¹⁾



1) Source: STOXX. Data as of Jun 30, 2020.

STOXX USA 500 ESG-X

Cumulative impact of exclusions on total returns



1) Source: STOXX. USD GR, Data as of June 30, 2019; Delta to STOXX USA 500 index

2) Please refer to the research paper: [STOXX® Europe 600 ESG-X Index - Analyzing ESG Exclusions](#)

STOXX USA 500 ESG-X

Ticker	ISIN	Type	Currency	Bloomberg
SU5LESGX	CH0476175234	Price	USD	BBG00P2XM825
SU5VESGX	CH0476175465	Net Return	USD	BBG00P2XM7Z1
SU5ZESGX	CH0476175168	Gross Return	USD	BBG00P2XM6Z3

EURO STOXX 50 Low Carbon

Low Carbon Investment: Not a Trend, Rather a Long-term Commitment from both Companies and Investors

Over 1000 companies joined the WE MEAN BUSINESS coalition¹⁾

Commitments against climate change

Investors can take action by making one or more of these commitments

- Sign the Montréal Pledge for carbon transparency in investment portfolios
- Join the Portfolio Decarbonization Coalition
- Invest in low carbon assets
- Report climate change information in mainstream reports as a fiduciary duty

Implications

Investors making this commitment are expected to have invested or have made a new commitment in Low Carbon assets defined by LCI registry, e.g. investments in:

- Agriculture & Forestry
- Buildings, e.g. energy efficiency improvements
- Energy e.g. solar, wind hydro
- Fixed income e.g. green bonds
- Information technology e.g. smart grids
- Low carbon funds e.g. public or private funds investing > 50% in low carbon assets

Engaging with companies

Encourage companies to commit to 1 or more of these initiatives:

- Adopt a science-based emissions reduction budget
- Put a price on carbon
- Procure 100% of electricity from renewable sources
- Responsible corporate engagement in climate policy
- Report climate change information in mainstream reports as a fiduciary duty
- Remove commodity-driven deforestation from supply chains by 2020
- Reduce short-lived climate pollutant emissions

1,892 Commitments
to bold action














1,265 Companies
leading the way

\$24.8 Trillion
market cap

¹⁾ Illustration and data: wemeanbusinesscoalition.org/

STOXX Offers a Comprehensive Set of Low Carbon Indices

Overview

Description	Covered regions
<p>Low Carbon indices</p> <ul style="list-style-type: none"> Same constituents as benchmark and blue chip indices. Tracks risk-return profile of the benchmarks, with reduced carbon footprint and tracking error. Uses both reported and estimated data¹⁾ 	<ul style="list-style-type: none">  Global, Global ex USA, ex Japan, ex Australia, ex Europe  Europe and Eurozone  Japan  USA
<p>Reported Low Carbon indices</p> <ul style="list-style-type: none"> Recognizes companies that report carbon emissions publicly Only stocks with reported data are eligible 	<ul style="list-style-type: none">  Global  Europe & Eurozone  USA
<p>Industry Leaders Low Carbon Indices</p> <ul style="list-style-type: none"> Select companies with lowest carbon intensities from each of the 10 ICB Industries, creating diversification and avoiding concentration in certain sectors Uses both reported and estimated data¹⁾ 	<ul style="list-style-type: none">  Global  Europe  USA  Japan
<p>Low Carbon Footprint Indices</p> <ul style="list-style-type: none"> Exclude 7 highest carbon emission supersectors and 10% of remaining highest emitters Lowest carbon footprint indices Uses both reported and estimated data¹⁾ 	<ul style="list-style-type: none">  Global  Europe

1) Carbon Intensity: ((Scope 1 + Scope 2 Greenhouse Gas Emissions (GHG)) / Revenue (\$1 million))

Trusted and Reliable Data Sources

Data partners



- CDP holds the largest collection globally of self reported climate change, water and forest-risk data
- Ranked # 1 by investors in climate change research



- ISS ESG specializes in carbon emission research and cooperates with CDP to provide robust estimated data

Emission data used for STOXX Low Carbon indices ¹⁾

- Scope 1 Direct GHG emissions are emissions from sources that are owned or controlled by the company
- Scope 2 Indirect GHG emissions from the generation of purchased electricity by the company
- Scope 3 Indirect GHG emissions as a consequence of the activities of the company, but occur from sources not owned or controlled by the company

Emission data divided into

- Reported data = data voluntarily provided by companies to CDP
- Estimated data = carbon emissions are estimated by ISS ESG



Recognized and regarded data providers with high quality carbon intensity data

1) Source: <http://www.co2benchmark.com/wri-ghg-protocol-scope-definitions>

EURO STOXX 50 Low Carbon Index: Investment Case

Description

Low Carbon indices

- Same constituents as the benchmarks at the annual review in December
- Carbon-tilt overweights low emitters and underweights high emitters
- Reduces carbon footprint **without** applying exclusions
- No adverse effects from weight optimization
- Low tracking error with similar risk-return profile compared to the benchmark
- Uses both reported and estimated carbon intensity data¹⁾

Universe



- EURO STOXX 50 constituents as of December each year

Selection



- Select all stocks with Reported and Estimated Carbon Intensity¹⁾ data
- Calculate a Z-Score

Weighting



- Price weighted: free-float market cap multiplied by the corresponding Z-score carbon intensity factor of each constituent. Overweight stocks with lower carbon intensities, underweight those with higher emissions
- Component capping of 5%

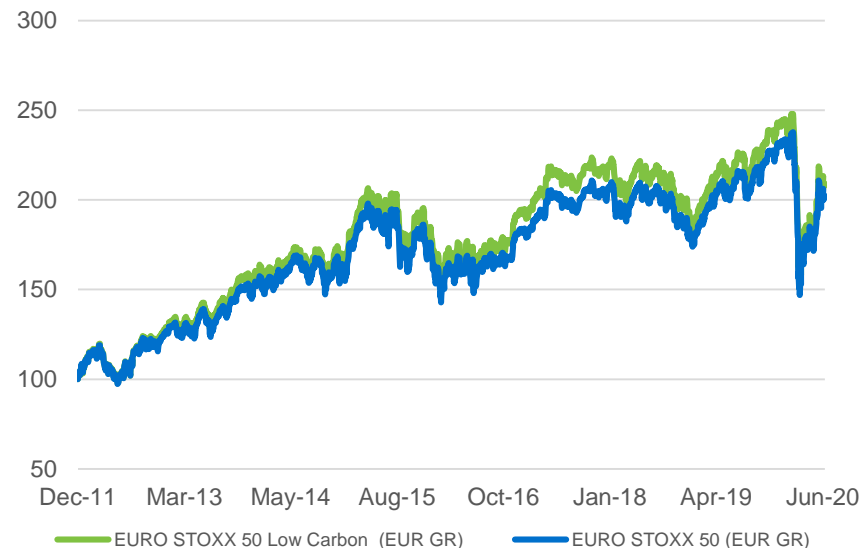
1) Carbon Intensity: ((Scope 1 + Scope 2 Greenhouse Gas Emissions (GHG)) / Revenue (\$1 million))

EURO STOXX 50 Low Carbon

Risk and return characteristics

	EURO STOXX 50 Low Carbon (EUR GR)	EURO STOXX 50 (EUR GR)
Perf. overall (annualized)	9.17%	8.74%
Perf. (1Y)	-5.68%	-4.53%
Perf. (3Y) (annualized)	0.15%	1.17%
Perf. (5Y) (annualized)	2.09%	2.30%
Vol. overall (annualized)	20.08%	19.82%
Volatility (1Y) (annualized)	30.61%	30.33%
Volatility (3Y) (annualized)	20.53%	20.31%
Volatility (5Y) (annualized)	20.86%	20.59%
Sharpe ratio (overall)	0.55	0.53
Sharpe ratio (5Y)	0.22	0.23
Tracking error (overall)	1.04%	
Tracking error (5Y)	1.13%	
Dividend yield (overall)	5.44%	5.39%
Maximum drawdown	38.88%	38.23%
Constituents	50	50

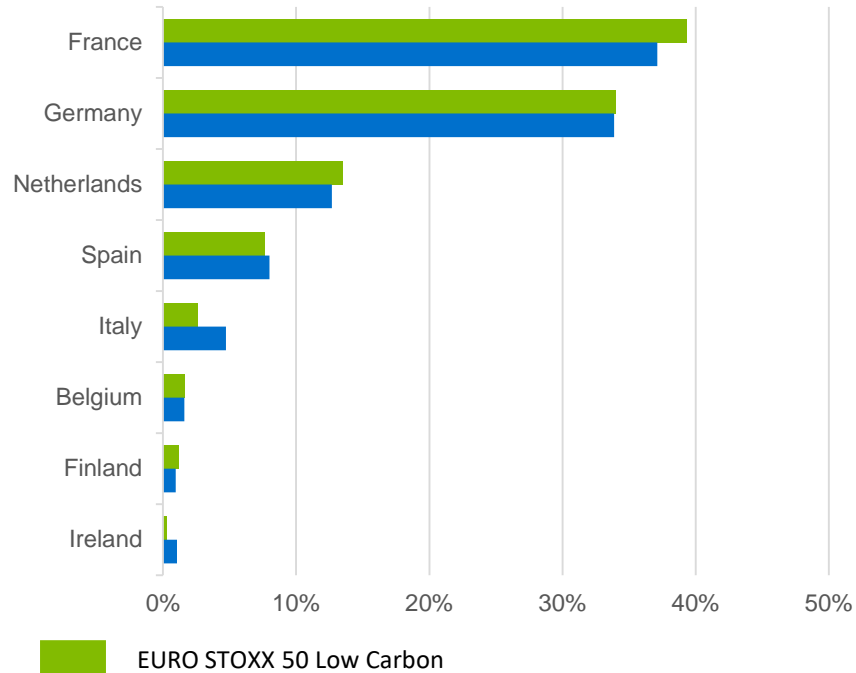
The EURO STOXX 50 Low Carbon Index has a 64% lower carbon footprint than the EURO STOXX 50 index



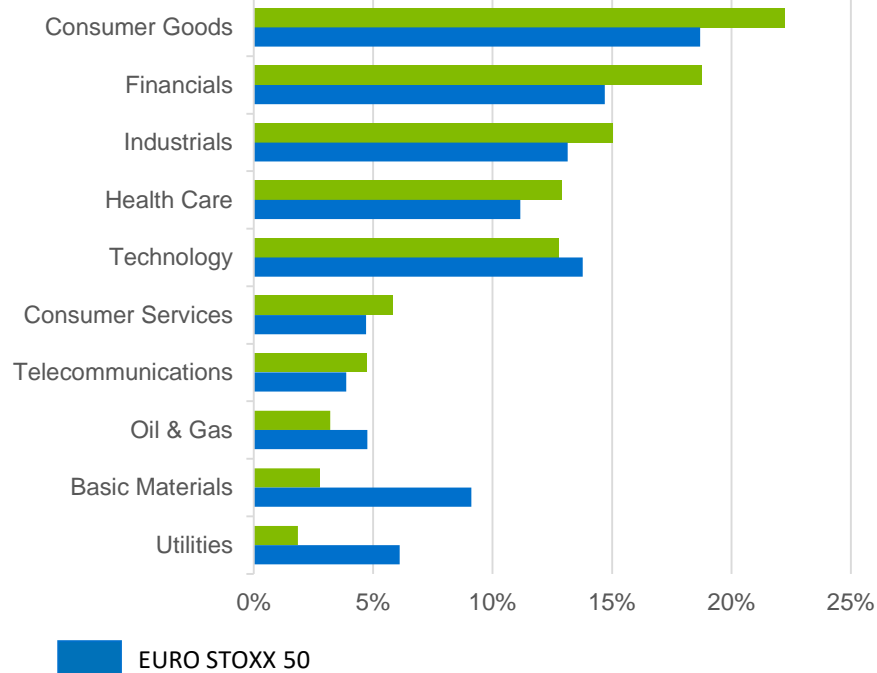
- 1) Source: STOXX, daily data. Relative figures calculated against Benchmark
- 2) EONIA used as a proxy for riskless returns
- 3) STOXX Data Dec 19, 2011 – Jun 30, 2020

EURO STOXX 50 Low Carbon

Country allocation¹⁾



Industry allocation¹⁾



¹⁾ Source: STOXX. Data as of June 30, 2020.

EURO STOXX 50 Low Carbon Index – Components¹

Name	ISIN	Weight in EURO STOXX 50 Low Carbon	Weight in EURO STOXX 50	Weight
ASML HLDG	NL0010273215	5.30	6.02	Underweight
SAP	DE0007164600	5.20	5.89	Underweight
LVMH MOET HENNESSY	FR0000121014	5.07	4.49	Overweight
SANOFI	FR0000120578	4.95	4.47	Overweight
SIEMENS	DE0007236101	4.50	3.39	Overweight
ALLIANZ	DE0008404005	4.18	3.28	Overweight
L'OREAL	FR0000120321	3.81	3.01	Overweight
UNILEVER NV	NL0000388619	3.41	2.81	Overweight
BAYER	DE000BAY0017	3.15	2.80	Overweight
SCHNEIDER ELECTRIC	FR0000121972	2.90	2.36	Overweight
TOTAL	FR0000120271	2.78	3.83	Underweight
DEUTSCHE TELEKOM	DE0005557508	2.55	2.10	Overweight
ADIDAS	DE000A1EWWW0	2.37	1.86	Overweight
VINCI	FR0000125486	2.31	1.97	Overweight
BNP PARIBAS	FR0000131104	2.25	1.77	Overweight
AXA	FR0000120628	2.13	1.67	Overweight
PHILIPS	NL0000009538	2.09	1.65	Overweight
DANONE	FR0000120644	2.00	1.73	Overweight

1) Source: STOXX. Data as of Jun 30, 2020.

EURO STOXX 50 Low Carbon Index – Components¹

Name	ISIN	Weight in EURO STOXX 50 Low Carbon	Weight in EURO STOXX 50	Weight
Kering	FR0000121485	1.99	1.56	Overweight
BCO SANTANDER	ES0113900J37	1.99	1.56	Overweight
AIRBUS	NL0000235190	1.98	1.60	Overweight
MUENCHENER RUECK	DE0008430026	1.84	1.40	Overweight
ESSILORLUXOTTICA	FR0000121667	1.75	1.47	Overweight
DEUTSCHE BOERSE	DE0005810055	1.69	1.32	Overweight
ANHEUSER-BUSCH INBEV	BE0974293251	1.64	1.60	Overweight
DAIMLER	DE0007100000	1.63	1.31	Overweight
SAFRAN	FR0000073272	1.62	1.37	Overweight
INTESA SANPAOLO	IT0000072618	1.53	1.20	Overweight
DEUTSCHE POST	DE0005552004	1.47	1.38	Overweight
Industria de Diseno Textil SA	ES0148396007	1.40	1.13	Overweight
AHOLD DELHAIZE	NL0011794037	1.34	1.16	Overweight
ING GRP	NL0011821202	1.33	1.05	Overweight
VOLKSWAGEN PREF	DE0007664039	1.29	1.07	Overweight
BASF	DE000BASF111	1.27	1.98	Underweight
NOKIA	FI0009000681	1.17	0.95	Overweight

1) Source: STOXX. Data as of Jun 30, 2020.

EURO STOXX 50 Low Carbon Index – Components¹

Name	ISIN	Weight in EURO STOXX 50 Low Carbon	Weight in EURO STOXX 50	Weight
BCO BILBAO VIZCAYA ARGENTARIA	ES0113211835	1.12	0.88	Overweight
ORANGE	FR0000133308	1.11	0.91	Overweight
AMADEUS IT GROUP	ES0109067019	1.09	0.90	Overweight
VIVENDI	FR0000127771	1.09	0.86	Overweight
TELEFONICA	ES0178430E18	1.05	0.86	Overweight
IBERDROLA	ES0144580Y14	0.99	2.64	Underweight
BMW	DE0005190003	0.99	0.79	Overweight
FRESENIUS	DE0005785604	0.93	0.79	Overweight
LINDE	IE00BZ12WP82	0.88	4.50	Underweight
GRP SOCIETE GENERALE	FR0000130809	0.69	0.55	Overweight
AIR LIQUIDE	FR0000120073	0.63	2.63	Underweight
ENEL	IT0003128367	0.62	2.58	Underweight
ENI	IT0003132476	0.43	0.93	Underweight
ENGIE	FR0010208488	0.24	0.89	Underweight
CRH	IE0001827041	0.24	1.06	Underweight

1) Source: STOXX. Data as of Jun 30, 2020.

EURO STOXX 50 Low Carbon

Ticker	ISIN	Type	Currency	Bloomberg	Reuters
SXE5LCEP	CH0305287432	Price	EUR	BBG00BKQXPQ5	.SXE5LCEP
SXE5LCEN	CH0305287499	Net Return	EUR	BBG00CM7S4D0	.SXE5LCEN
SXE5LCEG	CH0305287531	Gross Return	EUR	BBG00CM7S3P9	.SXE5LCEG
SXE5LCUP	CH0305287457	Price	USD		.SXE5LCUP
SXE5LCUN	CH0305287515	Net Return	USD		.SXE5LCUN
SXE5LCUG	CH0305287556	Gross Return	USD		.SXE5LCUG

The EURO STOXX 50 Low Carbon index was launched on Dec 4, 2016, with base value of 100 on Dec 19, 2011.

Decrement Indices Based on the EURO STOXX 50 Low Carbon

Decrement Index	Ticker	ISIN	Currency	Bloomberg	Reuters
EURO iSTOXX 50 Low Carbon Decrement 4.75% Index	ISXE50L4	CH0313264175	EUR		.ISXE50LCD4
EURO iSTOXX 50 Low Carbon Decrement 5% Index	ISXE50L5	CH0313264183	EUR	BBG00F7Z23J2	.ISXE50LCD5

The EURO iSTOXX 50 Low Carbon Decrement 4.75% Index is based on the Net Return version of the EURO STOXX 50 Low Carbon Index, whereas the EURO iSTOXX 50 Low Carbon Decrement 5% is based on the Gross Return version of the index.

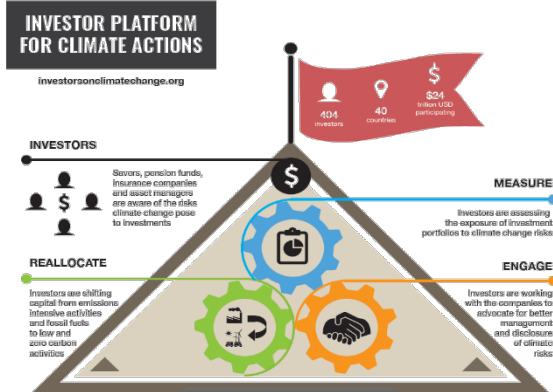
STOXX Europe Climate Impact

Climate Change is Not a Trend, but a Long-term Commitment by Governments, Finance Sector and Investors Globally

Investors worth a total of \$24 trillion committed to participate in the transition to a low-carbon economy

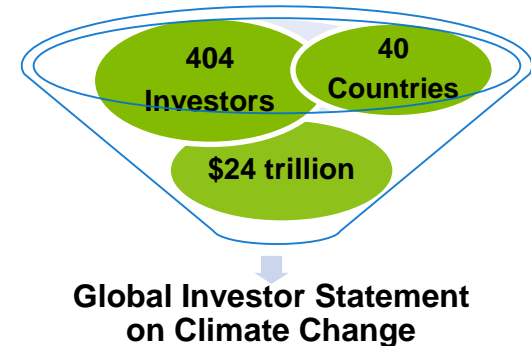
Risks

- Research¹⁾ shows that climate change could cost up to 19% of global GDP by end of 2030
- Investors are seeking ways to mitigate the financial costs of climate change



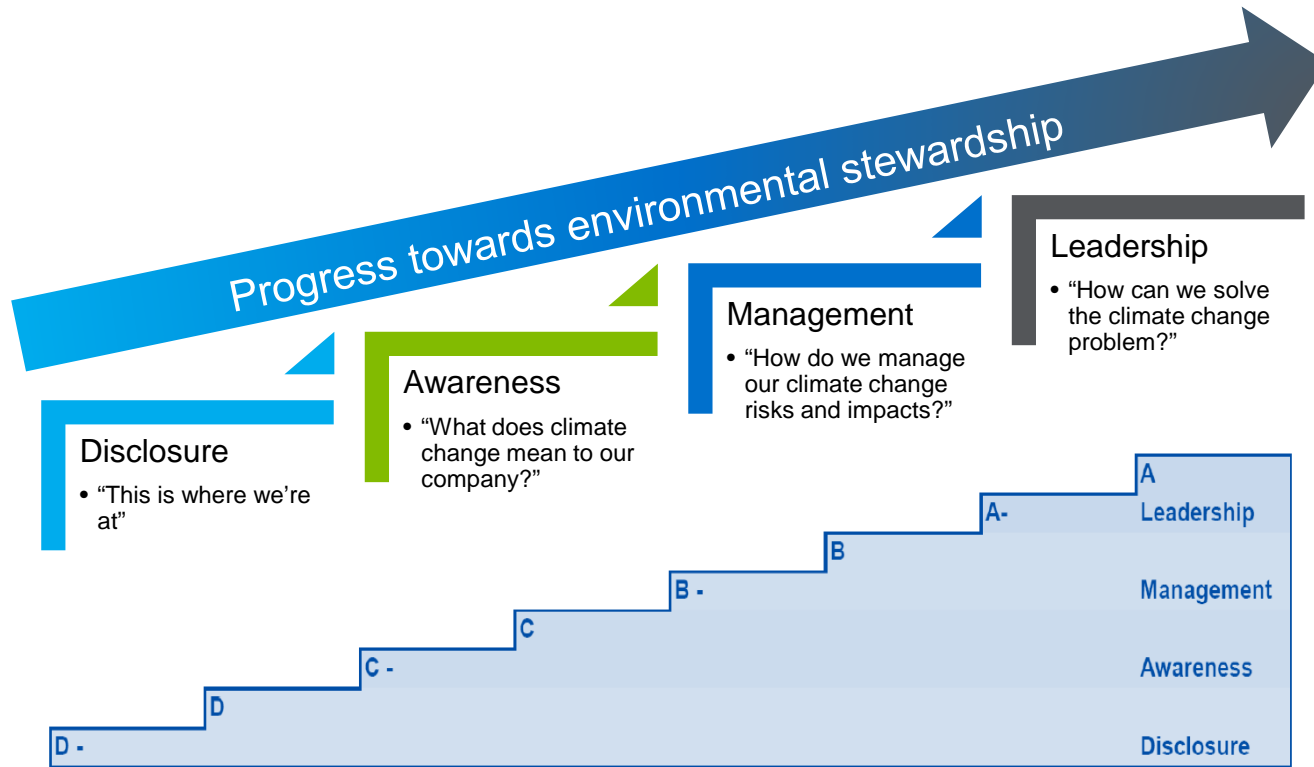
Opportunities

- Investors are discovering the potential of investments in renewable energy and the low-carbon economy
- Such investments offer favorable risk-return profiles compared to the benchmark



1) Report titled "Shaping Climate-Resilient Development" by Economics of Climate Adaptation (ECA) Working Group

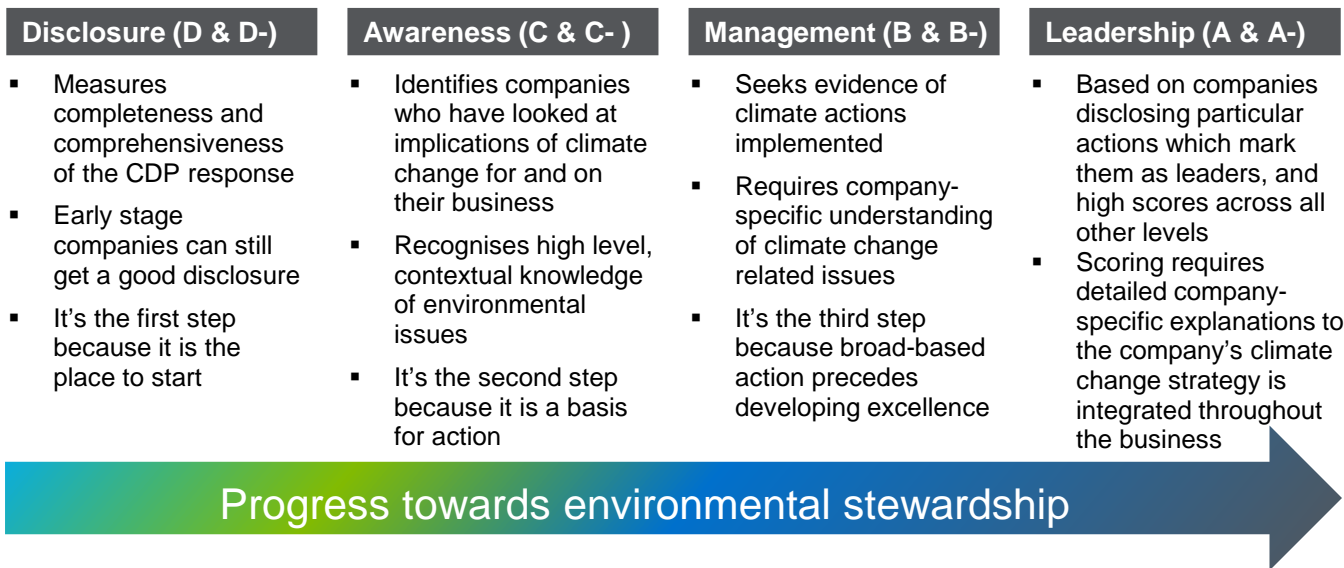
CDP's Scoring Approach and Corresponding Level



Source: CDP

CDP Scoring Levels

Climate Change scoring is closely aligned with CDP's mission – CDP works with market forces to motivate companies to disclose their impacts on the environment and natural resources and take action to reduce negative impacts.



1) Source: CDP Climate methodology 2017

STOXX Europe Climate Impact Ex Global Compact, Controversial Weapons & Tobacco Index

Description

STOXX Climate Impact Indices

Universe



Selection



Weighting



- Unique concept utilizing forward-looking indicators based on CDP research
- Contains companies with a CDP Performance Band Score of between A (Leadership) and B- (Management)
- Constituents focus on solving the climate problem (A to A-: “Leaders”) and managing climate change risks and impact (B to B-: “Management”)
- STOXX® Europe 600
- Exclude:
 - ICB subsector Coal (1771)
 - UN Global Compact Violations
 - Controversial Weapons
 - ICB Sector Tobacco (3785)
- Select all stocks from the Universe with a CDP Climate Scoring of A to B- (Leadership and Management)
- Price weighted:
 - Free-float market cap multiplied by the corresponding Z-score carbon intensity factor of each constituent with constituent capping at 5%
 - Overweight stocks with lower carbon intensities, underweight those with higher emissions

STOXX Europe Climate Impact Ex Global Compact, Controversial Weapons & Tobacco Index

Risk and return characteristics

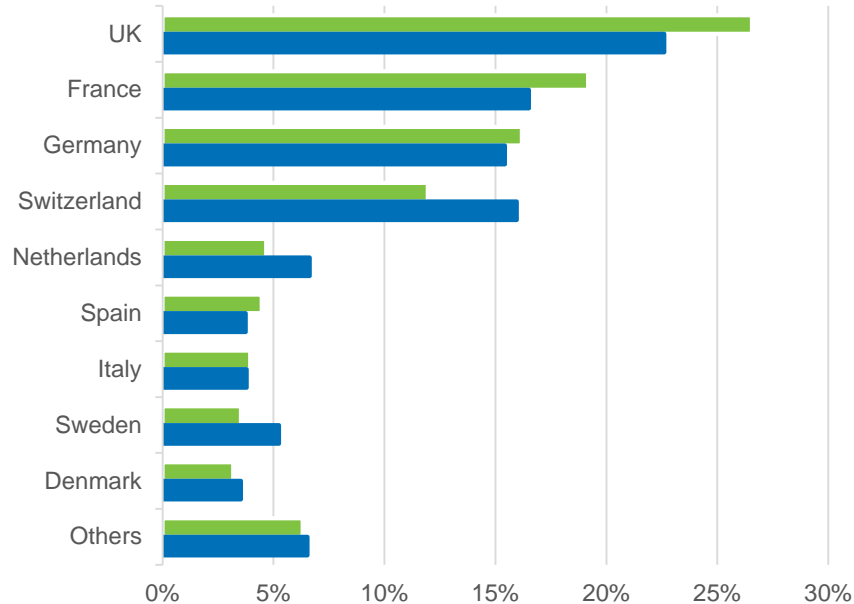
	STOXX Europe Climate Impact Ex GC, CW & Tob (EUR GR)	STOXX Europe 600 (EUR GR)
Perf. overall (annualized)	6.74%	7.05%
Perf. (1Y)	-5.35%	-3.87%
Perf. (3Y) (annualized)	1.27%	1.51%
Perf. (5Y) (annualized)	1.73%	2.20%
Vol. overall (annualized)	16.89%	16.91%
Volatility (1Y) (annualized)	26.65%	26.80%
Volatility (3Y) (annualized)	17.83%	18.06%
Volatility (5Y) (annualized)	18.32%	18.38%
Sharpe ratio (overall)	0.48	0.50
Sharpe ratio (5Y)	0.21	0.23
Tracking error (overall)	1.67%	
Tracking error (5Y)	1.74%	
Dividend yield (overall)	4.61%	4.36%
Maximum drawdown	34.55%	35.34%
Constituents	289	600



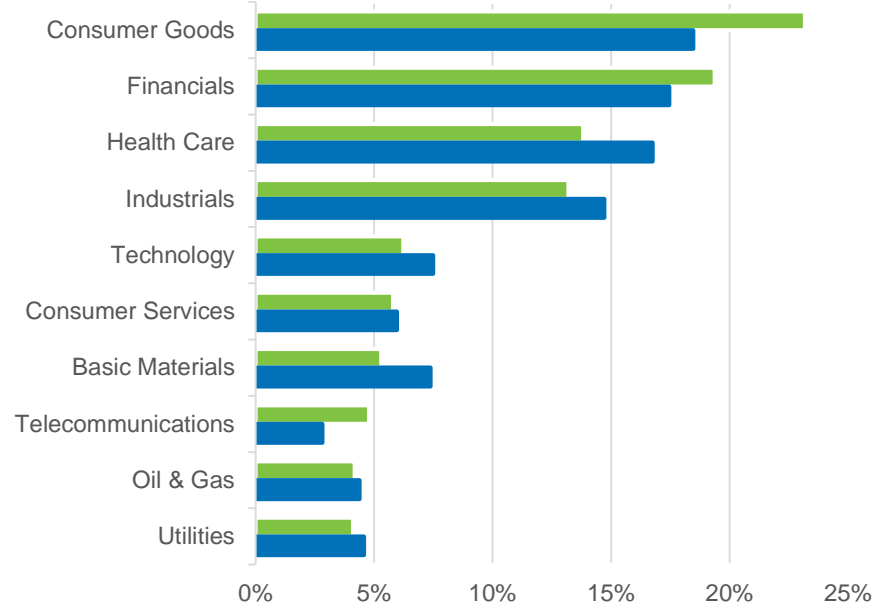
- 1) Source: STOXX, daily data. Relative figures calculated against Benchmark
- 2) EONIA used as a proxy for riskless returns
- 3) STOXX Data Dec 19, 2011 – Jun 30, 2020

STOXX Europe Climate Impact Ex Global Compact, Controversial Weapons & Tobacco Index

Country allocation¹⁾



Industry allocation¹⁾



STOXX Europe Climate Impact Ex Global Compact, Controversial Weapons & Tobacco Index

STOXX Europe 600

1) Source: STOXX. Data as of Jun 30, 2020.

STOXX Europe Climate Impact Ex Global Compact, Controversial Weapons & Tobacco Index

Ticker	ISIN	Type	Currency	Bloomberg	Reuters
SXECITEP	CH0355796415	Price	EUR	BBG00M6HG7T3	.SXECITEP
SXECITEN	CH0355796225	Net Return	EUR	BBG00M6HG7W9	.SXECITEN
SXECITEG	CH0355795524	Gross Return	EUR	BBG00M6HG7V0	.SXECITEG
SXUCITUP	CH0355796183	Price	USD		.SXUCITUP
SXUCITUN	CH0355796027	Net Return	USD		.SXUCITUN
SXUCITUG	CH0355796126	Gross Return	USD		.SXUCITUG

The STOXX Europe Climate Impact index was launched on Mar 7, 2017, with base value of 100 on Dec 24, 2012.

Decrement Indices Based on the STOXX Europe Climate Impact





Decrement Index	Ticker	ISIN	Currency	Bloomberg	Reuters
iSTOXX Europe Climate Impact Ex GC CW & Tobacco GR Decrement 5% Index	IXECTGD5	CH0442604689	EUR	IXECTGD5 INDEX	.IXECTGD5
iSTOXX Europe Climate Impact Ex GC CW & Tobacco NR Decrement 4.75% Index	IXECTND4	CH0442604705	EUR	IXECTND4 INDEX	.IXECTND4

The iSTOXX Europe Climate Impact Ex GC CW & Tobacco NR Decrement 4.75% Index is based on the Net Return version of the STOXX Europe Climate Impact Ex Global Compact, Controversial Weapons & Tobacco Index, where as the iSTOXX Europe Climate Impact Ex GC CW & Tobacco GR Decrement 5% is based on the Gross Return version of the index.

STOXX Europe ESG Leaders Select 30 EUR

STOXX Europe ESG Leaders Select 30 EUR

Index methodology

Universe		<ul style="list-style-type: none">▪ All European stocks from the <u>STOXX Global ESG Leaders</u>
Selection		<ul style="list-style-type: none">▪ Selection criteria<ul style="list-style-type: none">▪ Stocks that do not have both 12 month historical daily pricing data and 12 month historical dividend yield are removed from the base universe<ol style="list-style-type: none">1) Stocks whose previous 3 and 12 month historical volatilities are the highest are excluded2) Remaining stocks with the highest 12-month historical dividend yields are then selected to be included in the index▪ The percentage of exclusion/inclusion at step 1 and 2 is the same and is determined by the Equal Strength Ratio (ESR):<ul style="list-style-type: none">▪ The ESR is calculated as<ul style="list-style-type: none">• $ESR = \sqrt{\frac{x}{N}}$• Where<ul style="list-style-type: none">• x number of stocks in the Select index• N number of stocks in the base universe
Weighting		<ul style="list-style-type: none">▪ Volatility weighted (Inverse); 10% cap factor
Review		<ul style="list-style-type: none">▪ Quarterly upon review of base index

STOXX Europe ESG Leaders Select 30 EUR

Risk and return characteristics

	EUR ESG LDRS SL 30 EUR (EUR GR)	STOXX Europe 600 (EUR GR)
Perf. overall (annualized)	5.68%	7.68%
Perf. (1Y)	-16.79%	-3.87%
Perf. (3Y) (annualized)	-4.59%	1.51%
Perf. (5Y) (annualized)	-2.33%	2.20%
Vol. overall (annualized)	16.06%	17.27%
Volatility (1Y) (annualized)	29.79%	26.80%
Volatility (3Y) (annualized)	19.30%	18.06%
Volatility (5Y) (annualized)	18.38%	18.38%
Sharpe ratio (overall)	0.43	0.52
Sharpe ratio (5Y)	-0.02	0.23
Tracking error (overall)	6.60%	
Tracking error (5Y)	6.81%	
Dividend yield (overall)	5.52%	4.85%
Maximum drawdown	38.88%	35.34%
Constituents	30	600

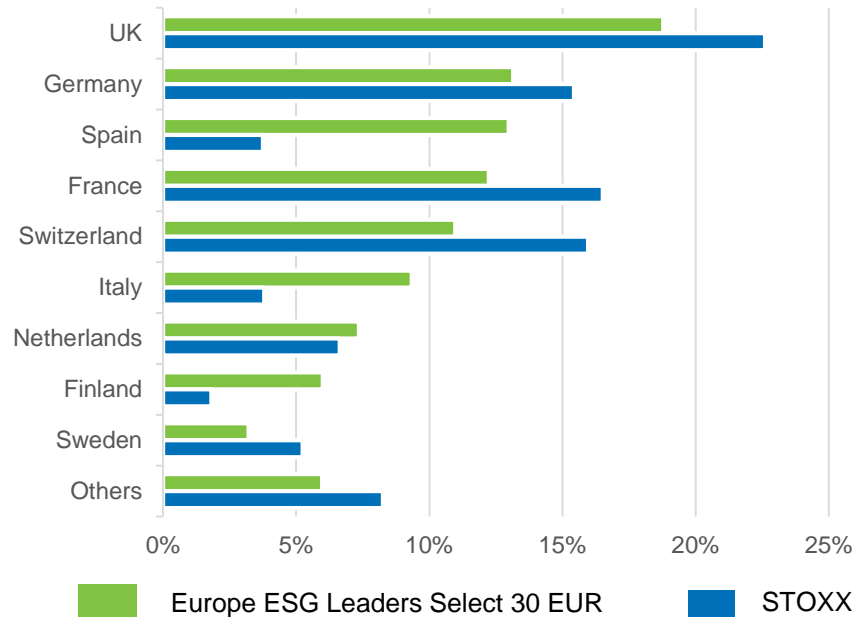


- 1) Dividend yield is annualized
- 2) Source: STOXX, daily data. Relative figures calculated against STOXX Europe 600 Index. Overall: from Jun 30, 2010 to Jun 30, 2020 ; 5Y: from Jul 01, 2015 to Jun 30, 2020 ; 3Y: from Jul 03, 2017 to Jun 30, 2020 ; 1Y: from Jul 01, 2019 to Jun 30, 2020.
- 3) EONIA used as a proxy for riskless returns

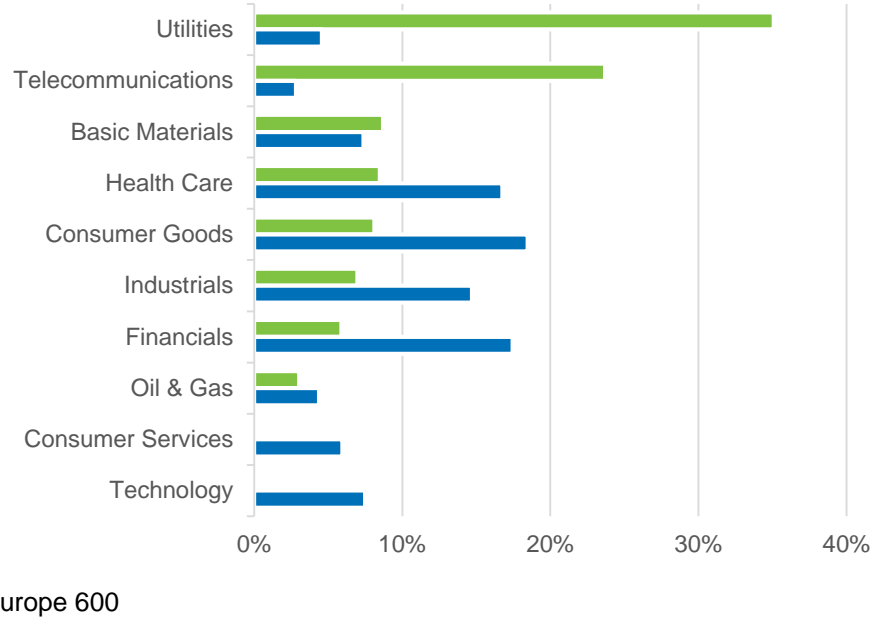
STOXX Europe ESG Leaders Select 30 EUR

Maintains diversification across countries and industries

Country allocation¹⁾



Industry allocation¹⁾



1) Source: STOXX. Data: June 30, 2020

STOXX Europe ESG Leaders Select 30 EUR

Index details

Ticker	ISIN	Type	Currency	Bloomberg
SEESGSEP	CH0298407328	Price	EUR	BBG00B6QWPK8
SEESGSER	CH0298407336	Net	EUR	BBG00B6QWPL7
SEESGSEG	CH0298407344	Gross	EUR	-

Listed derivatives

October 2019 saw the launch of futures and options on the STOXX Europe ESG Leaders Select 30 index at Eurex.

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Learn more about STOXX Indices on [our website](#).

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Disclaimer

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Qontigo's global client base includes the world's largest financial products issuers, capital owners and asset managers.

Created in 2020 through the combination of STOXX, DAX and Axioma, Qontigo is part of Deutsche Börse Group, headquartered in Eschborn with key locations in New York, Zug and London.

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