As the field of sustainable investing matures, Morningstar continues to evolve its data, research and analytics to help investors assess the ESG risks and attributes in their portfolios. Most recently, this has included our enhancements to the Morningstar Sustainability Rating™ (globes) to focus on material ESG risk, our Low Carbon Designation™ for funds, and product involvement data.

In early 2019 Morningstar launched the first part of a multistage effort to assess the sustainable funds landscape and educate the investment community on manager intentionality: Two new sets of intentionality indicators, one built around intentionally sustainable strategies, such as positive screens and specific impact goals, and another for exclusionary screens. Morningstar uses the information provided in regulatory filings to assign these attributes.

The Attributes framework offers investors a system that classifies the sustainable funds landscape using funds' own stated objectives. This document provides a detailed explanation of the updated Attributes framework and a definition of each individual attribute.
Sustainable Investment

Morningstar defines a strategy as a "Sustainable Investment" if it is described as focusing on sustainability, impact, or environmental, social, and governance, or ESG; factors in its prospectus or other regulatory filings. At the next level of granularity, "Sustainable Investment" funds are categorized into three distinct groupings. "ESG Funds" prominently focus on incorporating ESG factors into the investment process. "Impact Funds," in addition to financial return, seek to deliver a measurable impact on specific issues or themes like gender diversity, low carbon, or community development. "Environmental Sector Funds" are strategies that invest in environmentally oriented industries like renewable energy or water.

### Exhibit 1 Sustainable Investment Framework

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Sustainable Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>ESG Fund</td>
</tr>
<tr>
<td>Level 3</td>
<td>ESG Incorporation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ESG Incorporation</th>
<th>Impact Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender &amp; Diversity</td>
<td></td>
</tr>
<tr>
<td>Low Carbon/Fossil-Fuel Free</td>
<td></td>
</tr>
<tr>
<td>Community Development</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
</tr>
<tr>
<td>Other Impact Themes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental Sector Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable Energy</td>
</tr>
<tr>
<td>Water-Focused</td>
</tr>
<tr>
<td>General Environmental Sector</td>
</tr>
</tbody>
</table>

Source: Morningstar.

**ESG Fund**

These are sustainable strategies that incorporate ESG criteria throughout the investment process.

**ESG Incorporation**

These are strategies that use ESG criteria as a central part or binding factors of their security-selection and portfolio-construction process.

Strategies that use ESG Incorporation typically have explicit sustainable criteria that invested companies must meet. These strategies generally use some combination of positive screening, negative screening, and active engagement with investee. While some may include a specific thematic or impact focus, these strategies endeavor to promote sustainability and minimize negative impact. (See Page 7 for "Other" cases.)

**Impact Fund**

These are strategies that seek to make a measurable impact alongside financial return on specific issue areas through their investments. Impact funds are often focused on specific themes or use the 17 U.N. Sustainable Development Goals as a framework for evaluating the overall impact of the portfolio.
Gender and Diversity
These are strategies that seek to make a measurable impact on gender and diversity disparities or limit their investments to companies that meet certain diversity guidelines. These may include, for example, having a certain number of women on a company board and in management, and/or a positive record on racial and LGBTQ issues.

Low Carbon/Fossil-Fuel Free
These are strategies that seek to make a measurable impact through their investments in or tilts toward companies with small or decreasing carbon footprints or low carbon risk, and/or through avoidance of or reduced exposure to fossil fuels.

Community Development
These are strategies that seek to make a measurable impact through their investments in issuers of securities that support community development and engagement. These strategies may accomplish this through seeking to positively affect economic development, local institutions, or the availability of resources in target communities.

Environmental
These are strategies that intend to invest in companies with a positive environmental record or are specifically involved in industries that positively impact the environment. This also includes strategies that invest in securities whose use of proceeds contribute to positive environmental impact.

Other Impact Themes
These are strategies that seek to make a measurable impact alongside financial return through their investments in companies with other specifically stated or general impact themes that do not fall within the other impact categories.

Environmental Sector Fund
These are strategies that invest in environmentally oriented industries, such as renewable energy or water.

Renewable Energy
These are strategies that intend to invest in companies involved in the renewable energy sector.

Water-Focused
These are strategies that intend to invest in companies with clean water practices.

General Environmental Sector
These are strategies that invest in other environmental industries without a primary focus on renewable energy or water.
Employs Exclusions

"Employs Exclusions" strategies exclude certain sectors, companies, or practices. This indicator is marked if any exclusions are employed by the strategy, even if it is not a "Sustainable Investment" strategy based on the criteria outlined above.

Exhibit 2 Employs-Exclusions Framework

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Employs Exclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norms-Based Screening</td>
<td>Fur &amp; Specialty Leather</td>
</tr>
<tr>
<td>Abortion/Stem Cells</td>
<td>Gambling</td>
</tr>
<tr>
<td>Adult Entertainment</td>
<td>GMOs</td>
</tr>
<tr>
<td>Alcohol</td>
<td>Military Contracting</td>
</tr>
<tr>
<td>Animal Testing</td>
<td>Nuclear</td>
</tr>
<tr>
<td>Controversial Weapons</td>
<td>Palm Oil</td>
</tr>
<tr>
<td></td>
<td>Pesticides</td>
</tr>
<tr>
<td></td>
<td>Small Arms</td>
</tr>
<tr>
<td></td>
<td>Thermal Coal</td>
</tr>
<tr>
<td></td>
<td>Tobacco</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>

Source: Morningstar.

Uses Norms-Based Screening
These are strategies that cite international agreements, such as the UN Global Compact or Universal Declaration of Human Rights, as a guideline for investing responsibly. These frequently involve human rights violations, child labor issues, or investments in companies in conflict zones like Syria or Afghanistan.

Excludes Abortion/Stem Cells
These are strategies that intend to 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."

Excludes Adult Entertainment
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.

Excludes Alcohol
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.
Excludes Animal Testing
These are strategies that intend to avoid investments in companies that engage in animal testing practices.

Excludes Controversial Weapons
These are strategies that intend to 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.

Excludes Fur and Specialty Leather
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.

Excludes Gambling
These are strategies that intend to avoid investments in companies that derive a significant percentage of their revenue from gambling or casinos.

Excludes GMOs
These are strategies that intend to avoid investments in companies that are significantly involved in the use of genetically modified organisms.

Excludes Military Contracting
These are strategies that intend to avoid investments in military contractors or companies that derive a significant percentage of their revenue from nonconsumer 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.

Excludes Nuclear
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.”

Excludes Palm Oil
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.
Excludes Pesticides
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.

Excludes Small Arms
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.

Excludes Thermal Coal
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.

Excludes Tobacco
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.

Excludes Other
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 are "anti-family" or have a "severely negative" impact on customers.
Other:

ESG Engagement
These are strategies that use investment stewardship (also called active ownership), including voting and company engagement, as a central part of their investment process to pursue ESG goals with invested companies.

Engagement is currently only marked based on regulatory filings. However, due to the firmwide nature of engagement methods and their frequent absence from regulatory filings, we are currently exploring additional ways of confirming this data.

Sharia-Compliant
These are strategies that follow investment principles established by Sharia. Sharia refers to an Islamic religious law that governs day-to-day life and provides guidelines for investment and banking in Islam. Examples of these guidelines include the exclusion of alcohol and tobacco-related businesses.