

STOXX USA 500 ESG-X

February 2020



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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.



Market Consultation European Buyside Clients

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



ESG Derivatives on Eurex

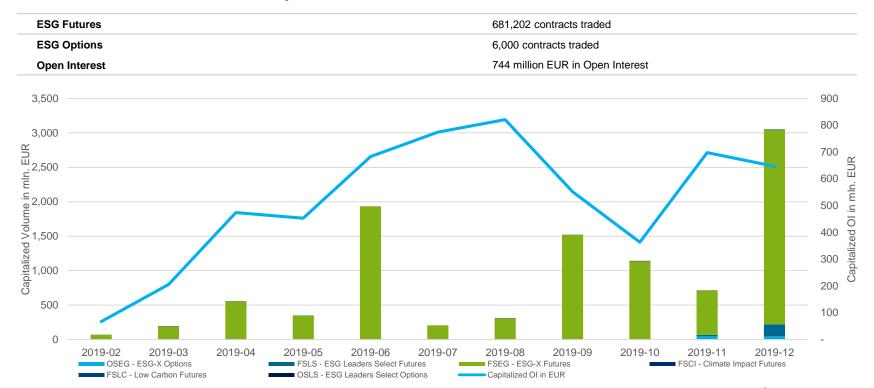
- STOXX Europe 600 ESG-X
 - Futures & Options
- STOXX Europe ESG Leaders Select 30
 - Futures & Options
- STOXX Europe Climate Impact
 - Futures
- FURO STOXX 50 Low Carbon
 - Futures
- STOXX USA 500 FSG-X
 - Futures
 - Launch: Feb 10, 2020
- Based on the strong demand, Eurex launched¹ their first ESG Futures with underlyings linked to ESG versions of STOXX European flagship indices in February 2019.
- Exactly 1 year later Eurex will expand their offering with the first ESG Derivatives on the US Market. Eurex Futures on STOXX USA 500 ESG-X were launched **February 10, 2020**¹⁾



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

Eurex ESG Futures

Volume distribution and Open Interest until December 31, 2019¹⁾



^{1) &}lt;u>https://www.eurexchange.com/exchange-en/products/esg</u>



STOXX USA 500 ESG-X



Index methodology

Universe



Selection



Weighting



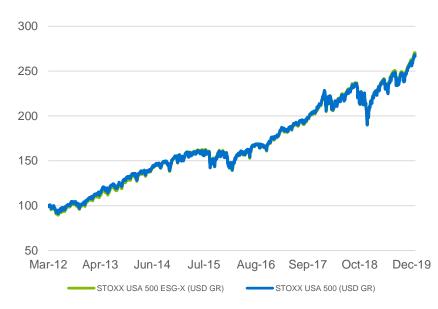
STOXX® USA 500 Index

- Exclusion criteria:
 - UN Global Compact Compliance Principles
 - 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
- A company is deleted from the index (t+2) if Sustainalytics raises the ESG-controversy risk level to level 5 ("Severe Risk")



Risk and return characteristics

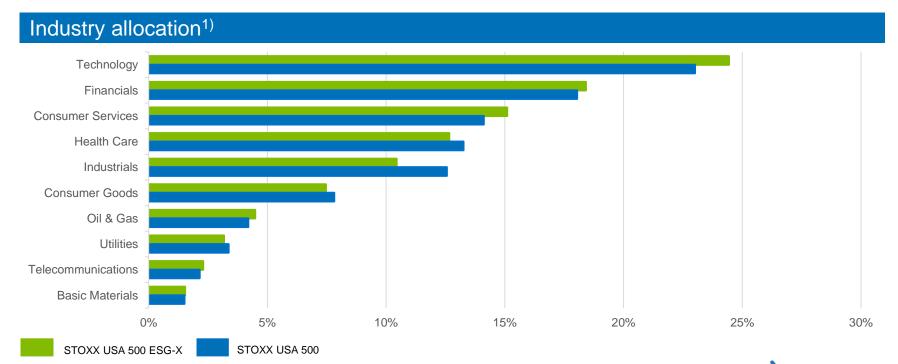
	STOXX USA 500 ESG-X (USD GR)	STOXX USA 500 (USD GR)
Perf. overall (annualized)	13.70%	13.57%
Perf. (1Y)	33.30%	32.21%
Perf. (3Y) (annualized)	16.07%	15.51%
Perf. (5Y) (annualized)	11.87%	11.68%
Vol. overall (annualized)	13.24%	12.92%
Volatility (1Y) (annualized)	12.91%	12.54%
Volatility (3Y) (annualized)	13.19%	12.84%
Volatility (5Y) (annualized)	13.78%	13.44%
Sharpe ratio (Overall)	0.98	0.99
Sharpe ratio (5Y)	0.80	0.81
Tracking Error (Overall)	1.00%	
Tracking error (5Y)	0.95%	
Dividend Yield (Overall)	39.61%	39.78%
Maximum drawdown	-19.90%	-19.59%



- 1) Source: STOXX, daily data. Relative figures calculated against Benchmark
- 2) LIBOR used as a proxy for riskless returns
- 3) STOXX Data March 19, 2012 December 31, 2019



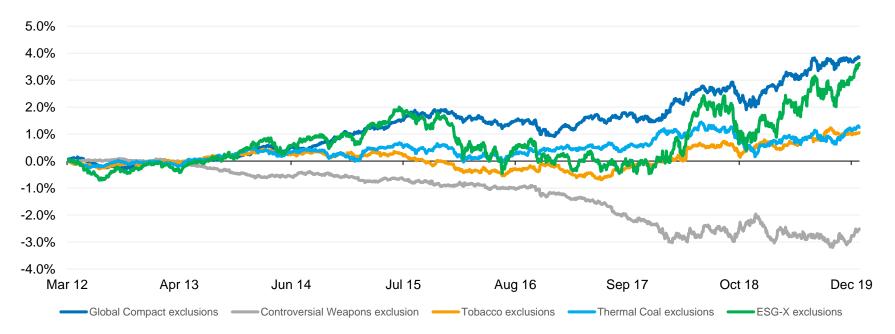
Maintains diversification across industries



¹⁾ Source: STOXX. Data as of December 31, 2019.



Cumulative impact of exclusions on total returns

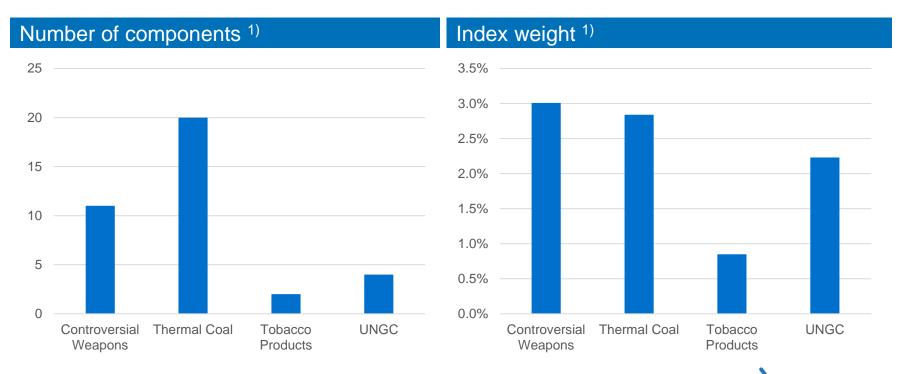


¹⁾ Source: STOXX. USD GR, Data as of December 31, 2019; Delta to STOXX USA 500 index



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

Impact of exclusion on STOXX USA 500 composition



¹⁾ Source: STOXX. Data as of January 14, 2020; Data for excluded securities



Ticker	ISIN	Туре	Currency	Bloomberg Ticker
SU5LESGX	CH0476175234	Price	USD	SU5LESGX Index
SU5VESGX	CH0476175465	Net	USD	SU5VESGX Index
SU5ZESGX	CH0476175168	Gross	USD	SU5ZESGX Index



STOXX USA 500 ESG-X Index Futures

<u>Underlying</u>					
Index	Currency	Index type	ISIN	Bloomberg	Reuters
STOXX® USA 500 ESG-X	USD	Price	CH0476175234	SU5LESGX	.SU5LESGX

Eurex products					
Product name	Currency	Index type	ISIN	Product code	Product type
Futures on STOXX® USA 500 ESG-X	USD	Price	DE000A26RSF5	FSUS	FINX



STOXX USA 500 ESG-X Index Futures

	STOXX [®] USA 500 ESG-X Futures (FSUS)			
Underlying index	STOXX USA 500 ESG-X Index (SU5LESGX)			
Index type	Price index			
Contract value	100 USD per index point			
Tick value	5 USD			
Price quotation	In points with two decimal place			
Minimum price change	0.05 points			
Contract months	Up to 9 months; 3 quarterly months			
Settlement	Cash settlement, due on the first exchange day after the final settlement day			
Final settlement price	Relevant for the STOXX® USA 500 ESG-X equity index futures is the index closing price on the last trading day.			
Expiration day and Final settlement day	3rd Friday of each expiration month if this is a trading day at Eurex Deutschland; otherwise the exchange day immediately preceding that day. Close of trading in the maturing futures on the Last Trading Day is at 22:00 CET. The final settlement day is the trading day following the last trading day.			
Continuous / TES	07:50 – 22:00 CET			
Flexible contracts	Available			
Min block trade size	100 contracts			



Appendix



STOXX ESG-X product suite --- 40+ Indices

STOXX country ESG-X indices

- STOXX Australia 150 ESG-X
- STOXX Canada 60 ESG-X
- STOXX Canada 240 ESG-X
- STOXX France 90 ESG-X
- STOXX Germany Total Market ESG-X
- STOXX Italy 45 ESG-X
- STOXX Japan 600 ESG-X
- STOXX Singapore 75 ESG-X
- STOXX Spain 30 ESG-X
- STOXX UK 180 ESG-X
- STOXX USA 500 ESG-X
- STOXX USA 900 ESG-X

STOXX regional ESG-X indices

- EURO STOXX 50 ESG-X
- EURO STOXX ESG-X
- STOXX Europe 600 ESG-X
- STOXX Europe 50 ESG-X
- STOXX Nordic 30 FSG-X
- STOXX North America 600 FSG-X
- STOXX Asia/Pacific 600 ESG-X
- STOXX Global 1800 ESG-X
- STOXX Global 3000 ESG-X
- STOXX Developed Markets 2400 ESG-X
- STOXX Emerging Markets 50 ESG-X
- STOXX Emerging Markets 800 LO ESG-X
- STOXX Emerging Markets 1500 ESG-X

Size subsets

- EURO STOXX Large ESG-X
- EURO STOXX Mid ESG-X
- EURO STOXX Small ESG-X
- STOXX Europe Large 200 ESG-X
- STOXX Europe Mid 200 ESG-X
- STOXX Europe Small 200 ESG-X

Sector subsets

- EURO STOXX Banks ESG-X
- STOXX Europe 600 Banks ESG-X

STOXX total market ESG-X indices

- STOXX Europe Total Market ESG-X
- STOXX Nordic Total Market ESG-X
- EURO STOXX Total Market ESG-X
- STOXX Australia Total Market ESG-X
- STOXX Developed Markets Total Market ESG-X

Size subsets

- EURO STOXX Total Market Large ESG-X
- EURO STOXX Total Market Mid ESG-X
- STOXX Developed Markets Total Market Large ESG-X
- STOXX Developed Markets Total Market Mid ESG-X
- STOXX Emerging Markets Total Market Large ESG-X
- STOXX Emerging Markets Total Market Mid ESG-X



Norms-based Screening

UN Global Compact Principles



Source: Sustainalytics Research, 2019

The principles are based on conventions as UN Universal Declaration of Human Rights, International Labour Organization Declaration on Fundamental Principles and Rights at Work, Rio Declaration on Environment and Development, and the UN Convention Against Corruption



Controversy Risk Screening

Sustainalytics screening on ESG incidents

Moderate Low **Significant** High Severe Qualitative Assessment The controversy has a moderate impact a high impact on the a severe impact on a low impact on the a significant impact environment and on the environment on the environment environment and the environment and and society, posing society, posing and society, posing society, posing high society, posing minimal risks to the significant risks to the risks to the company. serious risks to the negligible risks to the This category often company. This company. company. company. reflects structural category represents problems in the the most severe corporate conduct. company. Controversy and Event rating



Product Involvement Screening

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 February 4, 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 January 9, 2020)

- 174 signatories
- USD 9.7 trillion

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Product Involvement Screening

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, more investors are looking to exclude these companies for mitigating long term business risks.

Examples

Leading asset owners world-wide announced publically 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, AXA, MunichRe, Swiss Life, Zurich
- Retail networks: ABN AMRO



Fast-exit Rule Protects Against ESG-incidents

ESG corporate action

Fast-exit rule

- In case a company's ESG risk level is raised to level 5, the respective constituent will be deleted from the index
- The deletion takes place two trading days after the announcement. The constituent's weight will be distributed among the remaining constituents
- A fast entry is not applicable

Practice example: Volkswagen scandal

Due to this fast-exit rule, STOXX was the first index provider to delete Volkswagen from its ESG indices

Timeline:

- Friday, Sep. 18, 2015: the United States Environmental Protection Agency (EPA) issues a notice of violation of the Clean Air Act to Volkswagen Group, after it was found that the automaker had intentionally programmed diesel engines to activate certain emissions controls only during laboratory emissions testing
- Wednesday, Sep. 23: Sustainalytics changes rating on VW and STOXX announces the deletion of Volkswagen from all STOXX ESG indices
- Friday, Sep. 25: Deletion of Volkswagen from all STOXX ESG indices becomes effective



Eurex ESG Derivatives --- Liquidity Providers

On-screen

STOXX ESG Fut	ures: STXE 600 ESG-X (FSEG), STXE Climate Ir	mpact (FSCI), ESTX50 L	ow Carbon (FSLC)
DRW Investments (UK) LTD	LOTLO	Chadwick Miller	+44 20 7031 1369	cmiller@drwuk.com
Flow Trader B.V	NEDAM	Hidde Eise Mulder	+31 20 799 8622	hmulder@flowtraders.com
IMC Trading B.V	INMAM	Rick van Leeuwen	+31 20 798 8484	sales@imc.com
Optiver VOF	OPXAM	Holger Schlünzen	+31 20 708 7621	holgerschluenzen@Optive r.com
Société Générale	SOGFR	Gregory Dieng	+33 1 42 13 7244	eur-mark-gef-trd-1d- index@sgcib.com
Susquehanna	SISDB	Ronan Henderson	+353 1 802 8018	<u>Dub-Dept-SIS-</u> <u>Sales@sig.com</u>



Eurex ESG Derivatives --- Liquidity Providers

Off-screen/TES

STOXX ESG Futu	res: STX	E 600 ESG-X (FSEG), STXE Climat	e Impact (FSCI), I	ESTX50 Low Carbon (FSLC)
BNP Paribas	BNAPA	Christian Stock	+44 20 7595 1030	dl.eqd.sales.trading.emea@bnpparibas.com
BNP Paribas	BNAPA	Stephan Kemper	+49 69 7193 3105	dl.eqd.sales.trading.emea@bnpparibas.com
Citi Bank	SAILO	Claus Hein / Kyle Tonetti	+44 20 3569 3517	claus.hein@citi.com
Danske Bank, Copenhagen	DDBCO	Equity Derivatives Sales	+45 45 14 72 93	eqd_dksales@exchange.danskebank.com
Danske Bank, Helsinki	DDBCO	ETD Sales	+358 10 236 4713	timo.anttila@danskebank.com
Danske Bank, Stockholm	DDBCO	Derivative Sales	+468 5688 0531	Nid@danskebank.se
Deutsche Bank, Frankfurt	DBKFR	Tomas Laube	+49 69 910 38503	Tomas.laube@db.com
Deutsche Bank, London	DBKFR	Vasileios Koutsoulis	+44 20 754 57532	Vasileios.koutsoulis@db.com
Flow Traders B.V	NEDAM	Hidde Eise Mulder	+31 20 799 8622	hmulder@flowtraders.com
Goldman Sachs	GSIEB	Anna Whitlow / Mark Bellak (Futures Team)	+44 207 774 9077	anna.whitlow@gs.com
IMC Trading BV, Amsterdam	INMAM	Institutional Trading	+31 20 798 8519	Sales@imc.com
Skandinaviska Enskilda Banken AB, Stockholm	ENSLO	Aloke Sarnobat	+46 8 5162 3145	aloke.sarnobat@seb.se
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Call a STOXX representative

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Disclaimer

About Qontigo

Qontigo is a financial intelligence innovator and a leader in the modernization of investment management, from risk to return.

The combination of the company's world-class indices and best-of-breed analytics, with its technological expertise and customer-driven innovation enables its clients to achieve competitive advantage in a rapidly changing marketplace.

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

Created in 2019 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.

About STOXX

Qontigo's index provider STOXX is part of Deutsche Börse Group, and the administrator of the DAX indices under the European Benchmark Regulation. STOXX Ltd. is Qontigo's global index provider, currently calculating a global, comprehensive index family of over 10,000 strictly rules-based and transparent indices. Best known for the leading European equity indices EURO STOXX 50, STOXX Europe 50 and STOXX Europe 600, STOXX Ltd. maintains and calculates the STOXX Global index family which consists of total market, broad and blue-chip indices for the regions Americas, Europe, Asia/Pacific and sub-regions Latin America and BRIC (Brazil, Russia, India and China) as well as global markets.

STOXX indices are licensed to more than 600 companies around the world as underlyings for Exchange Traded Funds (ETFs), futures and options, structured products and passively managed investment funds.

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