

### The Morningstar Low Carbon Transition Leaders Index

### A benchmark for navigating the energy transition

#### Morningstar Inc.

April 2025

Margaret Stafford Associate Director, Indexes MargaretMaggie.Stafford@morningstar.com

https://indexes.morningstar.com/

#### **Executive Summary**

Morningstar's Low Carbon Transition Leaders Indexes represent a unique approach for investors looking for exposure to companies managing climate transition risks. Unlike traditional ESG and low carbon strategies that exclude or underweight high emitting sectors like Energy and Utilities, the Low Carbon Transition Leaders Indexes focus on companies within those sectors that have credible transition plans, emissions reduction strategies, and green revenues providing a more balanced sector distribution.

By incorporating forward-looking dimensions such as board accountability and investment alignment to emissions reduction targets, the Index enables a diversified, low-carbon strategy that mitigates trade-offs typically seen in other climate-focused investment approaches. In 2024, the US and Developed Markes Low Carbon Transition Leaders Indexes exhibited performance characteristics such as a lower tracking error, higher risk-adjusted returns, and more stable performance during both upward and downward market trends compared to its parent benchmark. This paper highlights how the Low Carbon Transition Leaders Index can offer a promising pathway for investors aiming to align portfolios with the global low-carbon transition while maintaining strong correlation with the broad market.

#### **Key Takeaways**

- ► The Morningstar US and Developed Markets Low Carbon Transition Leaders Indexes outperformed their parent benchmarks in 2024, driven largely by the technology and communications sectors.
- ► In 2024 the Morningstar US and DM Low Carbon Transition Leaders Indexes improved relative to their parent benchmarks across all three key measures that they target: Carbon Emissions Intensity, Green Revenue, and Low Carbon Transition Management Score.
- The indexes enable a more nuanced approach to transition investing enabled through differentiation between companies particularly, those in high-emitting sectors, through their use of Sustainalytics' forward-looking Low Carbon Transition Management Score criteria, and green revenues.

#### Setting the Scene: Transition Risk and Priorities for Long-Term Investors

The World Economic Forum estimates that the global cost of climate change damage is expected to be between USD 1.7 trillion and USD 3.1 trillion per year by 2050. Mitigating climate change is prompting an energy transition as the economy seeks to reduce greenhouse gas emissions by lowering dependence on fossil fuels, enhancing electrification, and pursuing energy efficiency. It is leading to fundamental economic transformation affecting all sectors. Climate change is a material, system-level risk not adequately captured by traditional financial analysis. This presents investors with both risks and opportunities, with implications for asset allocation and portfolio construction. Many investors—in particular, asset owners— with long time horizons and substantial assets face the greatest exposure. Therefore, many have adopted climate change investing as part of their long-term strategy.<sup>2</sup>

The last few years, however, have seen the rise of political backlash against sustainable investing and corporate initiatives writ large. There have been high-profile companies backtracking on commitments and banks leaving industry initiatives, in response to political pressures or to the realization that many of these commitments were set without sufficient understanding of what it would take to achieve them. Despite the challenges, there are signals of continued investor focus on this topic. Morningstar's 2024 annual survey of 500 global asset owners across 11 markets in North America, Europe, and Asia-Pacific reinforced this, finding that 67% believe that ESG has become more or much more material and that climate/net zero emissions (55%) is still the lead environmental factor.<sup>3</sup> In early 2025, a coalition of leading asset owners representing USD 1.5 trillion co-authored and endorsed the Asset Owner Statement on Climate Stewardship, a new resource for the sector designed to set clear and consistent expectations for asset managers on climate stewardship.<sup>4</sup>

Much of the discussion previously centered on how transition risks—policy, regulatory, market preferences, and technology changes leading to a lower carbon economy—will affect companies, particularly those in emissions-intensive sectors. Increasingly, the focus is also on the role of companies that provide climate solutions, meaning their products and services develop or deploy technologies in a transition to a low-carbon economy. Harvard Business School research recently found that companies providing climate solutions, whose business benefit when climate risks materialize, may be an effective hedge against these risks.<sup>5</sup>

In response to evolving investor needs in this area, Morningstar has developed several climate-focused indexes leveraging the growing bank of climate analytics and data from Morningstar Sustainalytics. These include EU Climate Benchmarks — Climate Transition (CTB) and Paris Aligned Benchmarks (PAB) — which specify minimum standards set by the European Commission. More recently, it includes the Morningstar Low Carbon Transition Leaders Index (LCTL). This index is designed to provide diversified, broad market exposure to companies leading their sector peers in their readiness for — and action

<sup>1</sup> World Economic Forum

<sup>2</sup> CFA Institute

<sup>3</sup> Morningstar Voice of the Asset Owner Survey 2024

<sup>4</sup> Responsible Investor

<sup>5</sup> Harvard Business School

toward—climate transition. Analysis of the developed markets and US variants of the LCTL illustrate the usefulness of the Sustainalytics Low Carbon Transition Management Score to enable comparison across different sectors, particularly those within high-emitting sectors. An examination of how the LCTL differs from its parent benchmark, and from EU Paris Aligned Benchmarks (PABs), illuminates some benefits and trade-offs. The rich data from Sustainalytics that underpins the index adds granularity to illustrate some of the unique attributes of this approach and where it can fit in an investor portfolio.

#### Climate Factors Included in the Low Carbon Transition Leaders Composite Score

The primary climate datasets used for our analysis include:

Dataset	Definition
Carbon Emissions Intensity	A company's total emissions (Co2e) including from its own operations, indirect emissions from energy use, and indirect emissions from its supply chain (scope 1, 2, and 3) divided by its enterprise value including cash.  Sustainalytics collects emissions information from companies where it is reported, typically annually. Sustainalytics estimates emissions data using a multifactor estimation model where it is not reported.
Low Carbon Transition Rating - Management Score	Low Carbon Transition Rating overall is a signal that provides investors with a science-based forward-looking assessment of public issuers' alignment to a net zero pathway by 2050. It takes a two-part approach to first assess exposure through projecting under/overshoot of the issuers' emissions based on the historical emissions trend of the issuer. Based on the above, analysts provide an assessment how much of the company's exposure is likely to be managed based on the quality of the issuer's targets, policies and programs, strategy, governance, and financial position. Indicator selection and weighting is determined based on a company's subindustry. The management assessment is a forward-looking signal that enables comparison of transition preparedness both within and across industries. The assessment is updated annually.
Green Revenue - Sustainable Activities Involvement	Sustainable Activities Involvement metrics identify companies that earn revenues from 64 economic activities that either result in the creation of a product or service that, through its use, offers significant environmental or social benefits and/or reduce the impact of business activity or consumption (for example, developing green buildings) or are conducted in a manner that has significantly less negative or significantly more positive impact (for example, electricity generation from wind or solar power). The assessments are updated annually based on public disclosure.

# The Low Carbon Transition Leaders approach is unique compared with other low carbon indexes available in the market—it achieves benchmark like exposure while incorporating climate risks and opportunities.

Oil and gas operations account for around 15% of total energy-related emissions globally, the equivalent of 5.1 billion tons of greenhouse gas emissions. Power generation is one of the largest sources of emissions globally. Global electricity demand is surging as economies develop and the world deploys electrification as a key strategy for carbon reduction in many sectors, including transportation and buildings. Morningstar's annual climate fund landscape report, Investing in Times of Climate Change, provides a useful framework to understand the wide and growing range of strategies that aim to meet varying investor objectives and preferences, from decarbonizing portfolios to investing in climate solutions.

7 Sustainalytics Low Carbon Transition Rating Industry Report – Utilities

<sup>6</sup> IEA 2023

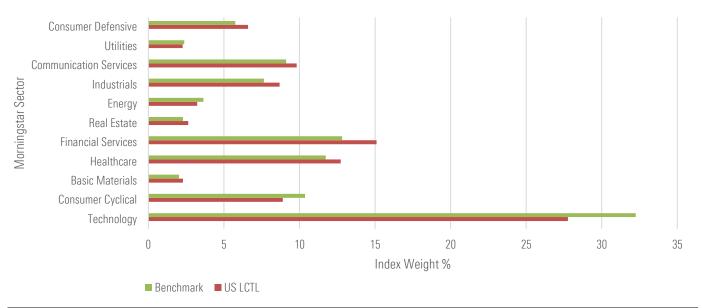
Traditionally, ESG and later "Low Carbon" approaches have excluded or significantly underweighted companies in high-emitting sectors such as oil and gas based on their greenhouse gas emissions intensity. These approaches typically require an investor to make trade-offs—for example, to take on a high tracking error or significant difference in returns from the benchmark index. Investors increasingly acknowledge the limits in their ability to reduce emissions in the real economy with portfolio decarbonization approaches.

The Low Carbon Transition Leaders Index methodology is a "Climate Transition" <sup>8</sup> approach that tilts toward companies that are better prepared to transition to a low-carbon economy. It is unique compared with EU Paris Aligned and Climate Transition Benchmark peers in that it allows an investor to achieve a more benchmark-like exposure while including companies in high-emitting sectors. It achieves this by selecting those that have credible transition plans, for example, with board and management accountability and investment alignment to emissions reduction.

"Low Carbon" indexes typically incorporate quantifiable carbon emissions reduction targets relative to reference benchmarks but are diversified enough that they can serve as a substitute for core equity exposure. As a result of the focus on emissions exclusively, though, these indexes tend to overweight inherently lower-emission sectors like technology and communications and underweight higher emissions sectors like energy and utilities. The Low Carbon Transition Leaders incorporates the more forward-looking dimensions of transition plan credibility assessment and green revenues, allowing it to achieve more even sector distribution.

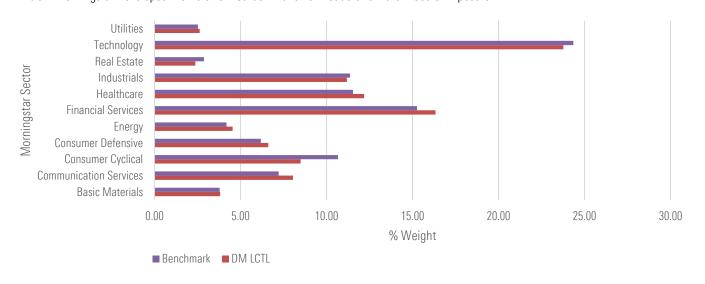
In the period from Feb. 1, 2024, to Jan. 1, 2025, energy and utilities sector companies made up a combined 5% of the Morningstar US Low Carbon Transition Leaders Index. In the Morningstar Developed Market LCTL, it was 7.17%, which was slightly overweight compared with the benchmark exposure of 6.72%.

**Exhibit 1** Morningstar US Low Carbon Transition Leaders vs. Parent Sector Exposure



Source: Morningstar Direct.

Exhibit 2 Morningstar Developed Markets Low Carbon Transition Leaders vs. Parent Sector Exposure



Source: Morningstar Direct.

Exhibit 3 Morningstar US Low Carbon Transition Lea	aders vs. Parent Exposure Kev Statistics
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	Tracking Error	Correlation	Beta	Std Dev	Sharpe	Max	Down Capture	<b>Up Capture</b>
					Ratio	Drawdown	Ratio	Ratio
Morningstar US LCTL GR USD	2.58	0.97	0.94	10.46	2.19	-3.40	67.46	103.19
Morningstar US TME TR USD	0.00	1.00	1.00	10.78	1.80	-4.08	100.00	100.00

Source: Morningstar Direct.

Exhibit 4 Morningstar Developed Markets Low Carbon Transition vs. Parent Key Statistics

Ç ,	Tracking Error	Correlation	Beta	Std Dev	Sharpe Ratio	Max Drawdown	Down Capture Ratio	Up Capture Ratio
Morningstar DM LCTL GR USD	2.61	0.97	0.87	9.20	1.82	-2.81	74.34	98.99
Morningstar DM All Cap TME GR USD	0.00	1.00	1.00	10.24	1.44	-3.81	100.00	100.00

Source: Morningstar Direct.

#### Morningstar Low Carbon Transition Leaders Index Methodology

The index methodology takes eligible companies from the parent index (the large-mid cap Morningstar US Target Market Exposure Index) grouped by sector and ranked according to their composite Low Carbon Transition Leaders Score, which is based on a combination of a company's current carbon intensity and its Management Score, as measured by Sustainalytics' Low Carbon Transition Rating. The index targets the best-scoring 50% of companies from each sector (by market cap). The index also provides exposure to companies that report carbon emissions and are reducing their carbon intensity, as well as those with business activities that contribute positively to the environment, by tilting toward them.

#### Morningstar Low Carbon Transition Leaders Index Methodology Summary

Starting universe

#### Eligibility

Portfolio construction

- Morningstar Global Target Market Exposure Index
- Large/mid indexes representing the top 85% of the investable market
- · Companies must not:
- Have any revenue involvement in controversial weapons, small arms, or tobacco production
- Be noncompliant with the principles of UN Global Compact
- Have a Sustainalytics Controversy Score of 5
- Derive 1% or more of revenue from thermal coal extraction
- A composite Climate Change Leaders score is determined for each company based on a combination of its current carbon intensity and its Management Score, as measured by Sustainalytics' Low Carbon Transition Rating
- Companies are grouped by sector and ranked by composite score. The bestscoring 50% of each sector (by market cap) is targeted for inclusion
- Green revenue, emissions reporting, and decarbonizing tilt factors are applied
- · UCITS capping is applied

Morningstar Low Carbon Transition Leaders Indexes

Source: Construction Rules for the Morningstar Low Carbon Transition Leaders Indexes.

#### Considerations and Trade-Offs

A market-capitalization-weighted index with no climate transition considerations is potentially overlooking risks and opportunities that are increasingly material to companies such as in the form of higher costs of operation due to carbon pricing, lower demand for goods and services due to consumer preference shifts, and technology innovations. One way to address such risks is to simply exclude high-emitting companies such as those in the energy and utilities sectors from a portfolio altogether.

However, this often requires even more considerable trade-offs for an investor in terms of tracking error. Another option for an investor is to invest in a pure-play renewable energy index. While this might make sense for some investors, it comes with distinct considerations for diversification and volatility. The Morningstar Low Carbon Transition Leaders offers a middle ground that incorporates climate considerations, acknowledging the immense effort it will take for certain sectors to decarbonize in the real economy, which ultimately requires capital to achieve. This makes it a potentially more feasible option for a core holding as opposed to satellite.

An index methodology based on best-in-class climate criteria and market capitalization will have more concentration on individual companies as we saw with Nvidia and Tesla. Therefore, it has more idiosyncratic risk, or risk specific to a company or asset, such as poor management decisions, product failures, or other factors that affect only that particular entity. This might be viewed as a positive for an investor looking for systematic climate exposure, which is provided through the selection using the composite score. Sometimes relative performance will be affected positively by companies not in the index. But sometimes it will miss out on some high-performing companies such as Apple, Amazon.com, Meta Platforms, and Berkshire Hathaway, for example, which were not included in the index during this period. Another limitation, as stated previously, is that the inputs used to create the composite score are

sourced from publicly available disclosures, which in large part are updated annually. This is important to ensure the data is sufficient in quality and stability for investment decision-making. However, there will be a lag to incorporating information about changes in targets, leadership, and strategic direction.

### What are some examples of companies in emissions-intensive sectors that are still included in the index? To what do we attribute their relatively higher scores?

Kinder Morgan (KMI) is an oil & gas storage and transportation company in the energy sector. It has a Carbon Emissions Intensity — 194.28 metric tons CO2e per million in USD, or fifth out of 22 companies in the energy sector. Its Low Carbon Transition Management overall management score is 50.2, or Average. It is worth noting how its management score ranks within its subindustry peer group. For Kinder Morgan, it is 11/56, which shows that, even though it's Average, it's still stronger than most of its peers.

Scope 1 emissions are the absolute largest source of baseline emissions for Kinder Morgan and are the area where the company's baseline emissions differ from its budget by the largest amount. Despite it having only average management, we see some important signals of commitment and accountability. For example, the company's investment plans signal strong management of scope 1 emissions. So, for example, a company in oil & gas transportation might have investments in renewable fuel handling, or carbon capture and storage, for example. The company also has a GHG Performance incentive program that is considered Strong as it links board and CEO renumeration to emissions reduction and broader climate targets. It has a Very Strong GHG risk management program, meaning that management embeds and integrates transition risk into wider business processes and procedures, and prioritizes adaptation and mitigation plans and measures associated with transition risks, with integration into business and financial planning including capital expenditure spent and/or research and development, for example. Public Service Enterprise Group (PEG) is another example of a company in an emissions-intensive sector, utilities. It is a multi-utility holding company for a regulated utility (PSE&G) and other nonregulated businesses such as nuclear power generation and clean energy projects. The company's Carbon Emissions Intensity is 750.87 metric tons Co2e per million in USD, or 13 out of 30 companies in the utilities sector. It has a Low Carbon Transition Management of 59.7, which is considered Strong. The component of its value chain with the highest misalignment is scope 1 emissions. This is also the area where it has the strongest management, which can be attributed to a few key areas. These include that the company's investment plans signal strong management of scope 1 emissions. We assess this by using forward-looking technology share data to estimate the impact of current capex on future alignment. For a company in the utilities industry, these could be projects such as renewable energy, energy efficiency and advanced metering infrastructure, and climate change adaptation. It also has a Strong GHG Performance Incentive Plan, where we can see that board and CEO renumeration are linked to emissions reduction or broader climate targets, and a strong GHG Reduction Program. It also has a small amount of Sustainable Activity Revenue exposure, 2.04%, from Solar PV renewable energy generation and Renewable Energy Distribution.

To further drill into some of the sector exposure data, one input to the index methodology that allows for differentiation between companies in high-emitting sectors is whether they derive revenue from green activities. Companies in the energy sector of Developed Markets LCTL had an average of 0.5% green revenue exposure to green solutions, while the average green revenue exposure of energy sector companies in the parent index average was 0.3%. For utilities looking at the US LCTL index, the average green revenue exposure was 16%, while the parent benchmark average was 8%. It is striking that, for most of these companies, these activities still represent very small portions of their overall revenue. In some cases, this is spread across many different activities to test and learn what has the best synergy and likelihood of yielding commercial viability.

Exhibit 5 Morningstar DM LCTL Energy Sector Top 5 Constituents With Highest Green Revenue %

Constituent Name	Country	Sector	Market-Cap Range	Green Revenue %	Green Revenue Activity Names
Texas Pacific Land Corp Shs	US	Energy	MID	6.0	Construction Water Supply Services
BP PLC Common Stock	GB	Energy	LRG	6.0	Low Carbon Infrastructure Green Transportation, Wind Renewable Energy Generation, Solar PV Renewable Energy Generation
Galp Energia SGPS	PT	Energy	MID	1.0	Solar PV Renewable Energy Generation, Professional Services Green Buildings, Electric Charging Stations Green Transportation, Biogas, Biofuels and Bioliquids Renewable Energy Support, Wind Renewable Energy Generation
Tenaris SA	IT	Energy	LRG	1.0	Technologies Water
TotalEnergies SE Common Share	FR	Energy	LRG	0.8	Biogas, Biofuels and Bioliquids Renewable Energy Support, Professional Services Green Buildings, Solar PV Renewable Energy Generation, Low Carbon Infrastructure Green Transportation, Wind Renewable Energy Generation, Technologies Maintenance Renewable Energy, Electric Charging Stations Green Transportation, Waste Heat/Cool Renewable Energy Generation, Batteries Green Transportation, Hydropower Renewable Energy Generation, Electricity Transmission and Distribution Renewable Energy Distribution, Technologies Green Buildings

Source: Sustainalytics Global Access.

Exhibit 6 Morningstar US LCTL Utilities Sector Top 5 Constituents With Highest Green Revenue %

Constituent Name	Country	Sector	Market Cap Range	Green Revenue %	Green Revenue Activity Names
American Water Works	US	Utilities	MID	91	Construction Water Supply Services, Construction Wastewater Services
Xcel Energy Inc.	US	Utilities	MID	29	Wind Renewable Energy Generation, Solar PV Renewable Energy Generation, Hydropower Renewable Energy Generation, Electricity Transmission and Distribution Renewable Energy Distribution, Bioenergy Renewable Energy Generation, Professional Services Green Buildings
NextEra Energy Inc Common Stock	US	Utilities	LRG	22	Electricity Transmission and Distribution Renewable Energy Distribution, Solar PV Renewable Energy Generation
Alliant Energy Corporation	US	Utilities	MID	17	Wind Renewable Energy Generation, Solar PV Renewable Energy Generation, Hydropower Renewable Energy Generation, Electricity Transmission and Distribution Renewable Energy Distribution, Bioenergy Renewable Energy Generation, Professional Services Green Buildings
American Electric Power Inc. Common Stock	US	Utilities	LRG	4	Wind Renewable Energy Generation, Hydropower Renewable Energy Generation, Solar PV Renewable Energy Generation, Electricity Transmission and Distribution Renewable Energy Distribution

Source: Sustainalytics Global Access.

### The Morningstar US Low Carbon Transition Leaders Index outperformed the broad market while improving on key climate characteristics.

During the period from Feb. 1, 2024, to Jan. 31, 2025, overall performance of the Morningstar US LCTL Index exceeded the benchmark by 4.51%. The Morningstar DM LCTL also exceeded but by a smaller amount, 2.55%. In both cases, this was largely driven by two sectors: technology and consumer cyclical. In the US version, technology led to a 5.86% higher return relative to the benchmark and consumer cyclical led to a 0.91% higher return relative to the benchmark. In the DM version, technology led to 3.20% higher return, with consumer cyclical leading to a 0.70% return.

Within these sectors, two specific stocks drove most of the outperformance. The first was Nvidia (NVDA), which in both the US and DM versions was overweighted by 5%. The second was Tesla (TSLA), which was overweighted by just over 2% in both versions. These two companies contributed to a lot of headlines over the last year, but 2025 is shaping to be very different.

From a climate perspective, the two companies that drove 2024 performance, Nyidia and Tesla, are not the most obvious leaders when it comes to social, governance, or environmental impact considerations more generally. However, evaluating them on the fundamental components of our climate transition preparedness assessment exclusively provides some interesting insights perhaps not as easily gleaned from reading the latest headline, or even an annual report or sustainability report. According to Morningstar Sustainalytics data, both companies score higher than peers across the three key measures. Their Carbon Emissions Intensities across all scopes (scopes 1, 2, and 3 upstream and downstream) are in the first quartile within their US TME peer group, their Low Carbon Transition Management scores are considered Strong and Very Strong, respectively. Nvidia, for its part, reports its GHG emissions fully including scope 3 upstream. It has also set GHG reduction targets that are time-bound and reports progress against key milestones. Lastly, the company has a what is a Strong GHG Reduction Program as it engages with its Tier 1 suppliers. For Tesla, its Strong Management Score is due mostly to its GHG Scope 3D Positive Management Adjustment, which is an adjustment made by our analysts to account for Tesla's business model as differentiated from its automotive subindustry peers. Both Nvidia and Tesla have Green Revenue exposure. For Tesla, this is largely attributable its primary business activity of manufacturing electric vehicles. For Nvidia, it generates revenues, albeit a small portion from activities in Energy Efficient Materials and a Energy Efficient Industrials.

Looking at the drivers of performance, sector neutrality keeps the allocation effect low. So, the main differences we observe come from Selection effects — which is generally what one should expect from an index using sustainability criteria to make selection. The performance impact was largely driven by company selection.

Exhibit 7 Morningstar US LCTL GR USD vs. Morningstar US TME TR USD Attribution

	Attribution Effect				
	Allocation %	Selection %	Active Ret%		
Technology	0.10	5.75	5.86		
Consumer Cyclical	-0.25	1.16	0.91		
Basic Materials	-0.08	0.10	0.02		
Healthcare	-0.19	-0.07	-0.26		
Financial Services	0.27	-0.07	0.20		
Real Estate	-0.04	-0.16	-0.20		
Energy	0.11	-0.17	-0.06		
Industrials	0.00	-0.18	-0.18		
Communication Services	-0.06	-0.19	-0.25		
Utilities	0.00	-0.33	-0.32		
Consumer Defensive	-0.07	-1.12	-1.19		
Total	-0.21	4.72	4.51		

Source: Morningstar Direct.

Exhibit 8 Morningstar DM LCTL GR USD vs. Morningstar DM TME TR USD Attribution

	Morningstar Sector		
Morningstar Sector	Allocation %	Selection %	Active Ret %
Technology	-0.04	3.24	3.20
Consumer Cyclical	-0.14	0.84	0.70
Basic Materials	-0.03	0.20	0.17
Real Estate	0.08	0.05	0.13
Communication Services	0.07	0.02	0.09
Industrials	0.01	0.04	0.05
Unclassified	0.00	0.00	0.00
Healthcare	-0.07	-0.03	-0.10
Utilities	0.00	-0.14	-0.14
Financial Services	0.10	-0.38	-0.28
Energy	-0.05	-0.23	-0.28
Consumer Defensive	-0.03	-0.97	-1.01
Total	-0.09	2.65	2.55

Source: Morningstar Direct.

## How does the Morningstar Low Carbon Transition Leaders Index compare with the benchmark in aggregate on key climate transition dimensions?

Based on the data from the December 2024 index reconstitution, we found the Morningstar DM and US Low Carbon Transition Leaders indexes had improved across all three measures. Green revenue exposure of the US LCTL index was 42% higher than the benchmark. For the DM variant, the values were slightly smaller, but the percentage difference was more significant, 67% versus 42% for the US. The US LCTL index achieved a portfolio Low Carbon Transition Management Score of 59.10 compared with the US TME score of 55.79, which is about 6% higher. For comparison, the average of Low Carbon Transition Rating Management score for the 642 unique funds in the US equity large-cap blend Morningstar Category was similar, at 55.26. The Carbon Intensity of the US LCTL index is also 20% lower than the parent benchmark. While overall Carbon Intensity was higher for the DM variant, the difference between the index and the parent was more significant at 28% versus 20% for the US.

Exhibit 9 Morningstar US Low Carbon Transition Leaders vs. Parent Aggregate Portfolio Climate Statistics

	Morningstar US Low					
	Morningstar US Target	Carbon Transition				
Portfolio Aggregate Metric	Market Exposure Index	Leaders Index	Difference %			
Green Revenue (%)	7.6	10.9	42%			
Low Carbon Transition Management Score (0-100)	55.8	59.1	6%			
Carbon Intensity (Carbon emissions /USD EVIC)	229.7	184.2	-20%			

Source: Morningstar Direct.

**Exhibit 10** Developed Markets Low Carbon Transition vs. Parent Leaders Aggregate Portfolio Climate Statistics

Portfolio Aggregate Metric	Morningstar DM Target Market Exposure	Morningstar DM Low Carbon Transition Leaders	Difference %
Green Revenue	5.7	9.5	67%
Low Carbon Transition Management Score (0-100)	56.3	60.2	7%
Carbon Intensity (Carbon emissions /USD EVIC)	364.5	262.8	-28%

Source: Morningstar Direct.

For long-term investors, we anticipate that the focus on climate risk and building resilient portfolios will persist. There are differing views on how to account for climate risks, both transition and increasingly adaptation, given that investors have different time horizons, objectives and constraints. Prevailing climate-investing strategies, such as PABs, focus on reducing exposure to carbon-intensive assets in a portfolio, treating carbon intensity as a risk factor ("portfolio decarbonization"). Asset owners increasingly seek to more effectively leverage their assets to hasten decarbonization of the real economy through engagement, investment in climate solutions, and mobilization of climate transition finance where the need is most acute. This paper provides an example of one approach, Low Carbon Transition Leaders Index, which provides broader market exposure including to high-emitting industries but prioritizes those with more credible transition plans and green revenue. A comparison of the broad market and the Low Carbon Transition Leaders including a deeper look into what key dimensions drive climate transition leadership both within and across different industries can provide informative insights into the steps that companies are taking to address their most material climate risks IMI

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Contact:

indexes@morningstar.com

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