Sustainable Reality
Sustainable Funds Return to Outperformance in First Half of 2023

Key Findings

In the first half of 2023, sustainable funds returned to their long-run trend of outperforming traditional funds, up 6.9% compared with traditional funds’ +3.8%. Relatively stable market conditions compared to 2022 meant that sustainable funds’ more growth-oriented focus was a positive driver for performance. Despite short-term fluctuations in performance, sustainable funds appear to be holding steady as patient capital for investors targeting longer-term horizons.

Sustainable funds’ assets under management (AUM) continued to grow, exceeding $3.1 trillion globally by the end of June 2023 (vs. $2.8 trillion at YE2022) to represent close to 8% of total AUM. Periods of underperformance, as sustainable funds experienced in 2022, can lead to asset outflows, yet this largely did not play out. Overall, sustainable funds saw first-half inflows of $57 billion at just over 2% of 2022 year-end AUM, although North America did see small outflows partly due to reclassification.

For the first time in the Sustainable Reality series, we include data on restriction screening. More than 20% of global AUM is now in funds using at least one restriction screen, up from 2% in 2019. The use of every type of restriction has increased, with nearly all of the rise attributed to Europe, where almost 60% of AUM uses screens compared with 8% in Asia and under 2% in North America. Controversial weapons, thermal coal and tobacco are the most commonly used screens.
This report is part of the Morgan Stanley Institute for Sustainable Investing’s ‘Sustainable Reality’ series, which assesses the historical performance of sustainable funds against traditional funds over a specific timeframe using Morningstar data. This report analyzes performance for January 1, 2023–June 30, 2023.

The fund universe for this analysis includes closed-end funds, exchange-traded funds and open-end funds, taking the oldest share class, and excludes feeder funds, funds of funds and money market funds. In total, this analysis covered approximately 96,000 funds globally.

Morningstar classifies a fund as sustainable if “...in the prospectus or other regulatory filings it is described as focusing on sustainability, impact investing, or environmental, social or governance (ESG) factors. Funds must claim to have a sustainability objective, and/or use binding ESG criteria for their investment selection. Funds that employ only limited exclusions or only consider ESG factors in a non-binding way are not considered to be a sustainable investment product.”

This analysis takes each fund’s classification as of June 30 (for H1 data) and December 31 (for full year data) in each year; Traditional funds are those classified as ‘Not Sustainable’ by Morningstar. Morningstar’s ‘Sustainable’ classification can differ from the newer, and still broad, European Sustainable Finance Disclosure Regulation (SFDR) Article 8 and Article 9 definitions. Over 99% of Article 9 funds are also classified as Sustainable by Morningstar, while this only applies for around 30% of Article 8 funds.

Morningstar’s calculation of total return is expressed in percentage terms and is determined each month by taking the change in monthly net asset value, reinvesting all income and capital-gains distributions during that month, and dividing by the starting net asset value (NAV). This analysis builds on the 2019, 2020 and 2023 Sustainable Reality reports, now looking at global performance rather than just US.
Sustainable Funds Return to Outperforming Traditional Funds

1H23 saw sustainable funds return to relative outperformance, with median returns of +6.9% compared with traditional funds’ +3.8%. This held true across all asset classes and geographies, with outperformance most evident in equities and in North America. Structural market factors, such as a growth focus in equities and longer duration in fixed income, helped contribute to sustainable funds’ relative outperformance.

In 2022, sustainable funds underperformed traditional funds for the first time in five years. Underperformance was concentrated in the first half of the year and started to reverse in the second half. 1H23 saw sustainable funds return to outperforming traditional funds (Figure 1).

By asset class (Figure 2), sustainable equity funds saw the strongest returns (+10.9%), outperforming traditional equity funds (+8.0%). Fixed income performance was more muted, with sustainable funds at +3.8% and traditional funds at +2.2%.

By region (Figure 3), sustainable funds outperformed traditional funds across all major geographies, with the greatest outperformance in Oceania (+3.7%) and North America (+2.5%).

Source: Morgan Stanley Institute for Sustainable Investing analysis of Morningstar data.
Equity Fund Performance Was Strongest in 1H23, With Sustainable Funds Outperforming Across Asset Classes

1H23 Return by Asset Type

- **Equity**
  - Sustainable Funds: 10.9%
  - Traditional Funds: 8.0%

- **Fixed Income**
  - Sustainable Funds: 3.8%
  - Traditional Funds: 2.2%

- **Other**
  - Sustainable Funds: 5.9%
  - Traditional Funds: 3.3%

Source: Morgan Stanley Institute for Sustainable Investing analysis of Morningstar data.

**“Other” includes multi-asset, property, commodities, and alternative fund types.**

Sustainable Funds Outperformed in All Regions, Particularly in Oceania and North America

1H23 Return by Region of Domicile

- **Africa**
  - Sustainable Funds: -4.0%
  - Traditional Funds: -5.8%

- **Asia**
  - Sustainable Funds: 7.1%
  - Traditional Funds: 5.6%

- **Europe**
  - Sustainable Funds: 8.2%
  - Traditional Funds: 5.7%

- **North America**
  - Sustainable Funds: 6.1%
  - Traditional Funds: 2.4%

- **Oceania**
  - Sustainable Funds: 17.4%
  - Traditional Funds: 16.3%

Source: Morgan Stanley Institute for Sustainable Investing analysis of Morningstar data.
Structural Market Factors Were More Favorable to Sustainable Funds’ Positioning in 1H23

In 2022, a rapid rise in interest rates structurally benefited value styles of investing. However, the first half of 2023 saw more stable market conditions, favoring sustainable funds’ more growth-oriented, long-term positioning. For example, only 10% of sustainable funds take a value approach, compared with 22% of traditional funds, which is unchanged from 2022. While market factors were not the only driver of sustainable funds’ outperformance in 1H23, it is important to note that a return to a wider market environment favoring value or shorter duration assets still has the potential to impact future performance for sustainable funds.

FIGURE 4

1H23 Saw Value Styles Underperform Blend and Growth, Reversing the FY22 Trend

Median Equity Fund Performance by Style

<table>
<thead>
<tr>
<th>Value</th>
<th>Blend</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY22</td>
<td>H123</td>
<td></td>
</tr>
<tr>
<td>-11.0%</td>
<td>6.5%</td>
<td>6.3%</td>
</tr>
<tr>
<td>3.9%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
EQUITIES

Sustainable Funds Outperform in Large-Cap Growth and Blended Categories

Sustainable funds outperformed traditional funds in most market cap and investing style categories (Figure 5).

This was particularly notable in the Large Blend and Large Growth categories, likely relating to specific stock or thematic exposures.

### FIGURE 5

**Sustainable Funds Outperformed in Large Blend and Large Growth Categories**

<table>
<thead>
<tr>
<th>Category</th>
<th>Sustainable Funds</th>
<th>Traditional Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Value</td>
<td>4.5%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Small Blend</td>
<td>6.6%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Small Growth</td>
<td>5.8%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Mid Value</td>
<td>4.8%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Mid Blend</td>
<td>6.6%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Mid Growth</td>
<td>7.3% 7.2%</td>
<td></td>
</tr>
<tr>
<td>Large Value</td>
<td>7.3%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Large Blend</td>
<td>9.9%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Large Growth</td>
<td>11.4%</td>
<td>5.2%</td>
</tr>
</tbody>
</table>

Source: Morgan Stanley Institute for Sustainable Investing analysis of Morningstar data.

Morningstar categorizes equity funds by market capitalization focus, from small to large, and style, value/blended/growth. Returns are median returns.
Sustainable Funds’ Longer-Dated Focus Offered a Small Advantage

Fixed income performance by style was less differentiated than in equities. The best performing funds were in lower credit quality categories (reversing the 2022 trend as markets stabilized), and in longer duration categories. Sustainable fixed income funds generally skew to the middle of the credit risk spectrum and away from short duration, so wider market moves supported their relative performance in the first half of 2023. Sustainable funds were also notable outperformers in the Medium Limited and High Extensive categories (Figure 6).

![FIGURE 6]

**Sustainable Funds Were Notable Outperformers in the Medium Limited and High Extensive Categories**

This model is based on the two pillars of fixed-income performance: interest-rate sensitivity and credit quality. The three duration groups are short, intermediate, and long-term, and the three credit quality groups are high (AA rated and higher), medium (BBB to AA rated), and low quality (<BB, all high-yield bonds). These groupings display a portfolio’s effective duration and credit quality to provide an overall representation of the fund’s risk, given the length and quality of bonds in its portfolio. Nine possible combinations exist, ranging from short duration/high quality for the safest funds to long duration/low quality for the riskiest.
Investor Demand for Sustainable Funds Remains Strong

Despite challenging market conditions in 2022, investor interest and demand for sustainable fund opportunities remained strong in 1H23. Sustainable funds’ AUM as a proportion of total AUM continued to grow throughout the year, reaching record levels (7.9% vs. 7.6% in Dec. 2022). Similarly, sustainable funds saw net positive inflows, cumulatively $57 billion by the end of June, while traditional funds saw small positive inflows.

Sustainable AUM Continued to Grow in 1H23, Accounting for Almost 8% of Total AUM

By the end of June 2023, sustainable funds’ AUM had increased to over $3 trillion, close to 2021 highs of ~$3.3 trillion. The proportion of overall AUM in sustainable funds continued to increase, reaching close to 8% of total AUM (Figure 7).

Source: Morgan Stanley Institute for Sustainable Investing analysis of Morningstar data.
Regionally, Europe continues to outpace other geographies in terms of sustainable AUM and fund counts. 89% of total sustainable AUM are domiciled in Europe compared with 10% in North America and <2% in all other regions. By fund count, Europe is home to more than three-quarters of the world’s sustainable funds, followed by North America (12%) and Asia (7%) (Figure 8).

Source: Morgan Stanley Institute for Sustainable Investing analysis of Morningstar data.

### FIGURE 8

**Europe Far Outpaces Other Regions in Number of Sustainable Funds**

<table>
<thead>
<tr>
<th>Region</th>
<th>FY20</th>
<th>FY21</th>
<th>FY22</th>
<th>1H23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable AUM</td>
<td>84%</td>
<td>86%</td>
<td>89%</td>
<td>89%</td>
</tr>
<tr>
<td>Fund Count by Region</td>
<td>77%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Morgan Stanley Institute for Sustainable Investing analysis of Morningstar data.
Sustainable Funds Saw Positive Inflows, Reflecting Strong Demand

Sustainable funds continued to see net positive inflows in 1H23—cumulatively $57 billion for the year, or around 2% of 2022 year-end AUM. This was similar to the 2022 trend of around 3% of prior year AUM, indicating no significant impact on flows from the 2022 relative underperformance. Traditional funds saw proportionately smaller inflows at $111 billion (0.3% of 2022 year-end AUM), a slight recovery from the strong outflows seen throughout 2022 (Figure 9).

By region, almost all flows were in Europe, with 1H23 net inflows of $68 billion, 2.8% of 2022 year-end AUM (Figure 10). North American sustainable funds saw small outflows throughout the first half, at -$10 billion (3.6% of 2022 year-end AUM), although around half of this was due to one fund’s reclassification.¹

¹ An ESG rating agency changed the credit rating requirements for fixed income funds, driving redemptions.
STATE OF PLAY

1H23 Performance and Demand for EU SFDR’s Article 8 and 9 Funds

The EU’s Sustainable Finance Disclosure Regulation (SFDR) sets out mandatory ESG disclosure requirements for asset managers with the goal of creating more transparency into sustainable investment strategies. According to the SFDR’s classification system, which went into full effect on Jan. 1, 2023, a fund will either be classified as Article 6 (funds without a sustainability scope), Article 8 (funds that promote environmental or social characteristics) or Article 9 (funds that have sustainable investment as their primary objective).

We look at the state of play for funds classified under Article 8 and Article 9 at the end of June 2023.

PERFORMANCE: Article 8 funds were up 5.9% in 1H23 with Article 9 up 6.4% (Figure 11). Both slightly underperformed the European funds within Morningstar’s ‘Sustainable’ definition (7.1%), but ahead of performance for European traditional funds (5.6%).

AUM: In total, Article 8 and 9 funds accounted for $6.4 trillion in AUM at the end of June 2023, up from $5.7 trillion at the end of 2022 (Figure 12). Of this, $6.1 trillion was labeled Article 8, accounting for 45% of total European AUM. As noted previously, this is materially larger than Morningstar’s figure of $2.8 trillion for European sustainable AUM, as only a minority of Article 8 funds currently fit the Morningstar ‘Sustainable’ category. Article 9 funds accounted for $334 billion of AUM at the end of June 2023, a slight decrease from FY22 ($357bn), despite the widespread reclassification of some passive funds from Article 9 to Article 8 earlier in the year.

FLOWS: Both Article 8 and Article 9 funds saw modest inflows in the first half of 2023, at $28 billion and $6 billion respectively, or 0.5% and 1.6% of 2022 year-end AUM. This was slightly lower than overall sustainable fund inflows through the first half of the year but remained positive (Figure 13).

FIGURE 11
Article 8 and Article 9 Fund Performance Slightly Below the Narrower Sustainable Definition, But Still Slightly Ahead of Traditional Funds

1H23 Return by SFDR Classification

<table>
<thead>
<tr>
<th></th>
<th>Article 8</th>
<th>Article 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return</td>
<td>5.9%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Europe Sustainable Funds</td>
<td>7.1%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

Source: Morgan Stanley Institute for Sustainable Investing analysis of Morningstar data.

2 Morningstar’s review of Q223 trends in Article 8 and Article 9 funds references small outflows for Article 8 funds during the quarter—SFDR Article 8 and Article 9 Funds: Q2 2023 in Review | Morningstar. The variation in the data presented here is due to differences in the fund universes, and possibly some timing differences in when each dataset was generated.
A Fifth of Global AUM is in Funds Using Restriction Screening

Restriction screening has grown sharply in recent years, now covering just over 20% of global AUM, up from 2% in 2019. Controversial weapons (20% of global AUM), thermal coal (14%) and tobacco (14%) are the most used commonly screens, but screening rates are rising across all themes.

For the first time in the Sustainable Reality series, the Institute for Sustainable Investing explores Morningstar data on how funds are using restriction screening. Just over 20% of global AUM is currently in funds using at least one screen. This rises to 90% for sustainable funds and falls to 16% for traditional funds.3

While restriction screening is long-established in sustainable investing, its use has risen sharply in recent years. In 2019, restriction screening covered just 2% of global AUM. By 2021, use significantly increased as SFDR came into effect for European-domiciled funds. Today, restriction screening is almost entirely concentrated in Europe, with nearly 90% of both Article 8 and Article 9 funds screening for at least one issue and over 60% of European AUM covered by some sort of screen. See the Appendix for an overview and definition of the restriction screens analyzed.

FIGURE 14

Rates of Restriction Screening Increased as SFDR Came Into Force in Europe in 2021

Any Exclusion, as a % of AUM

Source: Morgan Stanley Institute for Sustainable Investing analysis of Morningstar data.

3 Based on Morningstar’s classification, as with elsewhere in this report.
SUSTAINABLE REALITY: SUSTAINABLE FUNDS RETURN TO OUTPERFORMANCE IN FIRST HALF OF 2023

FIGURE 15

Indicating Rise in Screening Comes from More Funds Adopting the Approach

Number of Screens Per Fund

<table>
<thead>
<tr>
<th></th>
<th>Dec '19</th>
<th>Dec '20</th>
<th>Dec '21</th>
<th>Dec '22</th>
<th>Jun '23</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>17%</td>
<td>18%</td>
<td>22%</td>
<td>14%</td>
<td>16%</td>
</tr>
<tr>
<td>2 to 5</td>
<td>52%</td>
<td>53%</td>
<td>50%</td>
<td>49%</td>
<td>53%</td>
</tr>
<tr>
<td>6 to 9</td>
<td>28%</td>
<td>26%</td>
<td>23%</td>
<td>28%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Source: Morgan Stanley Institute for Sustainable Investing analysis of Morningstar data.

FIGURE 16

Controversial Weapons, Thermal Coal and Tobacco Are the Most Commonly Used Screens

<table>
<thead>
<tr>
<th>RESTRICTION SCREENING AT JUNE 2023</th>
<th>NUMBER OF FUNDS</th>
<th>% FUNDS</th>
<th>GLOBAL AUM, $BN</th>
<th>% AUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any</td>
<td>16,689</td>
<td>17.2%</td>
<td>$8,780</td>
<td>20.7%</td>
</tr>
<tr>
<td>Controversial Weapons</td>
<td>15,199</td>
<td>15.7%</td>
<td>$8,417</td>
<td>19.8%</td>
</tr>
<tr>
<td>Thermal Coal</td>
<td>10,663</td>
<td>11.0%</td>
<td>$6,064</td>
<td>14.3%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>11,393</td>
<td>11.8%</td>
<td>$5,988</td>
<td>14.1%</td>
</tr>
<tr>
<td>Other</td>
<td>8,212</td>
<td>8.5%</td>
<td>$4,259</td>
<td>10.0%</td>
</tr>
<tr>
<td>Small Arms</td>
<td>6,652</td>
<td>6.9%</td>
<td>$3,909</td>
<td>9.2%</td>
</tr>
<tr>
<td>Fossil Fuel</td>
<td>6,364</td>
<td>6.6%</td>
<td>$3,825</td>
<td>9.0%</td>
</tr>
<tr>
<td>Gambling</td>
<td>4,989</td>
<td>5.2%</td>
<td>$2,290</td>
<td>5.4%</td>
</tr>
<tr>
<td>Adult Entertainment</td>
<td>4,733</td>
<td>4.9%</td>
<td>$2,232</td>
<td>5.3%</td>
</tr>
<tr>
<td>Military Contracting</td>
<td>3,499</td>
<td>3.6%</td>
<td>$1,828</td>
<td>4.3%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>3,175</td>
<td>3.3%</td>
<td>$1,372</td>
<td>3.2%</td>
</tr>
<tr>
<td>Nuclear Power</td>
<td>2,581</td>
<td>2.7%</td>
<td>$1,356</td>
<td>3.2%</td>
</tr>
<tr>
<td>Palm Oil</td>
<td>1,021</td>
<td>1.1%</td>
<td>$564</td>
<td>1.3%</td>
</tr>
<tr>
<td>Genetically Modified Organisms</td>
<td>1,082</td>
<td>1.1%</td>
<td>$554</td>
<td>1.3%</td>
</tr>
<tr>
<td>Pesticides</td>
<td>483</td>
<td>0.5%</td>
<td>$306</td>
<td>0.7%</td>
</tr>
<tr>
<td>Animal Testing</td>
<td>583</td>
<td>0.6%</td>
<td>$227</td>
<td>0.5%</td>
</tr>
<tr>
<td>Fur and Specialty Leather</td>
<td>304</td>
<td>0.3%</td>
<td>$148</td>
<td>0.4%</td>
</tr>
<tr>
<td>Abortion</td>
<td>477</td>
<td>0.5%</td>
<td>$143</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Source: Morgan Stanley Institute for Sustainable Investing analysis of Morningstar data.
FIGURE 17

Overview of Restriction Screens by Region and Type*

**BY REGION**

**Europe Restriction Screening, as % of AUM**
- 61% (Jun '19) → 59% (Dec '23)
- 43% (Jun '19) → 40% (Dec '23)
- 29% (Jun '19) → 27% (Dec '23)
- 15% (Jun '19) → 13% (Dec '23)

**North America Restriction Screening, as % of AUM**
- 2% (Jun '19) → 1% (Dec '23)
- 1% (Jun '19) → 1% (Dec '23)
- 1% (Jun '19) → 1% (Dec '23)
- 1% (Jun '19) → 1% (Dec '23)

**Asia Restriction Screening, as % of AUM**
- 8% (Jun '19) → 7% (Dec '23)
- 6% (Jun '19) → 5% (Dec '23)
- 3% (Jun '19) → 2% (Dec '23)
- 1% (Jun '19) → 1% (Dec '23)

**Defense/Weapons Restriction Screening, as % of AUM**
- 20% (Jun '19) → 9% (Dec '23)
- 4% (Jun '19) → 3% (Dec '23)
- 2% (Jun '19) → 1% (Dec '23)
- 1% (Jun '19) → 1% (Dec '23)

**Environmental Restriction Screening, as % of AUM**
- 14% (Jun '19) → 9% (Dec '23)
- 3% (Jun '19) → 1% (Dec '23)
- 1% (Jun '19) → 1% (Dec '23)
- 1% (Jun '19) → 1% (Dec '23)

**Values-Based Restriction Screening, as % of AUM**
- 14% (Jun '19) → 5% (Dec '23)
- 6% (Jun '19) → 3% (Dec '23)
- 3% (Jun '19) → 1% (Dec '23)
- 1% (Jun '19) → 1% (Dec '23)

**BY TYPE OF SCREEN**

**Defense/Weapons Restriction Screening, as % of AUM**
- Controversial Weapons
- Small Arms
- Military Contracting

**Environmental Restriction Screening, as % of AUM**
- Thermal Coal
- Fossil Fuel
- Palm Oil
- Pesticides

**Values-Based Restriction Screening, as % of AUM**
- Tobacco
- Gambling
- Adult Entertainment

Source: Morgan Stanley Institute for Sustainable Investing analysis of Morningstar data.

*For definitions, please see the Appendix.
Conclusion

So far, 2023 saw a return to form for sustainable funds after challenging market conditions in 2022. This outperformance had both structural and secular drivers: The market environment was more favorable to sustainable funds’ positioning and there was material outperformance within style categories. Demand for sustainable funds remained strong, with positive inflows throughout the year—particularly in Europe—and no market reaction to the 2022 underperformance. Overall, sustainable funds appear to be holding steady as patient capital for investors targeting longer-term horizons.

Appendix

<table>
<thead>
<tr>
<th>RESTRICTION SCREENING CATEGORIES</th>
<th>MORNINGSTAR DEFINITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excludes Abortion/Stem Cells</td>
<td>These are strategies that avoid investments in companies that derive revenue from abortion services, abortifacients, and/or the use of embryonic stem cells. Strategies that exclude human cloning are also included in this data point because of the use of embryonic stem cells and the issue’s relationship to life ethics questions. While many strategies employing these exclusions also exclude contraceptives, the exclusion of the latter is reflected in “Excludes Other.”</td>
</tr>
<tr>
<td>Excludes Adult Entertainment</td>
<td>These are strategies that intend to avoid investments in companies that derive a significant percentage of their revenue from adult entertainment. Strategies that identify specific exclusions of a subindustry, such as pornography, also receive this tag.</td>
</tr>
<tr>
<td>Excludes Alcohol</td>
<td>These are strategies that intend to avoid investments in companies that derive a significant percentage of their revenue from the production, distribution, or sale of alcohol.</td>
</tr>
<tr>
<td>Excludes Animal Testing</td>
<td>These are strategies that intend to avoid investments in companies that engage in animal-testing practices.</td>
</tr>
<tr>
<td>Excludes Controversial Weapons</td>
<td>These are strategies that avoid investments in companies that derive a significant percentage of their revenue from controversial military weapons, such as weapons of mass destruction, nuclear weapons, land mines, and cluster munitions. These do not necessarily preclude investments in companies with revenue from conventional military weapons but may include companies that produce materials used in controversial weapons.</td>
</tr>
<tr>
<td>Excludes Fur and Specialty Leather</td>
<td>These are strategies that intend to avoid investments in companies that derive a significant percentage of their revenue from the production, distribution, or sale of fur and/or specialty leather.</td>
</tr>
<tr>
<td>Excludes Gambling</td>
<td>These are strategies that intend to avoid investments in companies that derive a significant percentage of their revenue from gambling or casinos.</td>
</tr>
<tr>
<td>Excludes GMOs</td>
<td>These are strategies that intend to avoid investments in companies that are significantly involved in the use of genetically modified organisms.</td>
</tr>
</tbody>
</table>

(continued on next page)
### Restriction Screening Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Excludes Military Contracting</strong></td>
<td>These are strategies that intend to avoid investments in military contractors or companies that derive a significant percentage of their revenue from non consumer military contracting or operations. Some strategies cite companies that derive a significant amount of revenue from working with military organizations or defense more generally. This category does not necessarily exclude nonmilitary companies that are involved in materials or components used in controversial weapons.</td>
</tr>
<tr>
<td><strong>Excludes Nuclear</strong></td>
<td>These are strategies that intend to avoid investments in companies that are significantly involved in the research or production of nuclear energy. This does not reflect exclusions of nuclear weapons, which are instead reflected in “Excludes Controversial Weapons.”</td>
</tr>
<tr>
<td><strong>Excludes Palm Oil</strong></td>
<td>These are strategies that intend to avoid investments in companies that derive a significant percentage of their revenue from the production, distribution, or sale of unsustainable palm oil and its products. This may not require the exclusion of companies that produce, distribute, or sell palm oil that has been shown to be sustainably sourced, including cosmetics and lotions.</td>
</tr>
<tr>
<td><strong>Excludes Pesticides</strong></td>
<td>These are strategies that intend to avoid investments in companies that derive a significant percentage of their revenue from the production, distribution, or sale of pesticides for environmental or biological concerns.</td>
</tr>
<tr>
<td><strong>Excludes Small Arms</strong></td>
<td>These are strategies that intend to avoid investments in companies that derive a significant percentage of their revenue from the production, distribution, or sale of personal weapons and small arms. These strategies most frequently exclude firearms but may exclude other personal weapons as well.</td>
</tr>
<tr>
<td><strong>Excludes Thermal Coal</strong></td>
<td>These are strategies that intend to avoid investments in companies that derive a significant percentage of their revenue from the extraction, distribution, sale, or use of thermal coal. Investments in companies exposed to metallurgical coal are typically not included in this category.</td>
</tr>
<tr>
<td><strong>Excludes Tobacco</strong></td>
<td>These are strategies that intend to avoid investments in companies that derive a significant percentage of their revenue from the production, distribution, or sale of tobacco and/or tobacco-related products.</td>
</tr>
<tr>
<td><strong>Excludes Fossil Fuel</strong></td>
<td>These are strategies that avoid investments in companies that derive a significant percentage of their revenue from the extraction, distribution, sale, or use of any fossil fuel. These strategies intend to avoid investments in companies that derive a significant percentage of their revenue from coal, petroleum, natural gas, oil shales, bitumen, tar sands, and heavy oils.</td>
</tr>
<tr>
<td><strong>Excludes Other</strong></td>
<td>These are strategies that intend to avoid investments in companies that are significantly involved in other products or practices deemed to be contradictory to the strategy’s values. Examples include companies with business operations in countries whose governments pose human rights concerns or more general language about companies whose products or services have a negative impact on customers.</td>
</tr>
</tbody>
</table>
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