

Global Sustainable Fund Flows: Q4 2024 in Review

Despite headwinds, inflows increase, driven by Europe.

Morningstar Sustainalytics

27 January 2025

Contents

- 1 Key Takeaways
- 1 The Global Sustainable Fund Universe
- 8 Europe
- 23 United States
- 34 Canada
- 36 Australia and New Zealand
- 40 Japan
- 43 Asia ex-Japan
- 49 Appendix—Defining the Global Sustainable Fund Universe

Hortense Bioy, CFA

Head of Sustainable Investing Research Morningstar Sustainalytics

Boya Wang, Ph.D.

Senior Analyst, Sustainable Investing Research, Morningstar Sustainalytics

Noemi Pucci

Associate Analyst, Sustainable Investing Research, Morningstar Sustainalytics

Arthur Carabia

Director of Policy Research, Morningstar

Shamir Popat

Senior Analyst, Morningstar Manager Research

Hunter Beaudoin

Analyst, Morningstar Manager Research

Risa Mizuta

Analyst, Morningstar Manager Research

Biddappa A R

Senior Quantitative Analyst, Morningstar

Key Takeaways

- ► Global sustainable open-end and exchange-traded funds ended 2024 with the highest quarterly inflows of the year, with subscriptions amounting to USD 16 billion in the fourth quarter, a notable uptick from the restated inflows of USD 9.2 billion in the third quarter. However, over the full year, inflows into global sustainable funds shrank by half, while the rest of the market enjoyed a boom.
- ► Europe drove the higher inflows in the fourth quarter, garnering USD 18.5 billion, more than doubling the restated USD 8.9 billion in the previous quarter.
- ▶ In the US, redemptions in the last quarter slid further to USD 4.3 billion compared with the USD 2.0 billion outflow registered in the third quarter. Outflows in Japan deepened, too, while sustainable funds in the rest of Asia continued to attract new money.
- ► Global sustainable fund assets retreated mildly by 4% over the last quarter to almost USD 3.2 trillion, dragged mostly by market price depreciation.
- Product development rebounded, with 86 new sustainable funds in the fourth quarter, compared with the 60 funds launched during the previous quarter.
- ▶ Meanwhile, fund closing and rebranding activity gained momentum. In Europe, 94 sustainable funds closed in the fourth quarter, bringing the total to 351 over the full year. Meanwhile, 213 products changed names in 2024, 50 of which dropped key ESG terms. In the US, a total of 19 sustainable funds were closed in the last quarter, outpacing new launches for the sixth consecutive quarter.
- ▶ In the UK, 61 funds have adopted a sustainability label so far, representing USD 35 billion of assets.
- ► We expect changes to the universe of sustainable funds to intensify in the coming months ahead of the May deadline for the application of the EU's antigreenwashing rules related to fund names.

The Global Sustainable Fund Universe

The global sustainable fund universe encompasses open-end funds and exchange-traded funds that, through their prospectus or other regulatory filings, claim to focus on sustainability, impact, or environmental, social, and governance factors. (See the Appendix for more details on how we define the global sustainable fund universe.) The global universe is divided into three segments by domicile: Europe, the United States, and Rest of World. There is more-granular data available in this report for Canada, Australia and New Zealand, and Japan. Meanwhile, China, Hong Kong, India, Indonesia, Malaysia, Singapore, Taiwan, Thailand, and South Korea are grouped under Asia ex-Japan because of their relatively low levels of assets.

¹ Note: Our definition of "sustainable fund" is not based on any regulatory framework, nor does it meet the criteria of any particular regulatory framework. The term "sustainable" in Morningstar products is currently under review to align with market expectations. See Appendix for further details.

This report examines recent activity in the global sustainable fund universe and details regional flows, assets, and launches for the fourth quarter of 2024. A summary is provided in Exhibit 1.

Exhibit 1 Global Sustainable Fund Statistics

	Flows Q4 2024	Flows Q3 2024	Assets	3	Fu	nds
Region	USD Billion	USD Billion	USD Billion	% Total	#	% Total
Europe	18.5	8.9	2,679	84	5,502	73
United States	-4.3	-2.0	344	11	612	8
Asia ex-Japan	2.7	2.4	74	2	632	8
Canada	-0.1	-0.1	36	1	267	4
Australia/New Zealand	0.4	0.6	31	1	261	3
Japan	-1.1	-0.6	22	1	236	3
Total	16.0	9.2	3,186		7,510	

Source: Morningstar Direct. Data as of December 2024, excluding money market funds, funds of funds, and feeder funds. For Canada and the US, the number of funds includes funds of funds and feeder funds (these are, however, excluded from flow and asset calculations). For Japan and South Korea, the number of funds, flows, and assets includes funds of funds and feeder funds.

Global sustainable funds ended 2024 with the highest quarterly inflows of the year, with subscriptions amounting to USD 16 billion in the fourth quarter, driven by Europe, which more than doubled its inflows to USD 18.5 billion from the revised USD 8.9 billion in the third quarter. Europe continued its dominance in the global sustainable fund universe with a market share of 84%, reflecting its pivotal role in the global sustainable fund landscape.

In contrast, the United States saw outflows deepen to USD 4.3 billion from the previous quarter's USD 2.0 billion. Inflows in Asia ex-Japan showed modest growth to USD 2.7 billion, though the region's contribution to global assets remained small at 2%. Meanwhile, outflows from Japan rose to over USD 1 billion, from the restated USD 600 million in redemptions in the previous quarter.

Calculated as net flows relative to total assets at the start of a period, the organic growth rate of the global sustainable fund universe inched higher to 0.51 % in the last quarter of 2024, from the restated 0.31% three months earlier. However, this remains much lower than the 0.78% organic growth experienced by the broader fund universe, which posted aggregate inflows of USD 407 billion.

Billions Europe US Rest of World -10

Exhibit 2 Quarterly Global Sustainable Fund Flows (USD Billion)

The annual flow exhibit below shows the great volatility of fund flows across different regions over time. Inflows into global sustainable funds reached their zenith of USD 645 billion in 2021, when the broader market also enjoyed record inflows of over USD 2.4 trillion. In 2022, global sustainable fund flows plunged by 75% but remained positive, while the broader market registered outflows, against a challenging macro backdrop that included the war in Ukraine, high inflation, and recession fears. Sustainable fund flows remained resilient for most of 2023 (except in the US), while the broader fund market slowly recovered. In 2024, inflows into global sustainable funds shrank by half, while the rest of the market enjoyed a boom, recording the second-largest subscriptions in seven years, boosted by a US stock rally.

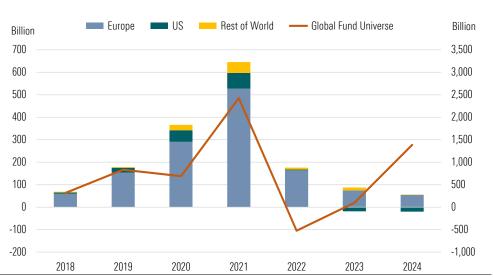


Exhibit 3a Annual Global Sustainable Fund Flows by Region (USD Billion)

Source: Morningstar Direct. Data as of December 2024.

From the exhibit below, we can see that active strategies suffered the most from the lower appetite for sustainable funds in the recent past. Passive sustainable funds have attracted a continuous—albeit declining—flow of new money. This trend mirrors the active to passive shift observed in the broader market as investors turn to lower-cost investment strategies.

USD Billion USD Billion Passive Global Fund Universe Active 500 2,500 400 2,000 300 1,500 200 1,000 500 100 N -100 -500 -200 -1,000 2018 2019 2020 2021 2022 2023 2024

Exhibit 3b Annual Global Sustainable Fund Flows by Management Style (Active/Passive, USD Billion)

Source: Morningstar Direct. Data as of December 2024.

A combination of factors has affected investor appetite for sustainable funds in recent years, including the underperformance of ESG strategies, on average, greenwashing concerns, regulatory changes, and a growing anti-ESG sentiment in the US.

Last year was a particularly turbulent one for sustainable funds. On the performance front, high interest rates continued to penalize some areas of the market, such as clean energy stocks and other green stocks. In a critical election year in the US, the anti-ESG backlash intensified, and political scrutiny reached new heights. Some individual states took legal action to limit the incorporation of ESG criteria in investment decisions.

The lower inflows experienced by sustainable funds in recent years contrast with several surveys showing continuous investor interest in sustainable investing. According to a widely watched survey by Morgan Stanley published a year ago, 54% of individual investors planned to increase their sustainable investments in 2024, and 77% were interested in sustainable investing. According to the Voice of the Asset Owner survey conducted by Morningstar Sustainalytics in the first half of last year, investors are increasingly considering ESG factors in their investment decisions. Sixty-one percent of asset owners in North America said that ESG has become more material in the past five years. For a majority of them, ESG considerations go hand in hand with fulfilling their fiduciary duty.

In a more recent survey published in December 2024, almost eight in 10 asset managers (78%) and asset owners (80%) expect sustainable assets under management and allocations to rise in the next two years, though the lack of data and greenwashing will continue to be challenges.

Global Assets Slide Slightly to USD 3.2 Trillion in a Declining Market

After reaching a new high of USD 3.3 trillion at the end of the third quarter, global sustainable fund assets retreated by 4% to USD 3.2 trillion at the end of 2024. For context, the Morningstar Global Market Index lost 1.3% over the fourth quarter. It was a period of shifting narratives, with the US election, a surging dollar, stubborn inflation, and a more cautious interest-rate-cutting stance. Bonds had a tougher quarter. The Morningstar Core Bond Index fell by 5.1% in the fourth quarter amid signs that the US Federal Reserve could be done with rate cuts for a while.

Europe takes up 84% of global sustainable fund assets, followed by the United States at 11%.



Exhibit 3c Quarterly Global Sustainable Fund Assets (USD Billion)

Source: Morningstar Direct. Data as of December 2024.

The exhibit below shows annual asset data since 2018. Despite the reduced fund flows, assets in the global sustainable fund universe reached a fresh high of USD 3.2 trillion at the end of 2024, representing an 8% increase compared with a year earlier and an over fourfold growth since late 2018. The market share of US sustainable funds reduced to 11% at the end of 2024 from 15% over the past seven years, while the share of the rest-of-world market rose to 2.3% from the trivial 0.7% in 2018.

Billion Europe US Rest of World 3,500 3,000 2,500 2,000 1,500 1,000 500 0 2018 2019 2020 2021 2022 2023 2024

Exhibit 3d Annual Global Sustainable Fund Assets (USD Billion)

Global Fund Launches

Product development improved in the last quarter of 2024, with 86 new sustainable funds introduced worldwide, compared with the revised 60 in the previous quarter. These numbers, however, will likely be revised upward in the next report as additional launches are identified.

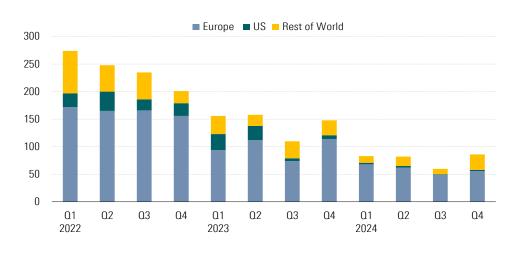


Exhibit 4 Global Sustainable Fund Launches Per Quarter

Source: Morningstar Direct. Data as of December 2024.

Throughout 2024, there were 311 new sustainable fund launches, representing a cooldown compared with the 572 launches of 2023. This points to a normalization of sustainable product development activity after three years of high growth driven mainly by Europe as almost every asset-management firm hastened to build core sustainable fund ranges to meet the growing demand. Asset managers have

become more selective and tactical in their approach to product launches. Additionally, regulations, a growing anti-ESG sentiment, and persistent greenwashing accusations have made asset managers more cautious about launching sustainable products.

BlackRock Tops the League Assets Table

Below we list the top asset managers that market sustainable funds globally. BlackRock, the world's largest manager, dominates the sustainable investing space with about USD 423 billion of assets in ESG-focused and sustainable open-end funds and ETFs. UBS is in a distant second with a total AUM of USD 180 billion, closely followed by Amundi's USD 178 billion.

Exhibit 5 Top Asset Managers by Global Sustainable Fund Assets

Overali	1		Actively Managed	<u> </u>		Passively Managed		
Firm	(USD	Flows 2024 (USD Million)	Firm	Net Assets (USD Billion)	Flows 2024 (USD Million)	Firm	Net Assets (USD Billion)	Flows 2024 (USD Million)
BlackRock (incl. iShares)	422.7		BlackRock (incl. iShares)	107.1	6,603	BlackRock (incl. iShares)	315.6	
UBS (incl. Credit Suisse)	180.1	-553	Amundi (incl. Lyxor)	76.5	-6,977	UBS (incl. Credit Suisse)	107.6	1,063
Amundi (incl. Lyxor)	178.4	-2,801	Natixis	76.2	4,463	Amundi (incl. Lyxor)	101.8	4,176
DWS (incl. Xtrackers)	103.5	1,786	UBS (incl. Credit Suisse)	72.5	-1,615	Vanguard	56.5	3,874
Swisscanto	98.7	11,320	Nordea	67.9	8,215	Northern Trust	54.1	3,585
Natixis	78.8	4,279	DWS (incl. Xtrackers)	54.8	-4,321	DWS (incl. Xtrackers)	48.6	6,107
BNP Paribas	73.6	-3,518	Swisscanto	54.6	1,706	Swisscanto	44.0	9,613
Nordea	67.9	8,215	KBC	53.7	3,038	Handelsbanken	37.0	5,440
Vanguard	59.9	4,261	Royal London	53.2	-557	BNP Paribas	31.6	-6
Northern Trust	58.8	4,440	Allianz Global Investors	48.9	1,728	State Street	28.5	2,184
KBC	53.8	3,026	Pictet	43.2	-7,430	Länsförsäkringar	22.6	3,070
Royal London	53.2	-593	BNP Paribas	42.0	-3,513	Legal & General	20.9	-1,827
Allianz Global Investors	48.9	1,728	Parnassus	37.9	-7,315	Invesco	18.9	1,307
Pictet	44.7	-7,369	JPMorgan	36.7	12,994	Cathay Securities Investment Trust	11.9	3,053
Handelsbanken	41.2	4,808	Union Investment	34.0	-198	Morgan Stanley	11.0	-455
JPMorgan	40.0	13,425	Goldman Sachs (incl. NNIP)	31.3	-1,496	HSBC	9.7	283
Morgan Stanley	38.3	-2,600	Robeco	28.2	-1,211	Storebrand Fonder	8.4	-880
Parnassus	37.9	-7,315	AXA IM	28.0	-3,137	Capital Investment Trust	8.2	6,770
Union Investment	34.0	-198	Morgan Stanley	27.3	-2,145	Mercer Global Investments	8.1	19
State Street	33.8	2,237	Vontobel	26.7	-518	Scottish Widows	7.6	1,145

Source: Morningstar Direct. Data as of December 2024.

Quarterly Statistics Per Domicile

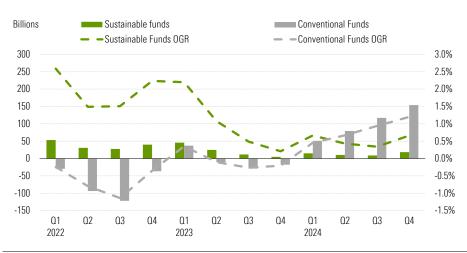
Europe

European Sustainable Fund Flows Double in the Fourth Quarter

In the last quarter of 2024, European-domiciled sustainable funds attracted USD 18.5 billion of net new subscriptions, more than doubling the restated inflows of USD 8.9 billion in the previous quarter. The full year saw European sustainable funds garner USD 52.4 billion, which was lower than the USD 77.7 billion in total subscriptions recorded in 2023.

The flow recovery in the fourth quarter translated into an organic growth rate² of 0.65%, higher than the 0.34% of the previous quarter. This still compares unfavorably with the conventional fund universe's organic growth rate of 1.20% in the last three months. European conventional funds amassed USD 154 billion in new money.

Exhibit 6a European Sustainable Fund Flows Compared With Conventional Fund Flows (USD Billion)



Source: Morningstar Direct. Data as of December 2024.

Active sustainable funds registered inflows for the first time in five quarters, amounting to USD 508 million, a notable uptick from the restated USD 1.5 billion in redemptions seen the previous quarter. Meanwhile, investors' preference for cost-efficient, index-tracking strategies continued as passive sustainable fund flows almost doubled to USD 17.5 billion from an all-time low of USD 9.5 billion in the previous quarter.

² The organic growth rate is calculated as net flows relative to total assets at the start of a period.

■ Active ■ Passive Billions -10 -20 -30

Exhibit 6b European Sustainable Fund Flows (USD Billion)

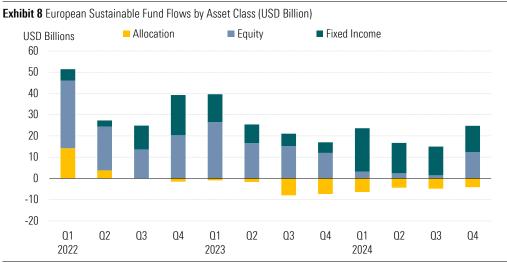
Exhibit 7 European Sustainable Fund Flows Compared With Conventional Fund Flows by Asset Class

USD Billion	Sustainab	le Funds	Conventio	nal Funds	Overall Fur	nd Universe
	03 2024	Q4 2024	03 2024	Q4 2024	03 2024	Q4 2024
Allocation	-4.8	-4.1	-0.4	8.1	-5.2	4.0
Alternative	0.1	-0.6	1.1	7.0	1.2	6.4
Commodities	0.0	-0.1	-0.4	-1.8	-0.4	-1.9
Convertibles	-0.3	-0.3	-0.9	-0.4	-1.2	-0.7
Equity	1.5	12.3	43.9	77.0	45.4	89.3
Fixed Income	13.5	12.5	73.5	66.6	87.0	79.0
Miscellaneous	-0.2	-0.4	2.8	0.4	2.6	0.0
Property	-0.9	-0.8	-2.3	-2.7	-3.2	-3.5
Total	8.9	18.5	117.2	154.1	126.2	172.5

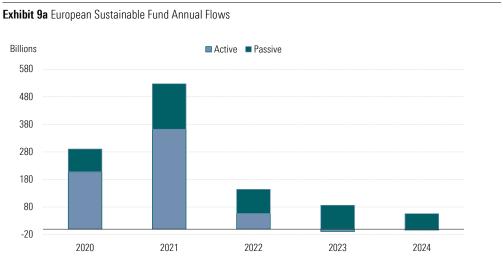
Source: Morningstar Direct. Data as of December 2024.

Sustainable equity funds looked to be back in vogue after posting a remarkable recovery in the last quarter of 2024. Inflows into the equity sleeve rose sevenfold to more than USD 12 billion from the restated USD 1.5 billion in the third quarter. Meanwhile, sustainable fixed-income funds saw a minor decrease in inflows but still ended the year with USD 12.5 billion of net new subscriptions. Finally, outflows from allocation funds continued with USD 4.1 billion in the fourth quarter.

Changes in sustainable fund flows in the last quarter mirror those seen in the broader market. The fourth quarter was a period of shifting narratives, including the US election, a surging dollar, stubborn inflation, and a more cautious interest-rate-cutting stance.



Over the whole of 2024, European sustainable funds registered lower inflows compared with 2023, with subscriptions of USD 53 billion last year, down from USD 78 billion in 2023 and a record high of USD 527 billion in 2021. Outflows from active funds eased to USD 3 billion in 2024 from USD 9 billion one year earlier. Meanwhile, flows into passive strategies also slid last year to USD 56 billion from USD 86 billion in 2023.



Source: Morningstar Direct. Data as of December 2024.

Several factors can explain the lower inflows last year. Mixed performance, greenwashing concerns, political and regulatory uncertainty, and a growing anti-ESG sentiment coming from the US.

Leaders and Laggards

The table of bestselling sustainable funds in the fourth quarter featured two **BlackRock ESG Insights Equity** funds that employ a best-in-class approach, targeting companies with lower carbon intensity and

higher percentages of "green" revenue relative to the parent indexes. Over the full year, these two funds collected a whopping USD 17 billion combined.

Exhibit 9b Top 10 European Sustainable Fund Flows in Q4 2024

Fund Name	Net Flows (USD, Million)
Blackrock US ESG Insights Equity Fund	4,926
Nordea Global Developed Responsible Enhanced Equity Fund	4,332
Blackrock North America ESG Insights Equity	3,577
Nordea Hållbarhetsfond Aktier Global	1,951
Goldman Sachs Enhanced Index Sustainable Global Equity Fund I NL	1,947
Handelsbanken Global Index Criteria	1,856
Xtrackers S&P 500 Equal Weight ESG ETF	1,727
JPMorgan US Research Enhanced Index Equity (ESG) ETF	1,727
DNCA Invest Alpha Bonds	1,639
Amundi S&P 500 Equal Weight ESG Leaders ETF	1,571

Source: Morningstar Direct. Data as of December 2024.

Abrdn Sustainable Index World Equity topped the outflow league table with quarterly redemptions totaling USD 2.8 billion. The passive strategy seeks to achieve a higher (at least 50%) weighted average of revenue percentage derived from clean technologies compared with that of the parent index while maintaining lower carbon intensity. We found another two BlackRock passive strategies, BlackRock Europe ex-UK ESG Insights Equity and BlackRock Low Carbon Screened and Optimised Equity Tracker, which together saw almost USD 2.3 billion in redemptions over the past three months. The former uses a positive ESG tilt, maintaining a portfolio with a higher weighted average exposure to companies with superior ESG scores relative to their industry peers.

Exhibit 9c Bottom 10 European Sustainable Fund Flows in Q4 2024

Fund Name	Net Flows (USD, Million)
abrdn Sustainable Index World Equity Fund	-2,758
BlackRock Europe ex UK ESG Insights Equity Fund	-1,351
Ailis MSCI USA ESG Screened Index	-1,321
Schroder International Selection Fund Global Sustainable Growth	-1,246
Northern Trust Emerging Markets Custom ESG Equity Index Fund	-1, 193
Goldman Sachs Enhanced Index Sustainable Emerging Markets Equity F	-1,063
Blackrock Low Carbon Screened and Optimised Equity Tracker Fund	-914
Ninety One Global Environment Fund	-846
Amundi MSCI USA SRI Climate Net Zero Ambition PAB ETF	-792
1895 Aandelen Thematic Opportunities Fonds	-758

Source: Morningstar Direct. Data as of December 2024.

In the fourth quarter of 2024, the top 10 bestselling asset managers collectively netted USD 36.8 billion in aggregate inflows, more than doubling the previous quarter's gain of USD 17.6 billion. BlackRock topped the flow leader table by far with a stellar performance of USD 14.4 billion. Meanwhile, Abrdn led the top 10 flow laggards in the fourth quarter with total redemptions of over USD 3 billion, followed by Fideuram and Schroders.

Exhibit 10 Top and Bottom 10 European Sustainable Fund Providers by Flows in Q4 2024

Inflow		Outflow	
	(USD		(USD
Firm	Million)	Firm	Million)
BlackRock (incl. iShares)	14,447	abrdn	-3,076
Nordea	8,487	Fideuram	-2,355
Handelsbanken	2,912	Schroders	-2,141
JPMorgan	2,703	Pictet	-1,943
Swisscanto	2,209	AXA IM	-1,935
KBC	1,373	Eurizon	-1,845
Arcano	1,276	Candriam	-1,597
Amundi (incl. Lyxor)	1,256	Fidelity International	-1,137
Northern Trust	1,189	UBS (incl. Credit Suisse)	-1,115
Natixis	1,016	Ninety One	-1,042

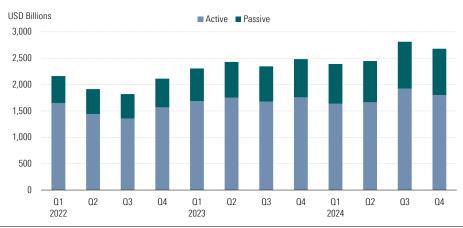
Source: Morningstar Direct. Data as of December 2024.

European Sustainable Fund Assets

Total assets of European sustainable funds amounted to USD 2.7 trillion toward the end of 2024, a 4% retreat from the restated USD 2.8 trillion in the third quarter. The slight decline was roughly in line with the performance of the market. For context, the Morningstar Global Market Index and the Morningstar Global Core Bond Index lost 1.3% and almost 5.1% over the fourth quarter, respectively.

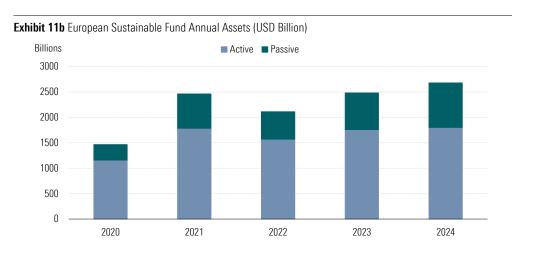
Passive strategies take up almost one third of the regional sustainable fund space.

Exhibit 11a European Sustainable Fund Assets (USD Billion)



Source: Morningstar Direct. Data as of December 2024

The exhibit below shows five years of annual asset data. While flows steadily declined in the past three years, European sustainable fund assets expanded to reach a new record of USD 2.7 trillion at the end of 2024, 8% higher than a year earlier and representing a 9% growth since late 2021. Assets in active sustainable funds have remained around USD 1.8 trillion, while their passive counterparts saw their market share climb to 33% from under 28% three years ago, underscoring the continuous shift in investor preferences from active management to cost-efficient strategies.



Source: Morningstar Direct. Data as of December 2024.

BlackRock, UBS, and Amundi Dominate the Sustainable Fund Landscape

Presented below are the foremost asset managers distributing sustainable funds across Europe. BlackRock, the global leader in asset management, continued to dominate the sustainable investing arena, managing a substantial USD 368 billion in ESG-focused open-end assets and ETFs in Europe at the end of 2024, a 5% growth compared with the third quarter. In a distant second was UBS, which overtook Amundi in the previous quarter. Both managers saw their sustainable fund assets decrease slightly in the last quarter.

Exhibit 11c Top Asset Managers by Sustainable Fund Assets in Europe

- Firm	(USD Billion)	Firm	Active Assets (USD Billion)	Firm	Passive Assets (USD Billion)
BlackRock (incl. iShares)	367.8	BlackRock (incl. iShares)	102.6	BlackRock (incl. iShares)	265.1
UBS (incl. Credit Suisse)	180.0	Natixis	74.9	UBS (incl. Credit Suisse)	107.7
,					
Amundi (incl. Lyxor)	172.8	UBS (incl. Credit Suisse)	72.3	Amundi (incl. Lyxor)	102.9
Swisscanto	98.7	Nordea	71.3	Northern Trust	51.1
DWS (incl. Xtrackers)	97.3	Amundi (incl. Lyxor)	70.0	Swisscanto	44.0
Natixis	77.5	Swisscanto	54.6	DWS (incl. Xtrackers)	42.8
BNP Paribas	73.1	DWS (incl. Xtrackers)	54.4	Handelsbanken	39.2
Nordea	71.3	Allianz Global Investors	48.7	BNP Paribas	31.5
Northern Trust	56.2	Pictet	43.0	State Street	25.5
Allianz Global Investors	48.7	BNP Paribas	41.6	Länsförsäkringar	22.6
Pictet	44.4	JPMorgan	36.2	Legal & General	17.9
Handelsbanken	43.5	Royal London	35.6	Vanguard	16.7
JPMorgan	39.4	Union Investment	34.0	Invesco	10.5
Royal London	35.6	KBC	31.7	HSBC	9.8
Union Investment	34.0	Goldman Sachs (incl. NNIP)	31.2	Storebrand Fonder	8.4
KBC	31.7	Robeco	28.5	Mercer Global Investments	8.1
Goldman Sachs (incl. NNIP)	31.5	AXA IM	27.5	Scottish Widows	7.6
State Street	30.8	Vontobel	26.7	OP	5.1
Robeco	28.5	Schroders	24.0	VanEck	4.5
AXA IM	27.9	LBP AM	23.8	Deka	4.2

Sustainable Fund Launches and Closures

The last quarter of 2024 registered a minor uptick in sustainable fund launches in Europe, which rose to 59 from the restated 49 in the previous quarter. With lingering regulatory uncertainties and a lower investor appetite, the development of new sustainable fund products in 2024 reached a low of 235, compared with 394 one year ago. As we continue to analyze the data and identify additional launches, we expect this number to be adjusted upward in the next report.

Exhibit 12a European Sustainable Fund Launches



Source: Morningstar Direct. Data as of December 2024.

The minor uptick in sustainable product development was also found in the number of conventional strategy launches. Over the past three months, the number of conventional strategy launches rose from the restated 288 in the previous quarter to 355, but as with sustainable funds, this number is likely to be adjusted upward as we continue to analyze the data and identify additional launches.

The cooldown of sustainable fund launches last year compared with previous years reflects a normalization of the sustainable product development activity after three years of high growth, during which many asset-management firms hastened to build their core sustainable fund ranges to meet the growing demand. Asset managers have also become more cautious in their development of new ESG and sustainable strategies because of greenwashing accusations and uncertainty around regulations. The European Union's Sustainable Finance Disclosure Regulation, or SFDR, is still under review. Meanwhile, asset managers have been busy assessing the impact of the European Securities and Markets Authority's fund naming guidelines on their fund ranges and implementing the necessary changes to comply with the new rules.

For more details on SFDR read: SFDR Article 8 and Article 9 Funds: Q4 2024 in Review.

The vast majority of the new sustainable funds are classified as Article 8 under SFDR. Several of the largest launches also offer some climate features, as shown in the exhibit below. For example, **DNB Global Low Carbon Corporate Bonds** focuses on companies that have the potential to contribute positively to the environment. This is measured by companies with taxonomy-aligned activities, companies with revenues aligned with one or more environmental UN Sustainable Development Goals, companies with credible science-based targets, and those that demonstrate potential avoided emissions. As such, the fund ensures that its weighted average carbon intensity does not exceed 100 metric tons of CO₂ equivalent/USD million sales. Meanwhile, **Columbia Threadneedle Net Zero Transition 2039-46 Buy and Maintain** aims for up to 70% of the portfolio to be invested in bonds from issuers that are aligned or committed to align with a global net zero pathway. In addition, a portion of the fund is invested in labeled bonds with defined use of proceeds addressing key areas of concern such as climate change, natural resources depletion, loss of biodiversity, and/or pollution control.

Fund Name	Size (USD Million)
Swiss Life Equity ESG Global ex Switzerland PF	851
Blackrock Asia Pacific (ex-Japan) ESG Insights Equity Fund	712
.&G Future World ESG Emerging Markets Government Bond (USD) Index Fund	445
Fidelity Sustainable USD High Yield Bond Paris Aligned Multifactor ETF	346
State Street World Climate Transition CTB Index Equity Fund	254
Amundi MSCI EM Asia ESG CTB Net Zero Ambition ETF	196
Acadian Climate Transition Global Enhanced Equity	165
DNB Global Low Carbon Corporate Bonds	147
ndosuez Target 2029	128
CT Net Zero Transition 2039-46 Buy and Maintain Fund	110

Meanwhile, 94 sustainable funds were closed in the last quarter of 2024, including 69 that liquidated and 25 that merged. The full year recorded 351 European sustainable fund closures, of which 230 were liquidations and 121 were mergers. This number surpasses the 255 closures recorded over the previous year by almost 40%. The increase reflects a maturation of the sustainable fund market. The sustainable fund industry has grown and become more competitive. Funds that struggle to attract assets or deliver good returns are increasingly prone to closing down. We view this as a natural evolution of the industry, where only the better-performing and popular strategies will survive.

0.4 ■ Liquidated Merged

Exhibit 13 European Sustainable Fund Closures

Source: Morningstar Direct. Data as of December 2024

Sustainable Fund Rebranding

Fund launches and closures are not the only activities shaping the landscape of sustainable funds. Asset managers have also been adding, dropping, and changing the names of existing funds, reflecting changes in both investment objectives and portfolios. The strong activity of adding ESG-related terms to fund names observed between 2019 and 2022 abated in 2023 to give way to a new trend of funds dropping and changing ESG terms.

Through 2024, we recorded 213 European sustainable funds that changed names, of which 50 added ESG-related terms, 115 dropped ESG-related terms, and 48 swapped ESG-related terms. The trend of dropping or changing names accelerated in the fourth quarter, as expected, as UK-domiciled funds started complying with the naming and marketing rules of the Financial Conduct Authority's Sustainability Disclosure Requirements and as funds distributed in the EU started implementing ESMA's ESG fund naming guidelines. Both rules aim to protect investors against greenwashing risk.

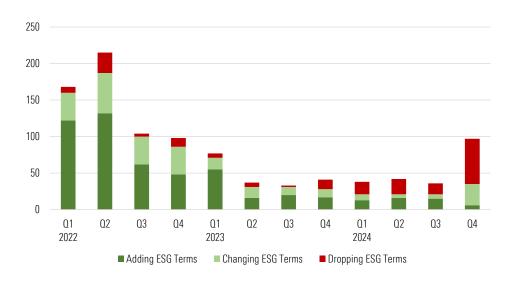


Exhibit 14 European Sustainable Fund Name Changes

Source: Morningstar Direct. Data as of December 2024. Based on 1,104 European ESG funds adding, dropping, or changing sustainability- or ESG-related terms in their names between 2022 and 2024.

The fourth quarter saw a record high of 62 funds remove ESG terms from their names. Examples include Morgan Stanley Global Quality Select (formerly known as Morgan Stanley Global Sustainable), Legal & General Global Diversified Equity Index (formerly known as Legal & General ex Thermal Coal Adaptive Capped ESG Equity Index), and Macquarie Supranational Emerging Markets LC Bond (formerly known as Macquarie Sustainable Emerging Markets LC Bond). A series of Beheerstrategie strategies also had the term "Duurzaam" removed from their names.

Meanwhile, around 30 sustainable funds swapped ESG-related terms in their names. Examples include a series of Handelsbanken Responsible Multi Asset funds (formerly known as Handelsbanken Sustainable Multi Asset), BlackRock Global Funds Climate Transition Multi-Asset (formerly known as BlackRock Climate Action Multi-Asset), and several Vanguard ActiveLife Climate Aware Multi Assets funds (formerly known as Vanguard Sustainable Life Equity funds). The latter features stronger climate considerations in security exclusions and corporate engagements. When selecting government bonds, the fund manager will consider whether a country's carbon intensity is at least 25% lower than the average of the government bonds issued by other countries within the benchmark index.

Only five funds added ESG-related terms to their names including UBAM Emerging Market Responsible High Alpha Bond (formerly known as UBAM Emerging Market Corporate Bond Short Duration), Eleva SRI Euroland Selection (formerly known as Eleva Euroland Selection), as well as Kathrein Sustainable Euro Bond (formerly known as Kathrein Euro Bond) and Kathrein Sustainable US-Dollar Bond (formerly known as Kathrein US-Dollar Bond).

We expect activity among sustainable funds to gather momentum over the next five months as EU funds have until May 21, 2025, to comply with ESMA's fund naming guidelines. In addition to protecting investors against greenwashing risk, the guidelines aim to provide minimum standards for funds that use specific ESG terms in their names. Last quarter, we identified around 4,700 EU funds with ESG or sustainability-related terms in their names that fall within the scope of the guidelines.

Analysis of ESG Key Terms Being Added and Dropped From Fund Names

This section looks more closely at the changes in ESG and sustainability-related terms that we identified to find out which ones are gaining popularity, and which ones are losing ground.

As shown below, "sustainable" and "sustainability" were the key terms removed the most in 2024 (dropped by over 80 funds), followed by ESG (dropped by 36 funds), while they have been added by 15 and 24 funds, respectively. Meanwhile, in 2024, like in previous years, there have been more additions (12) than removals (6) of the word "climate," although fund name changes involving this word remain very limited compared with the other terms listed here.

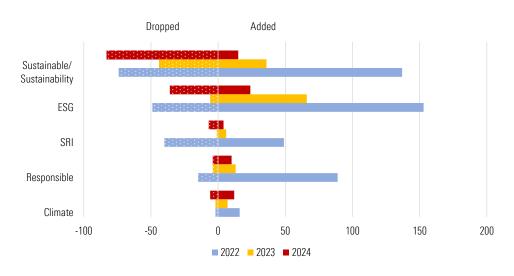


Exhibit 15a Sustainability and ESG-Related Terms With Most Frequent Changes

Source: Morningstar Direct. Data as of December 2024. Based on 1,091 European ESG funds adding, dropping, or changing sustainability- or ESG-related terms in the fund names between 2022 and 2024. Among funds that added ESG key terms, we included those that were not launched as ESG funds but became ESG funds after they added ESG terms as well as funds that began as ESG funds but swapped their original ESG terms for other ESG-related terms. Similarly, funds that dropped ESG key terms include those that removed key terms and funds that swapped their original ESG terms for other terms.

Between 30% and 50% of ESG Funds Will Rebrand - More Transition Strategies On the Horizon As previously mentioned, we expect an acceleration of rebranding activity in the coming months, potentially resulting in 30% to 50% of EU ESG funds changing their names by mid-2025. These will mostly be funds that use terms such as "sustainable" or "ESG" in their names that, for various reasons,

will not want to apply the stringent criteria required to keep these terms, starting with the fossil fuels exclusions imposed by the PAB regulation. Many will drop ESG-related terms and stop promoting their ESG characteristics through their names. For example, "ESG screened," "ESG filtered," and "ESG leaders"

will become "screened," "filtered," and "leaders," respectively. These terms, and other neutral terms, will arguably make it harder for investors to look for funds with ESG characteristics.

We also anticipate an increase in the popularity of ESG-related terms that emphasize transitional aspects as investors increasingly look to align their portfolios with real-world outcomes and, in the context of climate change, with real-world decarbonization. Examples of funds that have added or swapped such ESG key terms include Templeton European Sustainability Improvers (formerly known as Templeton European Dividend), Aegon Global Short Dated High Yield Climate Transition (formerly known as Aegon Short Dated High Yield Global Bond), Allspring Climate Transition Global Equity (formerly known as Allspring 2 Degree Global Equity), and Man Global Climate Transition Impact Bond (formerly known as Man Global Climate Impact Bond).

How Will Name Changes Impact Morningstar's Universe of Sustainable Funds?

In the upcoming months, we will continue tracking changes in fund names and strategies. Our objective is to determine which funds no longer meet the criteria for inclusion in our universe of sustainable funds. It's important to note that the removal of an ESG-related term from a fund's name won't automatically result in the fund being removed from our universe. Our criteria for inclusion consider factors beyond just the fund name, including the investment objective and policy. While we anticipate that many funds will remove ESG terms from their names and reflect this change in the language used to describe the investment objective in prospectuses, we don't expect as many funds to be removed from our universe.

For more details on SFDR read: SFDR Article 8 and Article 9 Funds: Q4 2024 in Review.

SDR's Sustainability Labels Face a Laborious Start

As previously mentioned, in addition to ESMA's fund naming guidelines, the UK's Sustainability Disclosure Requirements are another piece of regulation contributing to the reshaping of the European sustainable fund landscape. The SDR is an antigreenwashing package of measures aimed at improving the trust in and transparency of sustainable investment products and at minimizing greenwashing.

As part of the SDR, the Financial Conduct Authority introduced four consumer-focused sustainability labels that asset managers have been allowed to use since July 31, 2024. The labels are Sustainability Focus, Sustainability Improvers, Sustainability Impact, and Sustainability Mixed Goals.

As of this writing, according to Morningstar Direct data and public announcements, 61 funds have adopted a sustainability label, representing USD 35 billion (GBP 28 billion) of assets under management. The labeling regime has proved challenging to implement and has had a low initial uptake. The number of 61 labeled funds is to be put in perspective of the more than 400 UK-domiciled funds that had ESG-related terms in their names at the end of December 2023. The low level of adoption so far can be explained by the strict requirements set by the regulator and the uncertain investor demand for labels.

Asset managers have until April 2, 2025, to fully comply with the naming and marketing rules, which means they have until then to either obtain a label or drop the terms sustainable, sustainability, or impact from the names of their funds.

Sustainability Focus Is the Dominant Label in the UK

As expected, Sustainability Focus is the dominant label, with 44 adopting funds housing close to USD 28 billion (GBP 22.5 billion) in assets. Examples of Sustainability Focus funds include **Jupiter Ecology**, **CT Responsible Global Equity**, and **Fidelity Sustainable UK Equity**.

Exhibit 15b Breakdown of UK Sustainability-Labeled Funds Approved So Far by Count (Left Chart) and Assets (USD Million, Right Chart)



Source: Morningstar Direct, Morningstar Sustainalytics Research. Data as of Jan. 22, 2025.

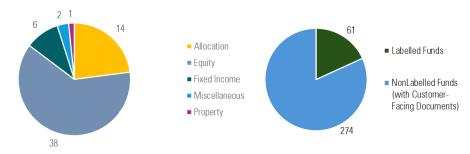
The second most adopted label is Impact. This label includes 14 funds, representing close to USD 6.0 billion (GBP 4.8 billion) in assets. The first Impact fund was WHEB Sustainability Impact. It was then followed by others, including Baillie Gifford Positive Change, Ninety One Global Environment, and AEW UK Impact. The goal of the latter is to make a positive impact by addressing the place-based needs of the UK, increasing the provision of sustainable real estate with a social use value.

It's only since the beginning of the year that managers have announced the adoption of the Improvers label. As of this writing, only three, namely BlackRock Brown to Green Materials, AXA Framlington Global Sustainable Managed, and AXA Framlington UK Sustainable Equity have received the Improvers label.

Meanwhile, no manager has yet announced the adoption of the Mixed Goals label, although it's our understanding that there are some in the FCA's approval pipeline. A year ago, in an study, we had predicted that Mixed Goals would be the second-most popular label, behind Focus. This prediction was made on the basis of the flexibility it offers. The Mixed Goals label allows portfolio managers to slice portfolios and create as many allocations to sustainability objectives as they see fit, as long as 70% of the overall assets are aligned with the criteria of at least two of the other three labels. The label was meant to facilitate the adoption of a label for multi-asset strategies.

In terms of asset class, the majority (38) of labeled funds are equity strategies, followed by allocation, with 14 funds. This may come as a surprise that none of these allocation funds chose to opt for the Mixed Goals label. There is also one property fund, AEW UK Impact.

Exhibit 15c Breakdown of UK Sustainability-Labeled Funds by Broad Asset Class (Count)



Source: Morningstar Direct, Morningstar Sustainalytics Research. Jan. 22, 2025.

Meanwhile, 274 UK-domiciled funds are classified in our database as "non SDR labeled" with consumer-facing documents. Some of these funds have dropped sustainability-related terms from their names because they chose not to opt for a label. Regulation still requires nonlabeled funds that claim to have ESG characteristics to provide a two-page consumer-facing document and explain why they didn't opt of a label. Examples include **Stewart Investors Asia Pacific Leaders, Royal London Emerging Markets Tilt**, and **Vanguard Global Capital Stewards Equity**. Almost half of nonlabeled funds are included in the Morningstar sustainable fund universe.

Label adoption will continue this year, but we do not expect it to exceed 150-200 funds. The level of adoption will depend on investor demand and product development. The choices will remain limited, with an under-representation of passive and fixed-income options.

European Regulatory Update

After an unprecedented wave of sustainable regulatory development under the EU Green Deal, the reappointed president of the European Commission Ursula von der Leyen has announced a consolidation and recalibration of key sustainability rules such as CSRD, CSDDD, and the EU Taxonomy. While the content of the review is still unclear, the stated goals are to reduce reporting requirements by at least 25% in the first half of 2025.

The legal proposal (the so-called Omnibus regulation) tabled to be published on Feb. 26, 2025, could include new reporting and materiality thresholds, new implementation delays, or simplified reporting scope for small companies, among other measures. The proposal will be subject to amendments by the European Parliament and the Council with the EC pushing for a swift adoption to enforce changes before the new reporting cycle in 2026. The Omnibus regulation is expected to be followed by a broader set of proposals targeting red tape and competitiveness.

Meanwhile, reflecting this new political priority within the bounds of existing regulations, the European Commission has released FAOs aimed at simplifying the use of the EU Taxonomy and easing companies' reporting burdens. These FAOs provide guidance on applying Taxonomy requirements, evaluating alignment annually, meeting technical screening criteria, and ensuring activities do no significant harm, or DNSH, to climate, pollution control, and biodiversity. Additional guidance was published on how financial institutions should report key performance indicators for Taxonomy-eligible and aligned activities.

The respective working programs, recent guidance, and opinions of the European Supervisory Authorities suggest that they remain unaffected by the current political environment.

Meanwhile, the European Supervisory Authorities have released their 2025 work programs outlining strategic priorities for the year ahead, with sustainable finance remaining a key focus for all three regulators. ESMA plans to enhance its efforts on implementing the sustainable finance legal and supervisory framework, addressing greenwashing, and promoting transparency in sustainable investments. The European Banking Authority will prioritize work on the prudential treatment of exposures related to ESG. For the European Insurance and Occupational Pensions Authority, sustainable finance will continue to be a priority across all areas of its work, including integrating ESG considerations into prudential and conduct frameworks.

ESMA released on Dec. 13, 2024, three new O&As addressing the practical application of its guidelines on fund names that use ESG or sustainability-related terms. The guidelines aim to protect investors from greenwashing risk and provide minimum standards for funds available for sale in the EU that use specific ESG terms in their names. Funds will need to comply with new portfolio requirements, like mandatory exclusions (such as controversial activities or fossil fuel), or change their names. The O&As cover key topics such as green bonds, the definition of "meaningfully investing in sustainable investments," and controversial weapons. The document helpfully clarifies that EU Green Bond Regulation-compliant bonds are exempt from mandatory exclusions and that for other use-of-proceeds instruments, a look-through approach is required at the project level and not at the entity level (except for UNGC and OECD MNE guidelines exclusions). However, the O&A unexpectedly raises the bar regarding the definition of "meaningfully investing in sustainable investments" now set at a minimum of 50%. Finally, ESMA clarifies the definition of controversial weapons (including antipersonnel mines, cluster munitions, chemical weapons, and biological weapons). New funds are already subject to the quidelines since Nov. 21, 2024, and existing funds will have until May 21, 2025, to comply.

For more details on SFDR read: SFDR Article 8 and Article 9 Funds: Q4 2024 in Review

On Nov. 7, 2024, EIOPA's final report on sustainability risks under the EU Solvency II framework recommends new prudential measures for insurers' fossil fuel assets. Key proposals include increasing capital requirements for fossil fuel related stocks by up to 17% and for fossil fuel related bonds by up to 40%, reflecting their higher transition risks. Despite these charges, EIOPA expects a "limited" impact on

insurers' solvency ratios due to their low exposure to such assets (stocks at 1% of total investments). The European Commission will review EIOPA's recommendations to decide on next steps.

On 8 January 2025, the EBA published guidelines for managing ESG risks. These rules require banks to assess and manage ESG risks using specific metrics and transition plans. Each bank must set its thresholds for these metrics to ensure compliance. Banks need to consider the financial impacts of ESG risks up to a time 10-year horizon. The guidelines will start to apply from Jan. 11, 2026, for all banks that are not small and noncomplex.

Lastly, it is important to highlight two reports released by the Platform on Sustainable Finance, an advisory group to the European Commission. The first report suggests a new classification system for sustainable finance products in light of the forthcoming SFDR review (with the creation of three product categories, namely "Sustainable", "Transition", and "ESG Collection"). The second report introduces a voluntary benchmark targeting capital expenditure alignment with the EU Taxonomy. Whether the European Commission will incorporate these recommendations into regulations remains uncertain.

In parallel, the UK government is continuing to cautiously roll out its sustainability regulatory framework. In November 2024, UK Chancellor Rachel Reeves announced a series of initiatives, including a consultation on a voluntary UK Green Taxonomy, draft legislation for regulating ESG rating providers, the launch of a Transition Finance Council in collaboration with the City of London Corporation, and plans to consult on transition strategies in 2025. The UK government has also confirmed that two sustainability reporting standards based on IFRS S1 and IFRS S2 will be published in the first quarter of 2025. These will be subject to a public consultation, with the final standards potentially coming into effect from the fiscal year 2027. Finally, the Financial Conduct Authority provided illustrative examples for precontractual disclosure in its Sustainability Disclosure and Labeling Regime, offering guidance to firms navigating investment label requirements.

United States

Withdrawals Deepen

US investors pulled money out of sustainable funds for the ninth consecutive quarter, with outflows of USD 4.3 billion in the fourth quarter. This represented a more than twofold increase from the revised USD 2.0 billion of redemptions in the third quarter. 2024 showed consistent losses each quarter, with no signs of recovery. While the losses narrowed between the second and the third quarter, they widened again in the last quarter, ending the year in a downward trend. By contrast, US investors poured USD 298 billion of net new money into conventional funds in the last quarter of the year, a notable upshoot from the USD 170 billion recorded for the previous quarter.

US-domiciled sustainable funds faced continued headwinds in 2024. Returns lagged those of conventional peers, on average, political scrutiny persisted, and greenwashing concerns endured.

Moreover, high interest rates continued to penalize some areas of the market, such as clean energy stocks.

Sustainable Fund Flows --- Sustainable Funds OGR --- All U.S. Funds OGR Billions 15 12% 10 8% 5 4% 0% -5 -4% -10 -8% 01 01 02 03 01 02 03 04 02 03 04 2022 2023 2024

Exhibit 16a US Fund's Quarterly Flows: Sustainable vs. All US Funds (USD Billion)

Source: Morningstar Direct. Data as of December 2024

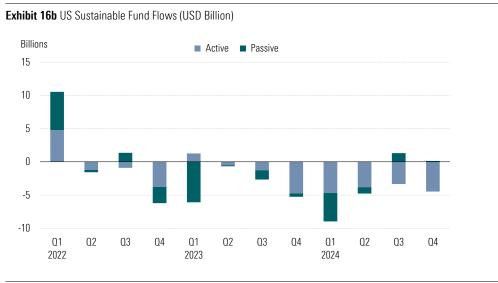
In the fourth quarter of 2024, US sustainable funds experienced an organic contraction of 1.3%, whereas the overall US market of funds grew by 1.0%. The organic growth rate, calculated as net flows over the period divided by total assets at the beginning of the period, provides insight into the relative magnitude of net flows.

2024 Was a Turbulent Year for US Sustainable Funds

Sustainable funds continued to lag conventional peers, on average. High interest rates continued to penalize some areas of the market such as clean energy stocks and other green stocks. In a critical election year, the anti-ESG backlash intensified and political scrutiny reached new heights. Some individual states took legal action to limit the incorporation of environmental, social, and governance (ESG) criteria in investment decisions. Moreover, greenwashing concerns remained a persistent concern for investors.

As a result of these headwinds, outflows deepened. Sustainable funds suffered their second year of redemptions in more than a decade. By contrast, conventional peers enjoyed significant inflows, supported by interest rate cut expectations and an AI-related stock rally.

Meanwhile, active sustainable strategies experienced outflows of USD 4.4 billion, which was similar to what was recorded in the first quarter of 2024. Conversely, index-tracking sustainable products registered modest inflows of USD 124 million.



Asset Classes

During the fourth quarter, sustainable bond funds kept positive momentum with a net collection of USD 890 million, similar to the previous quarter's subscription level. Conversely, sustainable equity funds continued to bleed money, shedding almost USD 5 billion over the quarter. Elevated interest rates make fixed-income investments more attractive as they offer better returns with lower risk compared with equities.

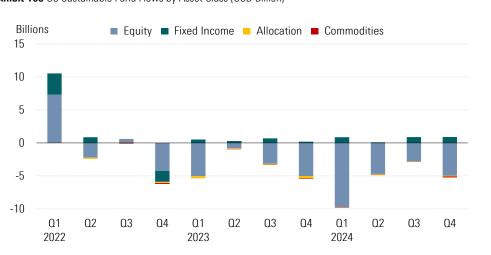


Exhibit 16c US Sustainable Fund Flows by Asset Class (USD Billion)

Source: Morningstar Direct. Data as of December 2024.

Annual Flows and Assets

US sustainable funds recorded their second year of net outflows in 2024, shedding USD 19.6 billion after bleeding USD 13.3 billion in 2023. By contrast, US investors poured a total of USD 740 billion into the broader fund market over the full year.

Neither active nor passive strategies were spared last year, but passive funds suffered less than their actively managed counterparts. Index-tracking options gave up USD 3.6 billion, less than the USD 8.2 billion redemptions experienced in 2023, while active funds bled USD 16.0 billion over the year.

Billions ■ Active ■ Passive 70 60 50 40 30 20 10 0 -10 -20 -30 2020 2021 2022 2023 2024

Exhibit 16d US Sustainable Fund's Annual Flows by Asset Class (USD Billion)

Source: Morningstar Direct. Data as of December 2024.

Flow Leaders and Laggards

In the fourth quarter of 2024, the standout performer in terms of inflows was **Xtrackers MSCI Emerging**Markets Climate Selection ETF, which garnered USD 429 million. This ETF prioritizes firms with lower carbon emissions while excluding certain markets like Indonesia, Kuwait, and Saudi Arabia. **First Trust**Nasdaq Clean Edge Smart Grid Infrastructure Index kept its second position as in the previous quarter with even higher inflows of USD 319 million. The fund invests in companies involved in smart grid technologies and infrastructure, capitalizing on the modernization of electrical grids to enhance efficiency and sustainability.

Exhibit 17a Top 10 US Sustainable Fund Flows

	Net Flows
Fund Name	(USD Million)
Xtrackers MSCI Emerging Markets Climate Selection ETF	429
First Trust NASDAQ® Clean Edge® Smart Grid Infrastructure Index Fund	319
iShares ESG U.S. Aggregate Bond ETF	201
Vanguard ESG U.S. Stock ETF	182
TCW Transform Systems ETF	180
Calvert Bond Fund	179
Xtrackers S&P 500 ESG ETF	157
Vanguard ESG International Stock ETF	150
iShares ESG Aware MSCI EAFE ETF	127
Vanguard ESG U.S. Corporate Bond ETF	126

Source: Morningstar Direct. Data as of December 2024.

The Largest Sustainable Funds Extend Their Outflows

Parnassus Core Equity tops the table of the worst sellers once again, recording outflows at USD 1.8 billion in the last quarter of the year. The fund focuses on investing in US large-cap companies with sustainable competitive advantages, quality management, and positive ESG performance. It is followed by American Century Large Cap Equity and iShares ESG Aware MSCI USA ETF.

Exhibit 17b Bottom 10 US Sustainable Fund Flows

	Net Flows
Fund Name	(USD Million)
Parnassus Core Equity Fund	-1,838
American Century Large Cap Equity Fund	-510
iShares ESG Aware MSCI USA ETF	-464
Brown Advisory Sustainable Growth Fund	-445
Calvert Equity Fund	-419
Eventide Gilead Fund	-327
Nationwide BNY Mellon Core Plus Bond ESG Fund	-323
iShares Global Clean Energy ETF	-310
Nuveen Large Cap Responsible Equity Fund	-269
Parnassus Mid Cap Fund	-181

Source: Morningstar Direct. Data as of December 2024.

Assets

During the fourth quarter, assets in US sustainable funds shed by 2.7%, ending the year at USD 344 billion.

Exhibit 18a US Sustainable Fund Assets (USD Billion)



Source: Morningstar Direct. Data as of December 2024.

Despite the year-end dip and the annual outflows of USD 19.6 billion, assets in US sustainable funds rose by 6.3% over the whole of 2024, supported by market appreciation. Yet, the total assets of USD 344 billion represent a 6% decline from the universe's all-time high at the end of 2021.

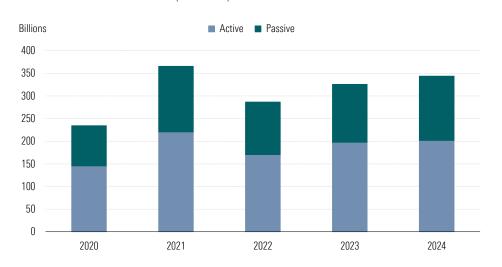


Exhibit 18b US Sustainable Fund Flows (USD Billion)

Vanguard Rises to Second Position Behind BlackRock

Below we list the top asset managers that market sustainable funds in the US. BlackRock, the world's largest manager, tops the list, with more than USD 58.3 billion in ESG and sustainability-focused openend assets and ETFs at the end of the fourth quarter. Assets were slightly lower than in the third quarter (USD 60.0 billion). It is followed by Vanguard, which for the first time stands in second position, with total assets gaining USD 1.0 billion over the last three months of the year to reach USD 38.8 billion, overtaking Parnassus and Morgan Stanley (which owns the Calvert brand).

Exhibit 19 Top Asset Managers by Sustainable Fund Assets in the US

Firm	Total Assets (USD Billion)	Firm	Net Assets (USD Billion)	Firm	Net Assets (USD Billion)
			<u> </u>		_
BlackRock (incl. iShares)	58.3	Parnassus	37.9	BlackRock (incl. iShares)	53.8
Vanguard	38.8	Morgan Stanley (incl. Calvert)	24.9	Vanguard	37.2
Parnassus	37.9	Nuveen	16.6	Morgan Stanley (incl. Calvert)	11.0
Morgan Stanley (incl. Calvert)	35.9	Dimensional	15.9	Nuveen	6.5
Nuveen	23.0	Brown Advisory	10.9	DWS (incl. Xtrackers)	5.8
Dimensional	15.9	Amundi (incl. Lyxor)	9.9	Invesco	5.5
Brown Advisory	10.9	Franklin Templeton	9.9	Fidelity	5.5
Amundi (incl. Lyxor)	9.9	Impax	8.3	First Trust	4.5
Franklin Templeton	9.9	Eventide	6.2	State Street	2.3
Impax	8.3	American Century	6.0	Northern Trust	2.0
Invesco	8.1	BlackRock (incl. iShares)	4.5	Praxis Mutual Funds	1.8
Fidelity	7.6	Boston Trust Walden	4.4	Global X	1.1
Eventide	6.2	Community Capital	3.7	Green Century	0.9
DWS (incl. Xtrackers)	6.0	AllianceBernstein	3.6	New York Life	0.8
American Century	6.0	Invesco	2.6	TCW	0.7
First Trust	4.5	Neuberger Berman	2.5	Kraneshares	0.7
Boston Trust Walden	4.4	PIMCO	2.3	Jackson	0.5
Community Capital	3.7	Domini	2.2	Flexshares	0.4
AllianceBernstein	3.6	Fidelity	2.2	VanEck	0.3
Praxis Mutual Funds	2.8	RBC	1.9	Amplify	0.2

New Sustainable Fund Launches Remain Low

The last quarter of 2024 saw the launch of only two sustainable equity funds. Invesco MSCI North America Climate ETF, which ended the year with USD 2.3 billion in assets, invests in leading companies in terms of carbon reduction and climate-focused business practices. Meanwhile, Stance Sustainable Beta ETF tracks an equal-weighted index of approximately 100 large- and mid-cap companies, excluding companies involved in the fossil fuel industry, fossil-fired utilities, and companies that fail to meet a diverse set of ESG standards.

■ Active ■ Passive

Exhibit 20a US Sustainable Fund Launches

Over the whole of 2024, only 10 new sustainable funds hit the shelves. This is the lowest level seen in 10 years and pales in comparison to the 100-plus funds launched in 2021 and 2022. The abrupt slowdown in product development can be directly explained by the lower investor demand for new sustainable strategies amid the ongoing ESG backlash.

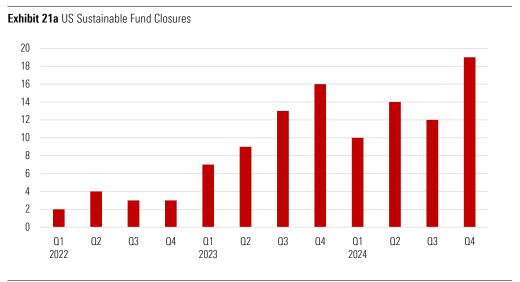
Increasingly, fund managers have looked to ETFs to house actively managed strategies, too. Two of last year's new ETF launches are actively managed. These are **Carbon Collective Short Duration Green Bond ETF** and **Nuveen Sustainable Core ETF**.

Exhibit 20b US Sustainable Fund Launches in 2024

Ticker	Morningstar Category	Inception Date	Fund Size (\$ mn)
KLMN	Global Large-Stock Blend	09/12/2024	2,343
KLMT	Global Large-Stock Blend	26/06/2024	1,700
KCSH	Ultrashort Bond	22/07/2024	224
PABD	Foreign Large Blend	17/01/2024	46
STSB	Large Blend	14/11/2024	17
CCSB	Short-Term Bond	11/04/2024	16
IBAT	Miscellaneous Sector	19/03/2024	6
NSCR	Large Blend	05/03/2024	6
LEYIX	Target-Date 2065+	24/09/2024	2
FRCVX	Target-Date 2065+	28/06/2024	1
	KLMN KLMT KCSH PABD STSB CCSB IBAT NSCR LEYIX	KLMN Global Large-Stock Blend KLMT Global Large-Stock Blend KCSH Ultrashort Bond PABD Foreign Large Blend STSB Large Blend CCSB Short-Term Bond IBAT Miscellaneous Sector NSCR Large Blend LEYIX Target-Date 2065+	Ticker Morningstar Category Date KLMN Global Large-Stock Blend 09/12/2024 KLMT Global Large-Stock Blend 26/06/2024 KCSH Ultrashort Bond 22/07/2024 PABD Foreign Large Blend 17/01/2024 STSB Large Blend 14/11/2024 CCSB Short-Term Bond 11/04/2024 IBAT Miscellaneous Sector 19/03/2024 NSCR Large Blend 05/03/2024 LEYIX Target-Date 2065+ 24/09/2024

Source: Morningstar Direct. Data as of December 2024.

Also, for the fifth consecutive quarter, US sustainable fund closures significantly outpaced new launches. A total of 13 sustainable funds were liquidated over the last three months of the year, while six were merged.



Source: Morningstar Direct. Data as of December 2024.

With 19 fund closures, the final quarter of 2024 marked a significant wave of shutdowns in the ESG space. The list includes a mix of equity, bond, real estate, and thematic ETFs, with major players like Nuveen, Fidelity, BlackRock, and Federated Hermes discontinuing specific offerings. These closures span themes such as low-carbon equity, net-zero transition, energy transition, gender equality, and ocean health, reflecting challenges for both broad and specialized ESG strategies.

Over the full year, 71 US sustainable funds closed, including 60 that were liquidated, while 11 were merged into other existing funds.

The largest fund (in terms of assets at the end of 2023) was **Nuveen Social Choice Low Carbon Equity**, which merged into **Nuveen Large Cap Responsible Equity** in December 2024 to streamline the number of offerings. The two strategies were managed by the same team and had the same ESG and low-carbon criteria.

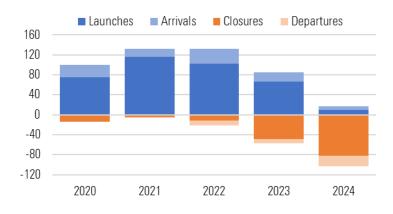
The list of fund closures encompasses a variety of strategies, including some targeting sustainability outcomes such as **JPMorgan Small Cap Sustainable Leaders**, while others, such as **Ninety One Global Environment** and **Veridien Climate Action ETF**, had a climate-focused mandate. A number of funds that closed had been repurposed into ESG-focused strategies a few years ago but failed to attract flows.

Exhibit 21b Largest US Sustainable Funds That Liquidated or Merged in 2024

Name	Inception Date	Obsolete Date	Obsolete Type	Total Assets Dec 2023 (\$Mil)
Nuveen Social Choice Low Carbon Equity Fund	07/08/2015	13/12/2024	Merged	1,221
ClearBridge All Cap Growth ESG ETF	03/05/2017	14/06/2024	Merged	111
Sterling Capital Diverse Multi-Manager Active ETF	13/12/2021	12/01/2024	Liquidated	101
WCM International Equity Fund	31/03/2020	07/10/2024	Merged	87
abrdn Emerging Markets Sustainable Leaders Fund	30/08/2000	21/06/2024	Merged	75
Angel Oak Financials Income Impact Fund	03/11/2014	24/05/2024	Liquidated	74
CCM Core Impact Equity Fund	25/11/1996	23/02/2024	Merged	73
WisdomTree U.S. ESG Fund	23/02/2007	05/02/2024	Liquidated	68
Virtus NFJ Global Sustainability Fund	09/12/2014	20/12/2024	Liquidated	56
BlackRock Sustainable Low Duration Bond Fund	18/10/2021	13/08/2024	Liquidated	47
BlackRock Sustainable Advantage CoreAlpha Bond Fund	23/08/2016	13/08/2024	Liquidated	41
AMG GW&K Enhanced Core Bond ESG Fund	02/01/1997	11/09/2024	Liquidated	40
JPMorgan Small Cap Sustainable Leaders Fund	31/12/1996	21/05/2024	Liquidated	39
Fidelity SAI Sustainable Future Fund	14/04/2022	15/11/2024	Merged	36
Janus Henderson Sustainable & Impact Core Bond ETF	08/09/2021	21/02/2024	Liquidated	36
Angel Oak Total Return Bond Fund	04/06/2021	16/02/2024	Merged	31
Ninety One Global Environment Fund	30/08/2021	30/10/2024	Liquidated	30
Direxion Hydrogen ETF	25/03/2021	29/07/2024	Liquidated	29
Allspring Municipal Sustainability Fund	28/02/2020	09/10/2024	Liquidated	28
Veridien Climate Action ETF	08/05/2023	20/08/2024	Liquidated	25

In addition to sustainable fund closures, 24 funds dropped their ESG-focused mandates (labeled "Departures" in the exhibit below).

Exhibit 21c Sustainable Funds: New Arrivals and Departures



Source: Morningstar Direct. Data as of December 2024.

Of the 24 funds that removed their ESG-dedicated mandates in 2024, the largest (in terms of assets) was NYLI MacKay ESG Core Plus Bond ETF CPLB, which became NYLI MacKay Core Plus Bond ETF.

Janus Henderson Sustainable Corporate Bond ETF JLQD, now called Janus Henderson Corporate Bond ETF, dropped its ESG-dedicated mandate after three years of activity during which it struggled to attract

assets. However, ESG has remained a core part of the overall evaluation process for credit. This is illustrated by the very limited turnover within the portfolio after rebranding.

Meanwhile, two Abdrn funds experienced radical changes. Abdrn International Sustainable Leaders was renamed as Abrdn Emerging Markets Dividend, while Abdrn US Sustainable Leaders Smaller Companies became Abrdn Focused US Small Cap Equity. The strategies are new and managed by different investment teams.

For more details on the US sustainable fund landscape:

https://www.morningstar.com/lp/sustainable-funds-landscape-report

Regulatory Update

On Nov. 5, 2024, a federal court refused to block California's two climate disclosure laws, leaving them in place as the lawsuit proceeds. With Donald Trump's election casting uncertainty over the US Securities and Exchange Commission's climate disclosure rules, California's laws (SB 253 and 261) could serve as the only broadly applicable climate-related mandates in the US. SB 253 applies to companies with annual revenues exceeding \$1 billion, requiring them to report scope 1 and scope 2 greenhouse gas emissions starting in 2026 and scope 3 emissions at a later date to be determined by the California Air Resources Board (as per SB 219). Meanwhile, SB 261 requires businesses with annual revenues over \$500 million to publish climate-related financial risk reports based on the framework recommended by the Task Force on Climate-Related Financial Disclosures, starting Jan. 1, 2026, and biennially thereafter. While the future of these laws remains uncertain, the court's decision means that, for now, they remain in effect and that the plaintiffs can try again to challenge the laws after gathering more evidence. As the legal battle over California's climate disclosure laws unfolds, businesses are still expected to focus on preparing for compliance.

On Oct. 21, 2024, the SEC fined an asset-management firm \$4 million for misleading claims about three of their investment funds using ESG factors. The SEC found that the firm used outdated and incomplete data from a third party and failed to properly check for investments in fossil fuel and tobacco companies. Along with the \$4 million fine, the firm was ordered to stop making such misleading claims.

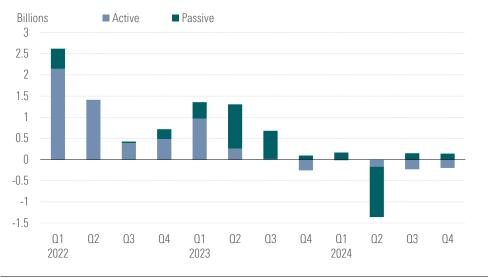
On Sept. 19, the House of Representatives approved two bills aimed at limiting the use of ESG factors in investments and climate-related disclosures required by agencies. The first bill, called the Protecting Americans' Investments from Woke Policies Act (H.R.5339), would constrain pension fund managers from considering nonfinancial factors when making investment decisions. The second bill, the Prioritizing Economic Growth Over Woke Policies Act (H.R.4790), would reduce the SEC's authority to require certain disclosures and protect companies from being held responsible for not including nonessential disclosures, such as those related to climate. Both bills were not adopted by the Senate in time but could be reintroduced and restart their path through the legislative process with the new legislature beginning in 2025.

Canada

Flows

Canada's sustainable fund universe experienced outflows of USD 56 million in the fourth quarter of 2024, following redemptions of USD 77 million in the third quarter.

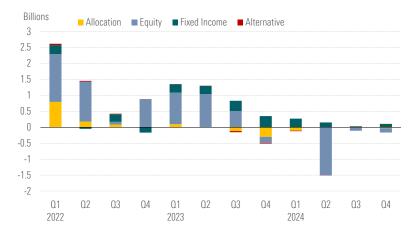
Exhibit 22a Canada Sustainable Fund Flows (USD Billion)



Source: Morningstar Direct. Data as of December 2024.

Fixed income was the only asset class consistently recording—albeit small—inflows in 2024, demonstrating its resilience in Canada like in other markets. Equity registered outflows throughout the year. The second quarter saw a significant outflow of USD 1.4 billion, the majority of which (USD 1.3 billion) came from the net redemption of one fund, **BMO MSCI USA ESG Leaders Index ETF**.

Exhibit 22b Canada Sustainable Flows by Asset Class (USD Billion)



Source: Morningstar Direct. Data as of December 2024.

Assets

Assets invested in Canadian sustainable funds declined slightly in the fourth quarter of 2024 to USD 36 billion, leveling with the second quarter, but almost 16% higher than the assets at the end of 2023.

Billions ■ Active ■ Passive n

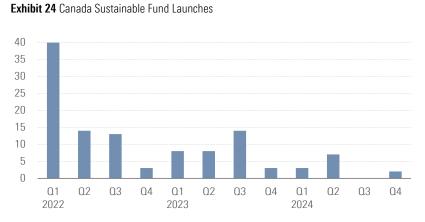
Exhibit 23 Canada Sustainable Fund Assets (USD Billion)

Source: Morningstar Direct. Data as of December 2024.

The top asset managers did not change throughout the year, NEI Investments kept its title of largest provider of sustainable funds in Canada, with assets of USD 8.0 billion, followed by Desjardins and National Bank with assets around USD 5.4 billion each.

New Launches and Closures

In the fourth quarter, two funds were launched by National Bank, fixed-income product **NBI Sustainable Global Bond** and equity fund **NBI Global Climate Ambition**. The former selects issuers based on strong sustainability commitments, prioritizing green, social, and sustainability-linked bonds. **NBI Global Climate Ambition focuses on climate-conscious equity investments by identifying companies that actively reduce carbon emissions, advance clean energy solutions, and align with net zero transition goals.**



Source: Morningstar Direct. Data as of December 2024.

There were two fund closures in the fourth quarter, **NEI US Dividend** and **Templeton Sustainable Balanced**.

Regulatory Update

On Oct. 9, 2024, the Government of Canada outlined a plan to develop a new sustainable investment taxonomy. The development of the metrics-based Canadian taxonomy would first focus on the following sectors: electricity, transportation, buildings, agriculture and forestry, manufacturing, and extractives, including mineral extraction and processing, and natural gas. A taxonomy for two to three priority sectors will be released within 12 months of the arm's-length, third-party organization beginning its work. Once finalized, the Canadian taxonomy would be available for financial institutions, lenders, and companies to use on a voluntary basis.

Australia and New Zealand

Flows

For the fourth quarter of 2024, there were positive net flows into the Australasian (Australia and New Zealand) sustainable funds universe of around USD 357 million based on the available data up to Dec 31, 2024. This was lower than the revised USD 576 million in net subscriptions in the previous quarter. Active strategies saw net inflows of USD 251 million over the fourth quarter, more than double the amount of passive funds, which had net inflows of USD 105 million.



Exhibit 25 Australia and New Zealand Sustainable Fund Flows (USD Billion)

Source: Morningstar Direct. Data as of December 2024.

However, these inflows pale in comparison with the total subscriptions of USD 8.8 billion registered by the overall funds and ETF universes for Australia and New Zealand.

Billions ■ Sustainable ■ Broader Market 5 0 -5 -10 -15 Q1 02 03 0.4 01 02 03 04 01 02 03 04 2022 2023 2024

Exhibit 26 Australian and New Zealand Fund Flows in the Broader Market (USD Billions)

Over the full year, Australasian sustainable funds experienced around USD 400 million of net inflows, which is better than the revised 2023 outflows of USD 740 million. After the turn in the interest-rate regime in late 2022, sustainable funds have been lagging partly because of their pronounced biases toward technology, industrials, and healthcare amid a concentrated global market favoring the "Magnificent Seven" stocks (Alphabet, Amazon.com, Apple, Meta, Microsoft, Nvidia, and Tesla).

Fixed-Income Funds Still Gathering Money

In the Australasia region for the fourth quarter of 2024, fixed-income strategies saw inflows of USD 205 million, while equity strategies gathered USD 150 million. Allocation funds registered net inflows of USD 150 million. In contrast, miscellaneous funds (infrastructure, property, alternatives, and so on) saw net outflows of USD 40 million.

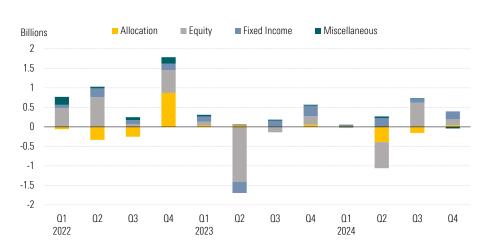


Exhibit 27 Australia and New Zealand Sustainable Flows by Asset Class (USD Billion)

Assets

The total size of the Australasian sustainable fund market was estimated at USD 30.8 billion as of Dec. 31, 2024, which is USD 2.5 billion lower (or 7%) than the assets as of the end of 2023. Over the quarter, around 38% of strategies reported inflows, 37% saw outflows, and 25% had no reported flows. In the same period, the Morningstar Australian Share Index was down almost 12% in US dollars, while the Morningstar Global Markets Index was down 1.3% over the same period. Over the course of 2024, Australian shares were up 1% but significantly lagged global shares by 15%.



Exhibit 28 Australia and New Zealand Sustainable Fund Assets (USD Billion)

Source: Morningstar Direct. Data as of December 2024

The Australian sustainable funds market remains quite concentrated, with the top 10 firms accounting for approximately two thirds of total assets in sustainable funds, which has been stable since the end of the first quarter of 2024.

The top 10 fund houses by sustainable fund assets are listed below. DFA has the highest market share (17.4%), followed by Betashares (12.4%) and Vanguard (8.7%). There has been a notable gain in DFA's market share compared with the 14.6% of the previous quarter. This was driven by relative asset growth (through flows or performance) compared with other houses that saw relative declines in their sustainable asset bases to minor degrees. Mercer has been relegated lower among the top 10 fund houses by market share, and First Sentier Investors is no longer present in the top 10.

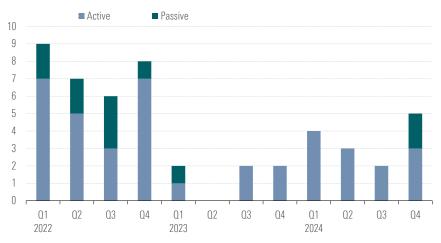
Exhibit 29 Top Australian and New Zealand Fund Houses by Sustainable Assets

Sustainable Asset Market Share	% Market Share
DFA Australia Limited	17.4%
BetaShares Capital Ltd	12.4%
Vanguard Investments Australia Ltd	8.7%
BlackRock Investment Management (Australia) Limited	5.5%
Australian Ethical Investment Ltd	4.9%
Pendal Institutional Limited	4.6%
Russell Investment Group Limited	4.4%
Mercer Investments (Australia) Limited	4.1%
U Ethical	2.8%
State Street Global Advisors (Aus) Ltd	2.5%

Launches

There were five new Australasian sustainable funds launched in the fourth quarter of 2024. Betashares launched Ethical Australian Composite Bond ETF and New Zealand Sustainability Leaders ETF. Kernel launched two global ESG funds (unhedged and New Zealand dollar-hedged), while Equity Trustees launched a Responsible Investment Australian Share wholesale class. But there were also 12 sustainable fund closures over the period, indicating tough conditions for fund houses in general as margin pressures crept up. Some of the notable closures among the sustainable fund cohort were BNP Paribas Earth Trust, Affirmative Global Bond, Magellan Core ESG, and Magellan Sustainable. Maple-Brown Abbott closed its Australian Sustainable Future strategy, while Platinum shut its Global Transition ETF, and Zurich Investments closed the ACI Healthcare Impact strategy as well. As of the end of December 2024, we counted 261 strategies in our Australasian sustainable fund universe.

Exhibit 30 Australia and New Zealand Sustainable Fund Launches



Regulatory Update

The Australian Securities and Investments Commission continues to show its strategic priority in protecting investors from greenwashing risk. While the events surrounding the Mercer and Vanguard greenwashing cases took place through 2024, the recent penalties through the third and fourth quarter of 2024 crystalized the potential impact on firms that are in breach of the ASIC Act.

Vanguard Investments Australia received the largest greenwashing penalty so far of USD 8 million, while Mercer Superannuation (Australia) received a USD 7 million penalty. Both firms contravened the ASIC Act by making false or misleading representations and engaged in conduct that was liable to mislead the public about the nature, characteristics, and suitability of their purpose.

The onus is on the strategies and firms to ensure that their communicated identities and purposes are clear and precise. These need to be supported by documented evidence of their claims, with transparency around the metrics used, and have third-party validation or certification. Inadequate reporting frameworks and compliance mechanisms present the most risks for greenwashing.

Japan

Flows

Outflows from the Japanese sustainable funds landscape continued into the fourth quarter of 2024 with net withdrawals of more than USD 1.0 billion—its 10th consecutive quarter of outflows. This contrasts with the broader Japanese funds landscape, which registered inflows of USD 12.8 billion in the quarter.

While actively managed sustainable funds continued to mark their 11th consecutive quarter of withdrawals, their passively managed peers saw net inflows of USD 191 million. **AMOne Global ESG High Quality Growth Equity Unhedged** continued to be the top contributor to the outflows throughout 2024, shedding almost USD 350 million toward year-end.

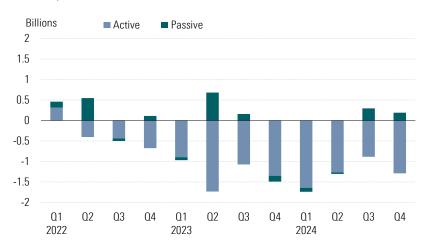


Exhibit 31 Japan Sustainable Fund Flows (USD Billion)

It should be noted that there is a possibility of double counting at the global level. Japan-domiciled funds of funds and feeder funds are included in this review to better reflect the actual flow situation in the Japanese fund market, as many Japanese funds of funds are invested in European funds.

Like in the previous quarter, the vast majority (95%) of the redemptions in the fourth quarter came from equity funds. Of the 20 funds hit the worst by withdrawals in the final quarter of 2024, 19 were equity funds.

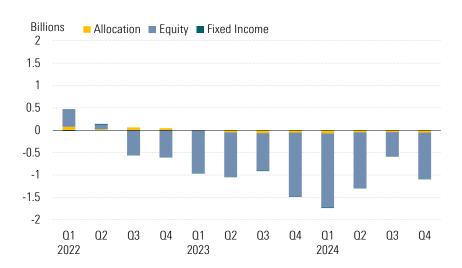


Exhibit 32 Japan Sustainable Fund Flows by Asset Class (USD Billion)

Source: Morningstar Direct. Data as of December 2024.

Assets

Assets in Japan-domiciled sustainable funds totaled USD 21 billion at the end of 2024, down 12.5% from USD 24 billion three months earlier. This contrasts with the performance of global equity markets, in which most Japan-domiciled sustainable funds invest. The Morningstar Global Target Market Exposure Index's total return for the third quarter was negative 1.08%, and this contrasts with the Japan-domiciled sustainable funds' decrease in assets, highlighting the impact of outflows. Actively managed funds still represent the predominant share, accounting for 85% of total assets within the sustainable fund category, with equity funds constituting 95% of Japan-domiciled sustainable funds.

Billions Active Passive

Exhibit 33 Japan Sustainable Fund Assets (USD Billion)

Launches

The Japanese sustainable funds market saw a rebound in product development with five new products in the fourth quarter. Fixed-income funds accounted for two of the new launches; both were global high-yield bond strategies from Sumitomo Mitsui DS Asset Management. The remaining three were equity funds, including Commons Maarui Future Co-Creation Fund cotocoto; it was the first open-end fund launched by Commons in 10 years. The fund invests in domestic and foreign companies creating positive impact on society, including those that focus on improving sustainable lifestyle and consumption and creating innovative businesses. The other new equity funds included NEXT FUNDS MSCI Global Climate 500 Japan Selection Index ETF and Nikko DC Japan Equity Human Capital Active Company Support. The former, launched by Nomura, invests in companies that aim to reduce greenhouse gas while excluding companies with negative ESG impacts. The Nikko fund is a defined-contribution fund that invests in companies focused on improving human resource investment, efficiency, and governance.

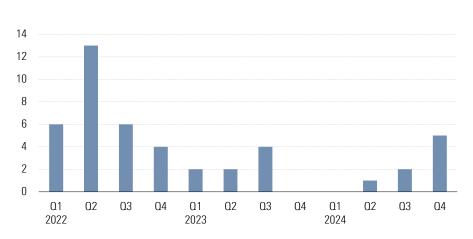


Exhibit 34 Japan Sustainable Fund Launches

Regulatory Update

There are no regulatory developments in Japan to report in the fourth quarter. The Financial Services Agency continues to host regular working groups to engage with stakeholders and promote sustainable funds.

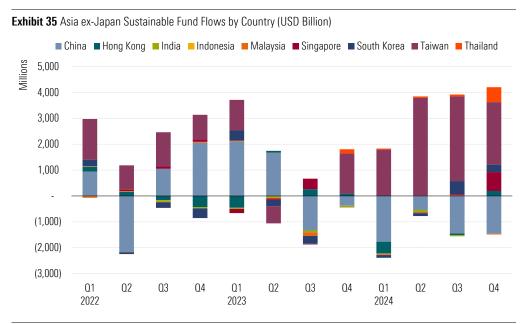
Asia ex-Japan

We used the most recent data available within the past quarter for funds whose full quarterly data was unavailable at the time of publication. Because China's data was not available at the time of publication, we used third-quarter 2024 data as a proxy for fourth-quarter 2024 data in every exhibit of this section. In third-quarter 2024, China-domiciled sustainable funds registered their fifth consecutive quarter of outflows, amounting to USD 1.4 billion, mostly from equity funds. Two index funds tracking the CSI Photovoltaic Industry Index led the outflows with collectively over USD 270 million in redemptions, while CIMF China Foreign Exchange Trade System Interbank Green Bond Index bucked the trend by attracting USD 143 million in net subscriptions over the period.

Flows

Excluding China, the Asia ex-Japan region experienced USD 4.2 billion in net inflows over fourth quarter-2024, the largest influx of the year. Over half of the capital, or USD 2.4 billion, went into Taiwan-domiciled sustainable funds. Cathay MSCI Taiwan ESG Sustainability High Dividend Yield ETF and Capital ICE ESG 20+ Year BBB US Corporate ETF continued to attract the largest sums. The former's explosive growth since its July 2020 inception can be attributed in part to the interest of retail investors, especially young Taiwanese investors, in investment products with high payout ratios, as well as the Financial Supervisory Commission's efforts to promote ESG in the market.

The Taiwanese sustainable fund market had an exceptional year in 2024, garnering USD 2.4 billion in net inflows.



Source: Morningstar Direct. Data as of December 2024. For China's Q4 flows, we used Q3 flows.

Hong Kong-domiciled sustainable funds saw their sole quarter of inflows in 2024, garnering USD 190 million over the fourth quarter. Index funds **Sun Life AM Hong Kong ESG Index** and **Sun Life AM Global Low Carbon Index** were particularly popular, leading the cohort with USD 195 million and USD 42 million, respectively. India, on the other hand, ended 2024 with its fourth consecutive quarter of outflows. It was the ninth consecutive quarter of outflows for **SBI ESG Exclusionary Strategy**, India's largest sustainable fund with almost USD 690 million of assets at the end of 2024.

The Thailand sustainable funds market stood out with USD 573 million in inflows in the fourth quarter, the most on record. Flows have generally increased since the introduction of the Thai ESG Fund Scheme in December 2023, which provides income tax deductions to investors in local sustainable investment products. Fixed-income funds accounted for over half of the flows in the market, including funds such as **K ESG Sovereign Instruments** and **KKP Government Bond Thailand ESG**.

In 2024, sustainable funds in Asia ex-Japan, excluding China, attracted USD 11.5 billion, 90% of which went into passive strategies. Passive funds accounted for 72% of the total assets in sustainable funds in the region at the end of the year, continuing their ascent after surpassing active funds earlier in the year, when they represented 47% of the total sustainable fund universe.

Billions ■ Active ■ Passive 4 3 2 0 -1 -2 01 02 03 04 01 02 03 04 01 02 03 04 2022 2023 2024

Exhibit 36 Asia ex-Japan Sustainable Fund Flows (USD Billion)

Most money into sustainable funds last year was poured into fixed-income strategies, while allocation funds saw net outflows.

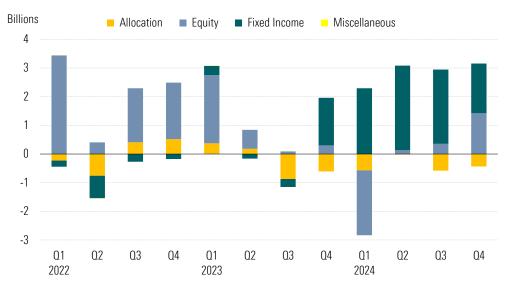


Exhibit 37 Asia ex-Japan Sustainable Fund Flows by Asset Classes (USD Billion)

Source: Morningstar Direct. Data as of December 2024.

Assets

Total sustainable fund assets in Asia ex-Japan (including China) expanded by 4% over the fourth quarter to USD 73.7 billion.³ Outside of China (for which data was not available at the time of publication), Taiwan sustainable funds continued to represent over one third of the region's total assets.

³ Excluding China's assets, sustainable funds in Asia ex-Japan increased by 7.6% over the fourth quarter to USD 37.7 billion.

The Thailand-domiciled sustainable fund market grew the most during the quarter, more than doubling in size to USD 933 million as of the end of 2024. Strong inflows and a steady stream of launches, discussed below, contributed to the expansion. Assets in Singapore-domiciled sustainable funds, meanwhile, increased a staggering 81% over the last three months of 2024, mainly owing to the growth of **iShares MSCI Asia Ex-Japan Climate Action ETF**, which counts Finnish pension fund Ilmarinen as a major investor. The ETF selects the top 50% of companies from each sector based on peer-relative assessments of each company's emissions intensity, emissions reduction commitments, climate risk management, and revenue from greener businesses.



Exhibit 38 Asia ex-Japan Sustainable Fund Assets (USD Billion)

Source: Morningstar Direct. Data as of December 2024.

Equity funds continued to dominate the Asia ex-Japan sustainable fund landscape at 59% of total assets at the end of 2024. Fixed-income funds maintained their market share after overtaking allocation funds in the third quarter of 2024, ending the year at 23% of assets versus allocation funds' 18%.

Launches

From October through December 2024, there were 20 new sustainable funds launched across the Asia ex-Japan region. Despite an uptick compared to the previous three quarters, the 48 Asia ex-Japan sustainable fund launches last year were the fewest since 2019.

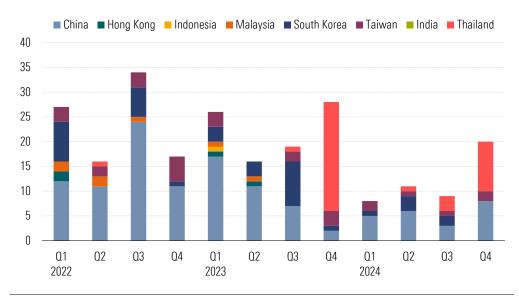


Exhibit 39 Asia ex-Japan Sustainable Fund Launches

Half of the launches in the fourth quarter were active Thailand-domiciled funds investing across a range of asset classes. Four focus on sovereign bonds, including Krung Thai ESG Sovereign Instruments, the largest Thailand-domiciled launch. The remaining six were equity funds, including two dividend-equity strategies launched in November—Tisco Dividend Select Equity Thailand ESG and SCB Thai Sustainable Dividend Equity—and three allocation funds. Outside of Thailand, eight new sustainable products that hit the shelves were from China, including three green bond funds: JPM CGT Green Bond, HSBC Jintrust Green Bond, and Penghua Green Bond. The remaining two were from Taiwan: income strategy Franklin Templeton SinoAm Taiwan ESG High Dividend ETF and allocation strategy Mega ESG Taiwan-US Sustainable Double Profits Multi-Asset.

Regulatory Update

In the final quarter of 2024, regulatory bodies and government-related agencies continued to introduce and improve on ESG-focused initiatives pertinent to the asset-management sector.

In October, a voluntary code of conduct for ESG ratings and data providers to combat greenwashing was published by the Hong Kong ESG Ratings and Data Providers VCoC Working Group, with sponsorship from the Securities and Futures Commission. The code is maintained by the International Capital Market Association and provides ratings and data-provider standards that are modeled on the International Organization of Securities Commission's best practices. In November, Hong Kong's SFC issued a circular stipulating expectations for asset managers when conducting due diligence on ESG ratings and data-product providers. The circular requires that asset managers exercise due skill and care when evaluating third-party ESG service providers, including an assessment of the adequacy of their resources.

In Taiwan, the Financial Supervisory Commission launched a "Green and Transition Finance Action Plan" in November that aims to assist the government and companies' transition to net zero emissions by 2050. The plan, which builds on three prior green finance action plans launched since 2017, contains five core strategies and six areas of focus that take into account international practices from countries that have already implemented transitional finance plans.

Also in November, major China bourses Shanghai Stock Exchange, Shenzhen Stock Exchange, and Beijing Stock Exchange issued guides to help companies prepare sustainability reports. The guides include tools for companies to improve their sustainable development governance frameworks, awareness, and disclosures.

In December, the Monetary Authority of Singapore released a paper that lays out good disclosure practices for retail ESG funds in the city-state. The paper is based on the review of prospectuses and periodic reports of ESG funds and aims to promote clear disclosures, including examples to illustrate the recommendations.

Appendix — Defining the Global Sustainable Fund Universe

The global sustainable fund universe encompasses open-end funds and ETFs that, by prospectus or other regulatory filings, claim to focus on sustainability, impact, or environmental, social, and governance factors.

Our definition differs from the EU's Sustainable Finance Disclosure Regulation, which defines "sustainable investments" at a holdings level. Our definition isn't based on any regulatory framework, nor does it meet the criteria of any particular regulatory framework.

Our universe of sustainable funds is based on intentionality rather than holdings. To identify intentionality, we relied on a combination of fund names (a strong indicator of intentionality) and information found in fund documents. The fund's documents should contain enough details to leave no doubt that ESG concerns figure prominently in the security selection and portfolio construction process.

The global sustainable fund universe does not contain the growing number of funds often referred to as "ESG integrated funds," which formally consider ESG criteria in the investment process and engage with portfolio holdings but do not make ESG considerations the focus of the investment process.

Furthermore, the global sustainable fund universe doesn't include funds that employ limited exclusionary screens such as controversial weapons, tobacco, and thermal coal (combined with an ESG integration approach or not). We, however, include ESG-screened passive funds in our universe as typically the exclusions are the sole purpose of the strategy.

Finally, when calculating flows and assets, we exclude feeder funds and funds of funds to avoid double counting. We make an exception for Japan and South Korea to better reflect the actual flow situation there as many Japanese funds of funds are invested in European funds. Money market funds are excluded in all markets.

To identify sustainable funds in their respective regions, analysts use the Sustainable Investment— Overall data point in Morningstar Direct. We also use the Sustainable Investment Overall Start Date data point to account for repurposed funds, where relevant.

⁴ Article 2(17) of SFDR defines the term sustainable investment as:

 ⁻ An investment in an economic activity that contributes to an environmental objective, as measured, for example, by key resource efficiency
indicators on the use of energy, renewable energy, raw materials, water and land, on the production of waste, and greenhouse gas emissions, or
on its impact on biodiversity and the circular economy;

Or an investment in an economic activity that contributes to a social objective, in particular an investment that contributes to tackling inequality or that fosters social cohesion, social integration, and labor relations, or an investment in human capital or economically or socially disadvantaged communities:

⁻ Provided that such investments do not significantly harm any of those objectives;

 ⁻ And provided that the investee companies follow good governance practices, in particular with respect to sound management structures, employee
relations, remuneration of staff, and tax compliance.

About Morningstar Sustainalytics

Morningstar Sustainalytics is a leading ESG research, ratings, and data firm that supports investors around the world with the development and implementation of responsible investment strategies. For 30 years, the firm has been at the forefront of developing high-quality, innovative solutions to meet the evolving needs of global investors. Today, Morningstar Sustainalytics works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. The firm also works with hundreds of companies and their financial intermediaries to help them consider sustainability in policies, practices, and capital projects. For more information, visit www.Morningstar Sustainalytics.com.

Copyright ©2025 Sustainalytics, a Morningstar company. All rights reserved.

The information, methodologies, data and opinions contained or reflected herein (the "Information") are proprietary to Sustainalytics and/or its third-party content providers, intended for internal, non-commercial use only and may not be copied, distributed or used in any other way, including via citation, unless otherwise explicitly agreed with us in writing. The Information is not directed to, nor intended for distribution to or use by India-based clients and/or users, and the distribution of Information to India resident individuals and entities is not permitted.

The Information is provided for informational purposes only and (1) does not constitute an endorsement of any product, project, investment strategy or consideration of any particular environmental, social or governance related issues as part of any investment strategy; (2) does not constitute investment advice nor recommends any particular investment, nor represents an expert opinion or negative assurance letter; (3) is not part of any offering and does not constitute an offer or indication to buy or sell securities, to select a project nor enter into any kind of business transaction; (4) is not an assessment of the economic performance, financial obligations nor creditworthiness of any entity; (5) is not a substitute for professional advice; (6) has not been submitted to, nor received approval from, any relevant regulatory or governmental authority. Past performance is no guarantee of future results. The Information is based on information made available by third parties, is subject to continuous change and no warranty is made as to its completeness, accuracy, currency, nor the fitness of the Information for a particular purpose. The Information is provided "as is" and reflects Sustainalytics' opinion solely at the date of its publication.

Neither Sustainalytics nor its third-party content providers accept any liability in connection with the use of the Information or for actions of third parties with respect to the Information, in any manner whatsoever, to the extent permitted by applicable law.

Any reference to third party content providers' names is solely to acknowledge their ownership of information, methodologies, data and opinions contained or reflected within the Information and does not constitute a sponsorship or endorsement of the Information by such third-party content provider. For more information regarding third-party content providers visit http://www.sustainalytics.com/legal-disclaimers. Sustainalytics may receive compensation for its ratings, opinions and other services, from, among others, issuers, insurers, guarantors and/or underwriters of debt securities, or investors, via different business units. Sustainalytics maintains measures designed to safeguard the objectivity and independence of its opinions. For more information visit Governance Documents or contact compliance@sustainalytics.com.