As the field of sustainable investing matures, Morningstar continues to evolve its data, research, and analytics to help investors assess the environmental, social, and governance risks and attributes in their portfolios. Most recently in November 2021, this has included our enhancements to the Morningstar Sustainability Rating™—also known as the globe rating—to incorporate Sustainalytics' Country Risk Rating for sovereign fixed-income instruments, as well as our launch of the Morningstar Portfolio Impact Metrics.

In 2019, Morningstar introduced two new indicators to help investors find funds that intentionally incorporate sustainability features in their investment processes. One identified investment products in which sustainability features were central to the investment process; these investment products are tagged as Sustainable Investment=Yes in our database. The second set of indicators identified investment products that use exclusionary screens and the specific exclusions being used. Morningstar uses the information provided in regulatory filings to assign these attributes.

Over the past couple of years, we have assessed this global dataset and received input on its usability and relevance from Morningstar's own research teams, clients, and the market.

In 2022, we are making additional changes to our Sustainable Attributes indicators to better align with regulatory developments, particularly the European Union's Sustainable Finance Disclosure Regulation, or SFDR, and to make better use of data provided by Sustainalytics, which Morningstar acquired in 2020.

This document provides an explanation of the changes and a definition of each individual attribute.

**Sustainable Investment**

Morningstar defines an investment product as a Sustainable Investment if the use of one or more approaches to sustainable investing is central to the investment products overall investment process, based on its prospectus or other regulatory filings. Note: This is not the same as the definition under the SFDR regulation, which defines “sustainable investments” at a holding level.

Sustainable Investments are categorized into two subgroups. General ESG Investments focus on the broad incorporation of environmental, social, and corporate governance factors, generally through the use of company ESG metrics and exclusions, where the use of these approaches plays a central role in their overall investment process. Sustainability Themed Investments, by contrast, focus on one or more sustainability themes. The specific themes pursued by these investment products are further identified...
using the Sustainalytics Impact Themes. They include Climate Action, Healthy Ecosystems, Basic Needs, Resource Security, and Human Development. More on these themes can be found below in the individual attribute definition section.

**Exhibit 1 Sustainable Investment Attributes**

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Sustainable Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>General ESG Investment</td>
</tr>
<tr>
<td>Level 3</td>
<td>Sustainability Themed Investment</td>
</tr>
<tr>
<td></td>
<td>Climate Action</td>
</tr>
<tr>
<td></td>
<td>Healthy Ecosystems</td>
</tr>
<tr>
<td></td>
<td>Basic Needs</td>
</tr>
<tr>
<td></td>
<td>Resource Security</td>
</tr>
<tr>
<td></td>
<td>Human Development</td>
</tr>
</tbody>
</table>

**General ESG Investment**

General ESG Investment products use ESG criteria as a central focus or binding factor in their security-selection and portfolio-construction process. Investment products that incorporate ESG factors typically have explicit sustainability criteria that invested companies must meet. These investment products may use ESG criteria to help them limit risk, identify investment opportunities, and engage with companies. They may also apply certain exclusions. These investment products endeavor to promote sustainability and minimize negative impact, without focusing on a specific theme or area of action.

**Sustainability Themed Investment**

Sustainability Themed Investment products explicitly target exposure to one or more sustainability themes as part of their investment process. Some may target specific themes like climate action or diversity and inclusion; others may pursue a broader sustainability-themed approach that covers more than one theme. Beyond their thematic focus, these investment products may or may not employ the approaches used by General ESG Investments in their investment decisions. Although most sustainability-themed funds are equity investments, some are fixed-income funds that invest in bonds that finance sustainable projects.

To provide investors with more detail on an investment products thematic focus, investments are categorized using the Sustainalytics Impact Themes. A sustainability-themed investment may belong in one or more of these thematic groups. An investment tagged to one of the five thematic groups may not be involved in all of the theme’s underlying subthemes.
Climate Action
Climate Action covers thematic investments related to climate change. This theme includes investment products focused on investing in companies or projects that contribute broadly to the transition to a low-carbon economy. It also includes green energy and clean tech investment products that invest in companies or projects that facilitate the transition to renewable energy. Examples include investment products focused on wind, solar, hydro, tidal, and geothermal power and those focused on green infrastructure and energy storage. Subthemes to be found under this broad theme include, but are not limited to, carbon transition, decarbonization, greenhouse gas emissions, climate change adaptation and mitigation, and climate solutions.

Healthy Ecosystems
This theme is concerned with safeguarding ecologically sound environments on land, air, and water. It includes investment products that invest in companies operating in industries that positively impact the environment, such as companies that reduce pollution or perform remediation activities. It does not include water or greenhouse gas emissions/climate-change-related subthemes, as these are covered under other themes. Examples of subthemes found in this category include biodiversity, deforestation, life under water, natural ecosystems, planetary boundaries, planetary health, and sustainable agriculture.

Basic Needs
This theme concerns the basic needs of humans with a particular focus on individuals in need. Basic needs include access to food, housing, essential healthcare concerning major and neglected diseases, clean water, and energy for underserved populations. It also addresses human safety, including safe workplaces and communities. Examples of investment products to be found in this category include those that target themes such as affordable drinking water, affordable electricity, clean water and sanitation, food security, safe working conditions, and human rights.

Resource Security
This theme is concerned with efficient use of resources and circular economies. Resources include water, timber, metals, minerals, gases, and all types of manufactured materials. Investments that target sectors related to any of these biological resources or that focus on subthemes such as sustainable water and wastewater, eco-efficient and/or circular economy adapted products, waste management, and recycling, are included under this theme. Additional examples of investment products in this group include investments that promote action in areas such as responsible production and consumption, land use, food waste, water consumption, water depletion, or forest conversion.

Human Development
This theme is concerned with enhancing human capabilities and promoting social progress. The theme includes measures that support education, equality, employment opportunities, and reduced inequalities. Investment products focusing on social themes such as diversity, equity and inclusion,
education, or micro-finance may be found under this theme. Other examples in this category include financial inclusion, equal opportunities, decent work and economic growth, and sustainable cities and communities.

**Sustainable Investment Start Date**

The Sustainable Investment Start Date refers to the date from which a fund can be considered a Sustainable Investment—Overall, based on the first qualifying regulatory filing. This date will match the inception date if the fund was created with the purpose of meeting sustainability goals. The date may also refer to a “repurpose date” at which a more traditional fund started being included in the sustainable-investment universe. To be considered a repurposed ESG fund, a fund’s updated prospectus must meet the requirement of Sustainable Investment—Overall. A Sustainable Investment Start Date is required if Sustainable Investment—Overall = Yes is added to a fund that was launched more than one year before being tagged as sustainable.

**Employs Exclusions**

Employs Exclusions investment products exclude certain sectors, companies, or business practices. This indicator is flagged if any exclusions are employed by the investment, even if it is not a Sustainable Investment product based on the criteria outlined above.

**Exhibit 2 Employs Exclusions Attributes**

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Employs Exclusions</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norms-Based Screening</td>
<td>Fur &amp; Specialty Leather</td>
<td>Pesticides</td>
</tr>
<tr>
<td>Abortion/Stem Cells</td>
<td>Gambling</td>
<td>Small Arms</td>
</tr>
<tr>
<td>Adult Entertainment</td>
<td>GMOs</td>
<td>Thermal Coal</td>
</tr>
<tr>
<td>Alcohol</td>
<td>Military Contracting</td>
<td>Tobacco</td>
</tr>
<tr>
<td>Animal Testing</td>
<td>Nuclear</td>
<td>Fossil Fuel</td>
</tr>
<tr>
<td>Controversial Weapons</td>
<td>Palm Oil</td>
<td>Other</td>
</tr>
</tbody>
</table>

**Source:** Morningstar.

**Uses Norms-Based Screening**

These are investment products that cite international agreements, such as the United Nations 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.

**Excludes Abortion/Stem Cells**

These are investment products that avoid investments in companies that derive revenue from abortion services, abortifacients, and/or the use of embryonic stem cells. Investment products 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 investment products employing these exclusions also exclude contraceptives, the exclusion of the latter is reflected in Excludes Other.

Excludes Adult Entertainment
These are investment products that intend to avoid investments in companies that derive a significant percentage of their revenue from adult entertainment. Investment products that identify specific exclusions of a subindustry, such as pornography, also receive this tag.

Excludes Alcohol
These are investment products 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 investment products that intend to avoid investments in companies that engage in animal-testing practices.

Excludes Controversial Weapons
These are investment products 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.

Excludes Fur and Specialty Leather
These are investment products 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 investment products that intend to avoid investments in companies that derive a significant percentage of their revenue from gambling or casinos.

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

Excludes Military Contracting
These are investment products 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 investment products 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 investment products 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 investment products 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 investment products 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 investment products 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 investment products most frequently exclude firearms but may exclude other personal weapons as well.

**Excludes Thermal Coal**
These are investment products 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 investment products 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 Fossil Fuel**
These are investment products 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 investment products 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.
Excludes Other
These are investment products that intend to avoid investments in companies that are significantly involved in other products or practices deemed to be contradictory to the investment products 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.

Other:
Sharia-Compliant
These are investment products 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.

Engagement
These are investment products that use shareholder engagement, including raising resolutions, active proxy voting, and direct company engagement, to pursue ESG goals with invested companies.