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
- EURO STOXX 50 Low Carbon
  - Futures
- STOXX USA 500 ESG-X
  - Futures
  - Launch: Feb 10, 2020

- Based on the strong demand, Eurex launched 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

Eurex ESG Futures

Volume distribution and Open Interest until December 31, 2019

<table>
<thead>
<tr>
<th>Product</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESG Futures</td>
<td>681,202 contracts traded</td>
</tr>
<tr>
<td>ESG Options</td>
<td>6,000 contracts traded</td>
</tr>
<tr>
<td>Open Interest</td>
<td>744 million EUR in Open Interest</td>
</tr>
</tbody>
</table>

STOXX USA 500 ESG-X
STOXX USA 500 ESG-X Index

Index methodology

- **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”)
## STOXX USA 500 ESG-X Index

### Risk and return characteristics

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

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
STOXX USA 500 ESG-X Index

Maintains diversification across industries

Industry allocation¹)

- Technology: 25%
- Financials: 20%
- Consumer Services: 15%
- Health Care: 10%
- Industrials: 8%
- Consumer Goods: 7%
- Oil & Gas: 5%
- Utilities: 4%
- Telecommunications: 3%
- Basic Materials: 2%

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

STOXX USA 500 ESG-X

STOXX USA 500
STOXX USA 500 ESG-X Index

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
STOXX USA 500 ESG-X Index

Impact of exclusion on STOXX USA 500 composition

<table>
<thead>
<tr>
<th>Number of components ¹)</th>
<th>Index weight ¹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controversial Weapons</td>
<td>0.0%</td>
</tr>
<tr>
<td>Thermal Coal</td>
<td>0.5%</td>
</tr>
<tr>
<td>Tobacco Products</td>
<td>1.0%</td>
</tr>
<tr>
<td>UNGC</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

¹) Source: STOXX. Data as of January 14, 2020; Data for excluded securities
## STOXX USA 500 ESG-X Index

<table>
<thead>
<tr>
<th>Ticker</th>
<th>ISIN</th>
<th>Type</th>
<th>Currency</th>
<th>Bloomberg Ticker</th>
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<tbody>
<tr>
<td>SU5LESGX</td>
<td>CH0476175234</td>
<td>Price</td>
<td>USD</td>
<td>SU5LESGX Index</td>
</tr>
<tr>
<td>SU5VESGX</td>
<td>CH0476175465</td>
<td>Net</td>
<td>USD</td>
<td>SU5VESGX Index</td>
</tr>
<tr>
<td>SU5ZESGX</td>
<td>CH0476175168</td>
<td>Gross</td>
<td>USD</td>
<td>SU5ZESGX Index</td>
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</table>
STOXX USA 500 ESG-X Index Futures

<table>
<thead>
<tr>
<th>Underlying</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>Currency</td>
</tr>
<tr>
<td>STOXX® USA 500 ESG-X</td>
<td>USD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eurex products</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Product name</td>
<td>Currency</td>
</tr>
<tr>
<td>Futures on STOXX® USA 500 ESG-X</td>
<td>USD</td>
</tr>
</tbody>
</table>
## STOXX USA 500 ESG-X Index Futures

<table>
<thead>
<tr>
<th><strong>Underlying index</strong></th>
<th>STOXX USA 500 ESG-X Index (SU5LESGX)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Index type</strong></td>
<td>Price index</td>
</tr>
<tr>
<td><strong>Contract value</strong></td>
<td>100 USD per index point</td>
</tr>
<tr>
<td><strong>Tick value</strong></td>
<td>5 USD</td>
</tr>
<tr>
<td><strong>Price quotation</strong></td>
<td>In points with two decimal place</td>
</tr>
<tr>
<td><strong>Minimum price change</strong></td>
<td>0.05 points</td>
</tr>
<tr>
<td><strong>Contract months</strong></td>
<td>Up to 9 months; 3 quarterly months</td>
</tr>
<tr>
<td><strong>Settlement</strong></td>
<td>Cash settlement, due on the first exchange day after the final settlement day</td>
</tr>
<tr>
<td><strong>Final settlement price</strong></td>
<td>Relevant for the STOXX® USA 500 ESG-X equity index futures is the index closing price on the last trading day.</td>
</tr>
<tr>
<td><strong>Expiration day and Final settlement day</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Continuous / TES</strong></td>
<td>07:50 – 22:00 CET</td>
</tr>
<tr>
<td><strong>Flexible contracts</strong></td>
<td>Available</td>
</tr>
<tr>
<td><strong>Min block trade size</strong></td>
<td>100 contracts</td>
</tr>
</tbody>
</table>
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 ESG-X
- STOXX North America 600 ESG-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

Human Rights
Respect and protect proclaimed Human Rights, avoid complicity in Human Rights abuses

Labor
Freedom of association, abolition of child labor, elimination of discrimination in respect to employment

Environment
Precautionary approach to environmental challenges, Development of environmental friendly technologies

Anti-Corruption
Businesses should work against corruption in all its forms including extortion and bribery

UN Global Compact Principles and underlying treaties

1) Source: Sustainalytics Research, 2019
2) 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

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>The controversy has a low impact on the environment and society, posing negligible risks to the company.</td>
</tr>
<tr>
<td>Moderate</td>
<td>The controversy has a moderate impact on the environment and society, posing minimal risks to the company.</td>
</tr>
<tr>
<td>Significant</td>
<td>The controversy has a significant impact on the environment and society, posing significant risks to the company.</td>
</tr>
<tr>
<td>High</td>
<td>The controversy has a high impact on the environment and society, posing high risks to the company. This category often reflects structural problems in the company.</td>
</tr>
<tr>
<td>Severe</td>
<td>The controversy has a severe impact on the environment and society, posing serious risks to the company. This category represents the most severe corporate conduct.</td>
</tr>
</tbody>
</table>

Source: Sustainalytics Research, 2019
Product Involvement Screening

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

Source: Swiss Sustainable Finance, January 2020
Product Involvement Screening

Tobacco and Thermal coal

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.

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

<table>
<thead>
<tr>
<th>Futures Type</th>
<th>Provider</th>
<th>Contact Person</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>STXE 600 ESG-X (FSEG)</td>
<td>DRW Investments (UK) LTD</td>
<td>Chadwick Miller</td>
<td>+44 20 7031 1369</td>
<td><a href="mailto:cmiller@drwuk.com">cmiller@drwuk.com</a></td>
</tr>
<tr>
<td>STXE Climate Impact (FSCI)</td>
<td>Flow Trader B.V</td>
<td>Hidde Eise Mulder</td>
<td>+31 20 799 8622</td>
<td><a href="mailto:hmulder@flowtraders.com">hmulder@flowtraders.com</a></td>
</tr>
<tr>
<td>ESTX50 Low Carbon (FSLC)</td>
<td>IMC Trading B.V</td>
<td>Rick van Leeuwen</td>
<td>+31 20 798 8484</td>
<td><a href="mailto:sales@imc.com">sales@imc.com</a></td>
</tr>
<tr>
<td></td>
<td>Optiver VOF</td>
<td>Holger Schlünzen</td>
<td>+31 20 708 7621</td>
<td><a href="mailto:holgerschluenzen@Optiver.com">holgerschluenzen@Optiver.com</a></td>
</tr>
<tr>
<td></td>
<td>Société Générale</td>
<td>Gregory Dieng</td>
<td>+33 1 42 13 7244</td>
<td><a href="mailto:eur-mark-gef-trd-1d-index@sgcib.com">eur-mark-gef-trd-1d-index@sgcib.com</a></td>
</tr>
<tr>
<td></td>
<td>Susquehanna</td>
<td>Ronan Henderson</td>
<td>+353 1 802 8018</td>
<td><a href="mailto:Dub-Dept-SIS-Sales@sig.com">Dub-Dept-SIS-Sales@sig.com</a></td>
</tr>
</tbody>
</table>
# Eurex ESG Derivatives --- Liquidity Providers

## Off-screen/TES

<table>
<thead>
<tr>
<th>STOXX ESG Futures: STXE 600 ESG-X (FSEG), STXE Climate Impact (FSCI), ESTX50 Low Carbon (FSLC)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BNP Paribas</strong></td>
</tr>
<tr>
<td><strong>BNP Paribas</strong></td>
</tr>
<tr>
<td><strong>Citi Bank</strong></td>
</tr>
<tr>
<td><strong>Danske Bank, Copenhagen</strong></td>
</tr>
<tr>
<td><strong>Danske Bank, Helsinki</strong></td>
</tr>
<tr>
<td><strong>Danske Bank, Stockholm</strong></td>
</tr>
<tr>
<td><strong>Deutsche Bank, Frankfurt</strong></td>
</tr>
<tr>
<td><strong>Deutsche Bank, London</strong></td>
</tr>
<tr>
<td><strong>Flow Traders B.V</strong></td>
</tr>
<tr>
<td><strong>Goldman Sachs</strong></td>
</tr>
<tr>
<td><strong>IMC Trading BV, Amsterdam</strong></td>
</tr>
<tr>
<td><strong>Skandinaviska Enskilda Banken AB, Stockholm</strong></td>
</tr>
<tr>
<td><strong>Société Générale</strong></td>
</tr>
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</table>
## STOXX Offices and Contacts

### Learn more about STOXX ESG-X Indices on:

[https://www.stoxx.com/esg-x](https://www.stoxx.com/esg-x)

<table>
<thead>
<tr>
<th>Location</th>
<th>Address</th>
<th>City</th>
<th>Country</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zug (headquarters)</td>
<td>Theilerstrasse 1a 6300 Zug Switzerland</td>
<td></td>
<td></td>
<td>+41 43 430 71 60</td>
</tr>
<tr>
<td>Tokyo</td>
<td>Marunouchi Kitaguchi Building 27F 1-6-1 Otemachi Chiyoda-ku Tokyo 100-0004 Japan</td>
<td></td>
<td></td>
<td>+81 3 5847 824</td>
</tr>
<tr>
<td>New York</td>
<td>1155 Avenue of the Americas Suite 1950 New York, NY 10036 United States of America</td>
<td></td>
<td></td>
<td>+1 212 618 6362</td>
</tr>
<tr>
<td>London</td>
<td>11 Westferry Circus London E14 4HE United Kingdom</td>
<td></td>
<td></td>
<td>+44 207 862 7680</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>Mergenthalerallee 61 65760 Eschborn Germany</td>
<td></td>
<td></td>
<td>+49 69 211 0</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>2904-7, 29/F, Man Yee Building 68 Des Voeux Road Central Central, Hong Kong Hong Kong, SAR</td>
<td></td>
<td></td>
<td>+852 2530 7862</td>
</tr>
</tbody>
</table>

### Call a STOXX representative

Customer support

customersupport@stoxx.com

+41 43 430 72 72
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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