
Morningstar ESG Indexes Outperform in Risk/Return Analysis

Sector bias explains only some of their strong record in 2020 and the past five years.

Morningstar Inc.

February 2021

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Sustainable investing experienced a milestone year in 2020. The coronavirus pandemic and its societal impact, the global movement for racial justice, and the ongoing threat of climate change all reinforced the relationship between investing and environmental, social, and governance-related issues.

"Stakeholder capitalism" became an increasingly mainstream concept. And investors sent record capital flows to ESG funds, pushing global assets past the \$1 trillion mark.¹ Regulators, especially in Europe, continued to provide important impetus, while efforts to improve and standardize ESG reporting and data, such as the Sustainability Accounting Standards Board, the Task Force on Climate-related Financial Disclosures, and the Global Reporting Initiative gained steam.

Sustainable investing also enjoyed a generally strong year from a return perspective in 2020.² That's important because of the persistent perception that ESG-based investing requires a performance sacrifice. Another common assumption is that ESG screens have done well lately because they skew toward the technology sector, which has led the market, and away from energy, the biggest laggard.

An examination of Morningstar ESG-screened indexes' risk and return history paints a positive picture—in 2020 and over the past five years. While relative returns certainly shift, the downside protection demonstrated by ESG indexes supports the notion that ESG risks are financially material.

Among the findings of this report:

- ▶ 52 of Morningstar's 69 ESG-screened indexes (75%) outperformed their broad market equivalents in 2020.
- ▶ 57 of 65 ESG indexes (88%) with a five-year record outperformed for the five years through the end of 2020.
- ▶ 59 of 65 ESG indexes (91%) lost less than their broad market equivalents during down markets over the past five years, including the first quarter of 2020.
- ▶ ESG index outperformance is not just about sector bias. For example, the Morningstar Global Markets ex-US Sustainability Index owes far more of its five-year outperformance to security selection than sector.
- ▶ The Morningstar US Sustainability Index underperformed in 2020 and for the five-year period despite being heavier on technology and lighter on energy.
- ▶ ESG screens have recently been more successful outside the U.S.

¹ Morningstar. "Global Sustainable Fund Flows: Q3 2020 in Review." Morningstar Manager Research. October 2020.
<https://direct.morningstar.com/research/doc/1006658/Global-Sustainable-Fund-Flows-Q3-2020>

² Hale, Jon. "Sustainable Equity Funds Outperform Traditional Peers in 2020." Morningstar. Jan. 8, 2021.
<https://direct.morningstar.com/research/doc/1017056/Sustainable-Equity-Funds-Outperform-Traditional-Peers-in-2020> and Ptak, Jeffrey. "Did ESG Pay Off for Funds Investors Last Year? Yes and No." Jan. 5, 2021. <https://direct.morningstar.com/research/doc/1016714/Did-ESG-Pay-Off-for-Fund-Investors-Last-Year-Yes-and-No->

Researching Morningstar's ESG-Screened Indexes

This study will focus on several groups of Morningstar indexes whose selection criteria are driven by ESG considerations. Only ESG indexes launched in 2020 or earlier are included. A total of 69 unique indexes are analyzed. All are equity-focused, apart from an ESG-screened corporate bond index. The study includes several families and index groups:

- ▶ Morningstar Sustainability Indexes (21)
- ▶ Morningstar Sustainability Leaders Indexes (10)
- ▶ Morningstar Sustainability Extended Indexes (3)
- ▶ Morningstar Sustainable Environment Indexes (10)
- ▶ Morningstar Low Carbon Risk Indexes (10)
- ▶ Morningstar Impact Indexes (4)
- ▶ Morningstar Renewable Energy Indexes (5)
- ▶ Additional Morningstar Sustainability Indexes (6)

The study does not include a small family of indexes focused on quality dividends with an ESG overlay, because sustainability screens are not a significant enough driver of those indexes' performance.

For a full methodological discussion of the indexes mentioned, refer to their construction rules and other documentation posted on the Morningstar Indexes' website.³

Except where mentioned, the indexes discussed use company-level assessments provided by Sustainalytics, the Morningstar division focused on ESG research. Sustainalytics issues ESG Risk Ratings on more than 11,000 companies across the globe and provides data on many more. Indexes transitioned from the Sustainalytics' ESG Rating to the Sustainalytics ESG Risk Rating in 2019, in parallel with the methodological evolution of the Morningstar Sustainability Rating for funds.⁴

The sustainability indexes are compared with their parent index, typically the large-capitalization or the large- and mid-capitalization segment of the equivalent broad equity market segment. Sustainalytics' coverage is strongest for large- and mid-cap companies. Gross return or total return index variants in U.S. dollars are examined for purposes of apples-to-apples comparison.

Indexes are compared with their parent indexes, or non-ESG equivalents, on three parameters:

- ▶ 2020 returns
- ▶ Five-year trailing returns (through year-end 2020)
- ▶ Five-year downside capture (through year-end 2020)

³ Morningstar Indexes. <https://indexes.morningstar.com/>

⁴ Morningstar Research. 2019. "Morningstar Sustainability Rating Methodology"

https://www.morningstar.com/content/dam/marketing/shared/research/methodology/744156_Morningstar_Sustainability_Rating_for_Funds_Methodology.pdf

While the returns comparison is straightforward, downside capture is chosen among a variety of risk measures because it helps gauge an investment's ability to preserve capital in bad market conditions. A downside capture ratio above 100% implies greater losses than the market during losing periods; a downside capture ratio below 100% suggests lesser losses. Capital preservation is critical to long-term investment success, per Warren Buffett's dictum: "Rule No. 1: Never Lose Money. Rule No. 2: Never forget rule No. 1."

As with any study, this one has caveats. Given the relatively recent development of ESG indexing, the time period assessed includes back-tested returns. The oldest and largest family studied, the Morningstar Sustainability Indexes, was launched in mid-2016, so its history spans nearly the entire five years. Other indexes analyzed are newer. Pre-inception performance is simulated based on historical Sustainalytics ratings.

Historical risk/return analysis depends on the time period. Readers will be correct to note that the trailing five years has overall been very strong for equities markets. This is undoubtedly true, although there have been rocky periods, including the first quarter of 2018, the fourth quarter of 2018, and the first quarter of 2020. In the fourth quarter of 2018 the Morningstar Global Markets Index lost nearly 13% of its value, and in the first quarter of 2020, it fell more than 22%. These periods facilitate risk analysis.

Another limitation is that index members are counted equally, when in fact, their scope varies considerably. Global markets indexes are all-encompassing; other family members (Europe, Asia, and the United States, for example) are carve-outs thereof. But it is worth examining all the family members separately, as each reflects a core equities exposure for investors based in different geographies. Many indexes are affected by regional weights, so their performance will be driven by the performance of different markets and currencies.

Morningstar Sustainability Index Family

The Morningstar Sustainability Indexes are methodologically aligned with the Morningstar Sustainability Rating for funds, or globe rating. After excluding companies involved with tobacco, controversial weapons, and civilian firearms, as well as companies experiencing serious ESG-related controversies according to Sustainalytics, the indexes select companies in order of their Sustainalytics-assigned ESG Risk Rating until 50% coverage of the parent index is reached by market cap. Until 2019, the indexes used the Sustainalytics' ESG Rating, which was an industry-relative measure of a company's ESG profile. Sector and regional weights are kept within 2 percentage points of their equivalent market weight. Index constituents are weighted by market cap.

Exhibit 1 Morningstar Sustainability Index Family

Broad Regional Markets	Developed Markets	Emerging Markets	Single Country
Global Markets	Developed Markets ex-US	Emerging Markets	United States
Global Markets ex-US	Developed Europe	Emerging Americas	Japan
Asia	Developed Markets ex-North America		United Kingdom
Asia ex-Japan			Germany
Asia Pacific			Canada
Asia Pacific ex-Japan			Australia
Europe			India
Eurozone			
Nordic			

Source: Morningstar Indexes

The Morningstar Sustainability Index family launched in 2016, but most of these equity indexes have returns modeled to December 2009 based on Sustainalytics' company-level ratings. The emerging-markets-focused indexes go back to December 2011, as do some of the indexes with significant emerging-markets weights, such as Asia. The sustainability indexes are derived from the large- and mid-cap segment of the equivalent Morningstar region/country index. The indexes overlap; for example, the U.S. represents more than 50% of the Morningstar Global Markets Sustainability Index's weight.

As displayed in Exhibit 2, 18 of 21 ESG indexes outperformed in 2020, with the exception of Global Markets, the U.S., and Canada. On a five-year basis, 18 of 20 indexes outperformed. Only one index lost more than its parent during down markets—Canada. The Global Markets and U.S. indexes suffered for not holding Tesla, Facebook, Amazon.com, or Alphabet due to their ESG Risk Ratings as assessed by Sustainalytics. In Asia and Europe, ESG screens led to superior returns and lower losses owing more to security selection than sector biases. In Europe, above-market weight to ASML, Louis Vuitton Moët Hennessy, and Vestas Wind Systems helped in 2020, as did not holding HSBC. Over the five-year period, above-market weight to SAP, Allianz, and Novo Nordisk contributed, as did the lack of exposure to British American Tobacco. In Asia, above-market weight to Taiwan Semiconductor, Pinduoduo, Sony, and Keyence contributed in 2020. For the five-year period, above-market weight to the technology sector was a tailwind in Asia.

Exhibit 2 Sustainability Indexes' Risk/Return Record vs. Large-Mid Cap Index Equivalent

Indexes	2020 Excess Return	5-Year Excess Return	5-Year Downside Capture Ratio
Global Markets	-0.39	0.15	94.94
US	-2.9	-0.81	94.62
Global Markets ex-US	2.97	1.46	94.91
Developed Markets ex-North America	5.34	1.52	95.86
Developed Markets ex-US	4.83	1.61	95.02
Asia Pacific	0.45	0.76	92.85
Asia Pacific ex-Japan	0.65	0.97	88.62
Asia	0.94	0.71	92.01
Asia ex-Japan	0.46	1.72	91.36
Europe	5.69	2.08	92.37
Developed Europe	5.5	2.06	92.28
Eurozone	4.93	2.78	90.47
Emerging Markets	0.57	1.12	95.13
Nordics	0.06	0.09	95.04
Emerging Americas	0.12	-2.14	98.47
Japan	5.01	1.09	94.8
UK	4.07	1.11	98.56
Germany	1.41	2.52	87.76
Canada	-4.39	-1.06	103.16
Australia	2.06	0.72	95.65
India	7.21	0.82	94.29

Source: Morningstar Direct. Data as of Dec. 31, 2020.

Morningstar Sustainability Leaders Index Family

The Morningstar Sustainability Leaders Indexes are methodologically similar to the broad sustainability indexes. But they are more concentrated; they can deviate further from market weights by sector and region, and they exclude more classes of companies. Not only do the Sustainability Leaders indexes exclude companies involved with tobacco, controversial weapons, and civilian firearms, they also avoid nuclear products and companies with significant exposure to gambling, alcohol, or adult entertainment. Companies experiencing serious ESG-related controversies according to Sustainalytics are excluded, as are companies that have a poor Carbon Risk Rating or that are not compliant with the United Nations Global Compact. The Sustainability Leaders indexes select companies in order of their Sustainalytics-assigned ESG Risk Ratings and are fixed-count in nature. Index constituents are weighted by market cap.

Exhibit 3 Morningstar Sustainability Leaders Index Family—Membership and Constituent Counts

Broad Regional Markets		Developed Markets		Emerging Markets		Single Country	
Global Markets	100	Developed Markets	75	Emerging Markets	50	United States	50
Global Markets ex-US	75	Developed Markets ex-US	50			Japan	25
Asia ex-Japan	50	Developed Europe	50				
		Nordic	50				

Source: Morningstar Indexes

The Morningstar Sustainability Leaders Indexes launched in 2018 but have returns back-tested to December 2012 based on Sustainalytics' company-level ratings. The indexes are derived from the large-cap segment of the equivalent Morningstar region/country index. The indexes overlap; for example, the U.S. represents more than 50% of the Morningstar Global Markets Sustainability Leaders Index's weight.

As displayed in Exhibit 4, all 10 Sustainability Leaders indexes outperformed in 2020, nine beat their parent index over the five-year period through the end of 2020, and seven lost less in down markets than their non-ESG equivalents. It should be noted that the Sustainability Leaders indexes are more concentrated and less constrained in their sector weights than the Morningstar Sustainability Indexes, increasing their margins of outperformance/underperformance. Concentration helped the U.S. and Global Markets Indexes in 2020, when above-market exposure to technology companies like Nvidia and Adobe boosted returns. But concentration also contributed to higher downside capture ratios for several indexes.

Exhibit 4 Sustainability Leaders Index Family's Risk/Return Record vs. Large Cap Equivalent

Indexes	2020 Excess Return	5-Year Excess Return	5-Year Downside Capture Ratio
Global Markets	9.17	0.98	100.2
Developed Markets	9.98	2.2	104.43
US	3.21	-0.07	93.15
Global Markets ex-US	8.2	4.53	95.98
Developed Markets ex-US	8.77	3.93	100.94
Asia ex-Japan	8.88	1.56	77.04
Developed Europe	14.34	4.57	98.89
Emerging Markets	8.13	2.41	80.52
Japan	6.39	3.81	79.17
Nordics	4.89	2.03	94.93

Source: Morningstar Direct. Data as of Dec. 31, 2020.

Morningstar Sustainability Extended Indexes

The Morningstar Sustainability Extended Indexes family launched in 2020 with returns modeled to December 2014 based on Sustainalytics' company-level ratings. The Sustainability Extended Indexes are methodologically similar to the Morningstar Sustainability Indexes and are aligned with the Morningstar Sustainability Rating for funds. The Sustainability Extended indexes are derived from the large- and mid-cap segment of the equivalent Morningstar region/country index. After excluding companies involved with tobacco, controversial weapons, and civilian firearms, as well as companies experiencing serious ESG-related controversies according to Sustainalytics, the indexes select companies in order of their Sustainalytics-assigned ESG Risk Rating until 67% coverage of the parent index is reached by market cap. Until 2019, the indexes used the Sustainalytics' ESG Rating, which was an industry-relative measure of a company's ESG profile. Sector and regional weights are kept within 2 percentage points of their equivalent market weight. Index constituents are weighted by market cap.

- ▶ Morningstar US Sustainability Extended Index
- ▶ Morningstar Canada Sustainability Extended Index
- ▶ Morningstar Developed Markets ex-North America Extended Index

As displayed in Exhibit 5, one of the three indexes outperformed in 2020. All three achieved superior returns over the five-year period and lost less during down markets. In Canada, below-market weight to Shopify hurt the sustainability index in 2020, while the U.S. index suffered from not holding Tesla, Amazon.com, and Alphabet due to their ESG Risk Ratings as assessed by Sustainalytics.

Exhibit 5 Sustainability Extended Indexes Risk/Return Record vs. Large-Mid Cap Index Equivalent

Indexes	2020 Excess Return	5-Year Excess Return	5-Year Downside Capture Ratio
US	-2.15	0.6	94.94
Canada	-3.05	0.73	92.23
Developed Markets ex-North America	3.41	1.1	95.05

Source: Morningstar, Inc.

Morningstar Sustainable Environment Index Family

Morningstar Sustainable Environment Indexes are focused on companies that act as responsible stewards of the natural world, setting the standard in their industries on criteria such as waste management, water intensity, and pollution mitigation. The indexes highlight companies that seek to minimize their environmental impact and carbon risk, relying on Sustainalytics' assessment of 50 environmental indicators. The indexes exclude companies involved with controversial weapons and thermal coal, as well as companies experiencing a serious environmental controversy, according to Sustainalytics, and carrying a Carbon Risk Rating of Severe. The indexes select companies in order of their Sustainalytics-assigned Environmental Scores until 50% coverage of the parent index is reached by market cap. Sector and regional weights are kept within 2 percentage points of their equivalent market weight, and index constituents are weighted by market cap.

Exhibit 6 Morningstar Sustainable Environment Index Family

Broad Regional Markets	Developed Markets	Emerging Markets	Single Country
Global Markets	Developed Markets	Emerging Markets	United States
Global Markets ex-US	Developed Markets ex-US		Japan
Asia ex-Japan	Developed Europe		
	Nordic		

Source: Morningstar, Inc.

The Morningstar Sustainable Environment Indexes launched in 2018, but most have returns back-tested to June 2012 based on Sustainalytics' company-level ratings. The constituents of the Sustainable Environment index family are derived from the large- and mid-cap segment of the equivalent Morningstar region/country index. The indexes overlap; for example, the U.S. represents more than 50% of the Morningstar Global Markets Sustainable Environment Index's weight.

As displayed in Exhibit 7, all 10 of the Sustainable Environment indexes outperformed in 2020, all 10 achieved superior returns for the five-year period, and nine lost less than their non-ESG equivalents during down periods. The Global Markets Index and many others benefited from their below-market exposure to the poor-performing energy sector in 2020 and for the five-year period.

Exhibit 7 Sustainable Environment Index Family's Risk/Return Record vs. Large-Mid Cap Equivalent

Indexes	2020 Excess Return	5-Year Excess Return	5-Year Downside Capture Ratio
Global Markets	3.41	1.34	96.88
Developed Markets	3.99	1.17	96.62
US	1.89	1.01	95.01
Global ex-US	2.54	0.39	98.38
Developed Markets ex-US	2.66	0.31	99.36
Asia ex-Japan	8.87	1.98	91.89
Developed Europe	3.26	0.59	96.94
Emerging Markets	7.78	1.66	100.74
Japan	3.88	0.04	98.3
Nordics	3.03	-1.08	97.54

Source: Morningstar Direct. Data as of Dec. 31, 2020.

Morningstar Low Carbon Risk Index Family

The Morningstar Low Carbon Risk Indexes are methodologically aligned with the Morningstar Low Carbon Designation. They allow investors to mitigate risks associated with climate change. Leveraging Sustainalytics' unique Carbon Risk Rating, the indexes emphasize companies across regions that are aligned with a low-carbon economy. Some industries are inherently better positioned for a world less dependent upon fossil fuels, but individual companies can take actions to mitigate their climate-related risk. The indexes are created through an optimization process that targets low portfolio-level carbon risk

and fossil fuel exposure, while minimizing deviation from the broad market. Only high-carbon-risk companies are excluded; otherwise most members of the parent index are included in the indexes with weights tilted based on carbon risk ratings. The number of constituents in each index is variable. Regional and sector weights are kept to within 4 percentage points of market weight.

Exhibit 8 Morningstar Low Carbon Risk Index Family

Broad Regional Markets	Developed Markets	Emerging Markets	Single Country
Global Markets	Developed Markets	Emerging Markets	United States
Global Markets ex-US	Developed Markets ex-US		Japan
Asia ex-Japan	Developed Europe		
	Nordic		

Source: Morningstar Inc.

The Morningstar Low Carbon Risk Index family launched in 2018, but the indexes have returns back-tested to December 2012. The Low Carbon Risk indexes are derived from the large- and mid-cap segment of the equivalent Morningstar region/country index. The indexes overlap; for example, the U.S. represents more than 50% of the Morningstar Global Markets Low Carbon Risk Index's weight.

As displayed in Exhibit 9, only two of the 10 Low Carbon Risk indexes outperformed in 2020, while eight outperformed over the trailing five-year period. Below-market exposure to the underperforming energy sector contributed during both periods, but not enough to overcome below-market weight to some high-flying U.S. technology stocks. All 10 indexes lost less than their non-ESG equivalents during down markets over the past five years. For the U.S. index, below-market exposure to Apple and Amazon.com hurt returns in 2020. The small margins of deviation from the parent index reflects the indexes' optimization methodology and constrained nature.

Exhibit 9 Low Carbon Risk Index Family's Risk/Return Record vs. Equivalent Large/Mid-Cap Index

Indexes	2020 Excess Return	5-Year Excess Return	5-Year Downside Capture Ratio
Global Markets	0.05	0.24	98.05
Developed Markets	-0.11	0.19	98.63
US	-0.49	0.28	98.6
Global Markets ex-US	-0.02	0.1	98.21
Developed Markets ex-US	-0.02	0.07	99.49
Asia ex-Japan	-0.49	0.13	96.13
Developed Europe	-0.23	-0.27	99.59
Emerging Markets	1.2	0.13	95.81
Japan	-0.12	0.61	98.31
Nordics	-1.46	-0.40	98.46

Source: Morningstar Direct. Data as of Dec. 31, 2020.

Morningstar Impact Indexes

Morningstar's impact indexes are focused on effecting positive societal change through the deployment of capital. The Morningstar Minority Empowerment Index targets the shares of 200 U.S. companies selected for their commitment to diversity and inclusion. Its scoring leverages indicators researched by Sustainalytics, including board diversity, discrimination policies, and support for community development programs. The Morningstar Women's Empowerment Index is similar in that it also targets 200 companies listed in the U.S., but its focus is a commitment to gender equity. Companies are assessed by specialist researcher Equileap on 19 criteria, including gender balance within a company's workforce, board, and executive ranks, as well as equal compensation and policies such as paid maternity leave. The Morningstar Developed Markets ex-Japan Gender Diversity Index also uses Equileap assessments but holds most of the same constituents as its parent index with weights tilted toward better-scoring companies. Finally, the Morningstar Societal Development Index targets the shares of 200 companies from developed and emerging markets that are contributing to the United Nations' 17 Sustainable Development Goals, which target global challenges such as poverty, inequality, and stewardship of land, air, and sea. Its scoring considers policies and programs related to human rights, labor protection, environmental protection, and corruption as assessed by Sustainalytics. The index has an emphasis on companies that are contributing to global development, so companies active in lesser-developed countries are emphasized.

The indexes are derived from their equivalent large- and mid-cap market segment. Sector and regional weights for the Minority Empowerment, Women's Empowerment, and Societal Development indexes are kept to within 4 percentage points of their market weight. The gender diversity index is more tightly constrained.

- ▶ Morningstar Minority Empowerment Index
- ▶ Morningstar Women's Empowerment
- ▶ Morningstar Societal Development Index
- ▶ Morningstar Developed Markets ex-Japan Gender Diversity

As displayed in Exhibit 10, only one of the four impact indexes outperformed in 2020. Three launched in August 2018 with no back-testing. The gender diversity index launched in 2020 with a back-test. It both outperformed and lost less during down markets over the last five years.

Exhibit 10 Impact Indexes Risk/Return Record vs. Equivalent Large/Mid-Cap Index

Indexes	2020 Excess Return	5-Year Excess Return	5-Year Downside Capture Ratio
Societal Development	-8.36	N/A	N/A
Minority Empowerment	-5.59	N/A	N/A
Women's Empowerment	-3.54	N/A	N/A
Developed Markets ex-Japan Gender Diversity	0.26	0.2	99.03

Source: Morningstar Direct. Data as of Dec. 31, 2020.

Morningstar Renewable Energy Indexes

Morningstar's five renewable energy indexes target companies leading the transition to the low-carbon economy. With the exception of the Morningstar Developed Europe Renewable Energy 30 Index, the renewable energy indexes both select companies involved in renewable energy or green transportation and include companies that meet a significant percentage of their energy needs from renewable sources. The 30-stock index focuses solely on renewable energy and green transportation. The indexes rely on Sustainalytics' Sustainable Product Research and Carbon Exposure Data using revenue to determine a company's involvement. For the indexes that include both producers and users of renewable energy, there are two index sleeves. The first sleeve, which selects companies for their renewable energy or green transportation involvement, represents 75% of index weight. The second, which highlights heavy users of renewable energy, represents 25% of index weight. Companies are equally weighted within their sleeves.

The indexes include:

- ▶ Morningstar Global Markets Renewable Energy Index
- ▶ Morningstar Developed Markets Renewable Energy Index
- ▶ Morningstar North America Renewable Energy Index
- ▶ Morningstar Developed Europe Renewable Energy Index
- ▶ Morningstar Developed Europe Renewable Energy 30 Index

The Morningstar North America Renewable Energy Index launched in 2019 with back-tested returns to June 2018 based on historical Sustainalytics data. The other indexes launched in 2020 with back-tested returns to December 2015 based on historical Sustainalytics data. The indexes are derived from their equivalent all-capitalization market segment.

As displayed in Exhibit 11, all five of the renewable energy indexes outperformed in 2020 and four of four both outperformed and lost less than the market during the trailing five-year period. Renewable-energy-related stocks have performed exceedingly well in recent years, including companies like Vestas Wind Systems, NIO, Tesla, CS Wind, Xinyi Solar, Scatec, and Verbund.

Exhibit 11 Renewable Energy Indexes Risk/Return Record vs. Equivalent Index

Indexes	2020 Excess Return	5-Year Excess Return	5-Year Downside Capture Ratio
Global Markets	10.99	2.26	85.24
Developed Markets	9.77	2.06	84.58
North America	22.45	N/A	N/A
Developed Europe	22.13	6.67	98.14
Developed Europe 30	34.68	10.77	93.04

Source: Morningstar Direct. Data as of Dec. 31, 2020.

Additional Morningstar Sustainability Indexes

Three fixed-count sustainability indexes are methodologically similar to the broad Morningstar Sustainability Indexes. They select compact cohorts of companies within different geographies based on their ESG Risk Ratings. The indexes exclude tobacco, controversial weapons, and companies experiencing serious ESG-related controversies. Sector and regional weights are kept to within 2 percentage points of their parent index, and index constituents are weighted by market cap.

- ▶ Morningstar Global Markets Sustainability 50 Index
- ▶ Morningstar Developed Markets Sustainability 200 Index
- ▶ Morningstar Developed Markets Asia Pacific Sustainability 60 Index

Morningstar's focused sustainability indexes launched in 2018 with returns back-tested to December 2009 based on Sustainalytics' company-level ratings. The Morningstar Global Markets Sustainability 50 Index is derived from the large- and mid-cap segment of the global equity market. The Morningstar Developed Markets Sustainability 200 Index is derived from the large-cap segment, as is the Morningstar Developed Markets Asia Pacific Sustainability 60 Index.

- ▶ Morningstar Global Target Market Exposure Responsible Index represents the top 85% of market capitalization across developed and emerging markets after excluding companies associated with adult entertainment, alcohol, gambling, firearms, fossil fuels, and tobacco products. The index uses Sustainalytics product involvement data and relies on revenue thresholds. The index launched in 2019 with returns back-tested to 2016 based on historical Sustainalytics data.
- ▶ Morningstar Sweden Sustainability Selection 70 Index targets Swedish companies with a goal of achieving a lower ESG risk profile than the Morningstar Sweden (broad market) Index. It excludes companies involved in a range of areas, those that are not compliant with the U.N. Global Compact, and those with a serious level of ESG controversy. Sector weights may not deviate more than 4 percentage points from the Morningstar Sweden Index. The index launched in 2020 with returns back-tested to 2016 based on historical Sustainalytics data.
- ▶ Morningstar US Corporate Bond Sustainability Index selects investment-grade debt securities issued by companies across the globe that are effectively managing their ESG-related risks. The indexes are methodologically aligned with the Morningstar Sustainability Rating for funds and maintain similar interest-rate sensitivity, yield, sector weights, and credit quality as their non-ESG equivalents.

As displayed in Exhibit 12, five of the six indexes outperformed in 2020. Four outperformed over the five-year period. Five lost less than their non-ESG equivalents for the trailing five-year period.

Exhibit 12 Additional Sustainability Indexes Risk/Return Record vs. Equivalent Index

Indexes	2020 Excess Return	5-Year Excess Return	5-Year Downside Capture Ratio
Global Target Market Responsible	4.15	0.96	98.96
Global Market Sustainability 50	-13.56	-3.58	131.47
Developed Markets Sustainability 200	1.03	-0.57	95.83
Developed Asia Pacific Sustainability 60	9.17	2.34	80.6
US Corporate Bond Sustainability	0.86	0.03	90.1
Sweden Sustainability Select 70	0.41	1.02	97.75

Source: Morningstar Direct. Data as of Dec. 31, 2020.

ESG Risks Are Material

The performance experience for Morningstar's ESG indexes has been encouraging over the last few years. Nevertheless, excess performance and/or superior downside capture does not guarantee future resilience. Investors should consider a variety of characteristics when choosing an index for a performance benchmark or as the underlying basis of an investment fund. Still, the recent risk/return record of Morningstar's ESG indexes supports the view that sustainable investing need not entail a performance sacrifice and that ESG risk are financially material. ■■■

About Morningstar Indexes

Morningstar Indexes combine the science and art of indexing to give investors a clearer view into the world's financial markets. Our indexes are based on transparent, rules-based methodologies that are thoroughly back-tested and supported by original research. Covering all major asset classes, our indexes originate from the Morningstar Investment Research Ecosystem—our network of accomplished analysts and researchers working to interpret and improve the investment landscape. Clients such as exchange-traded fund providers and other asset management firms work with our team of experts to create distinct, investor-focused products based on our indexes. Morningstar Indexes also serve as a precise benchmarking resource.

To learn more about Morningstar Indexes, visit: <http://global.morningstar.com/indexes>

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