STOXX ESG Indices / Underlying Eurex Futures Overview

May 2019

Willem Keogh
Feedback 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
- Asset managers are looking for “ESG compliant” version of STOXX Europe 600 with a “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

Based on the strong demand Eurex has announced¹ that the first ESG Derivatives with underlyings linked to ESG versions of STOXX European flagship indices have been launched on Feb. 18, 2019.

Eurex ESG Derivatives

Summary

**STOXX Europe 600 ESG-X**
- Based on the 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
- Aim to reduce market risk and reputational risks
- Similar risk-return profile as STOXX Europe 600

**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
Exclusions

Norms-based screening and controversial weapons

Norms-based screening uses the 10 principles of UN Global Compact for responsible business and covers the following areas:

- Human rights
- Labour rights
- Environment
- Business ethics and anti-corruption.

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.

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
Exclusions

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:**
    - Coal-fired electricity, heat or steam generation capacity / thermal coal electricity production (including utilities that own/operate coal-fired power plants)

Leading institutions world-wide started to exclude companies involved in Tobacco and/or Coal, for example:

- Pension funds/Insurances: Norwegian SWF, FRR, PGGM, APG, AP4, AP7, Allianz, MunichRe, AXA, California Public Employees Retirement, NZ Super, Calpers
- Asset Managers: BNPP AM, Robeco, Nordea, SEB, SwedbankRobur
- Retail networks: ABN AMRO
STOXX Europe 600 ESG-X

Exclusions

- STOXX® Europe 600
- 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
  - In case a company which is an index constituent increases in its ESG-controversy risk level to level 5, the respective constituent will be deleted from the index.
## STOXX Europe 600 ESG-X

### Risk and return overview

<table>
<thead>
<tr>
<th>Risk and return characteristics&lt;sup&gt;1,2&lt;/sup&gt;</th>
<th>STOXX Europe 600 ESG-X</th>
<th>STOXX EUROPE 600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return (overall)</td>
<td>4.1%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Return 1y</td>
<td>-0.7%</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Return 3y</td>
<td>8.1%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Return 5y</td>
<td>5.9%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Volatility 1y</td>
<td>12.3%</td>
<td>12.2%</td>
</tr>
<tr>
<td>Volatility 3y</td>
<td>12.7%</td>
<td>12.7%</td>
</tr>
<tr>
<td>Volatility 5y</td>
<td>15.6%</td>
<td>15.6%</td>
</tr>
<tr>
<td>Sharpe ratio 5y</td>
<td>0.71</td>
<td>0.71</td>
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<tr>
<td>Max. Drawdown (overall)</td>
<td>25.05%</td>
<td>24.93%</td>
</tr>
<tr>
<td>Tracking error (overall)</td>
<td>0.50%</td>
<td></td>
</tr>
<tr>
<td>Number of Constituents</td>
<td>577</td>
<td>600</td>
</tr>
</tbody>
</table>

### Index performance<sup>1</sup>

![Index performance chart](chart.png)

3. EONIA rate used as proxy for riskless returns.
STOXX Europe 600 ESG-X
Cumulative impact of exclusions on total returns

1) Source: STOXX. Data as of Nov. 27, 2018.
2) Please refer to the research paper: STOXX® Europe 600 ESG-X Index - Analyzing ESG Exclusions
STOXX Benchmark ESG-X Indices
The following indices will be launched shortly

**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 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 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**
- EURO STOXX Total Market ESG-X
- STOXX Europe Total Market ESG-X
- STOXX Nordic 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
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