SFDR Article 8 and Article 9 Funds: Q2 2023 in Review

Article 8 funds bleed money again, while Article 9 funds register their lowest inflows on record.

Morningstar Manager Research
27 July 2023

Contents

Hortense Bioy, CFA
Global Director of Sustainability Research
Manager Research
hortense.bioy@morningstar.com

Boya Wang, Ph.D.
ESG Analyst, Manager Research, EMEA
boya.wang@morningstar.com

Arthur Carabia
Director, ESG Policy Research
arthur.carabia@morningstar.com

Biddappa A R
Senior Quantitative Analyst
Quantitative Research Technology

For more Information and data request:
ManagerResearchServices@morningstar.com

Executive Summary

Since the European Union's Sustainable Finance Disclosure Regulation came into force in March 2021, asset managers have been required to provide more information on the sustainability risks and impact of their investment products sold in the EU. The level of disclosure depends on the sustainability objective of the products—that is, whether these are classified as Article 8 or Article 9.

This report provides an update on the landscape of Article 8 and Article 9 funds at the end of June 2023, examining aspects such as flows, assets, fund launches and classifications, exposure to sustainable investments and taxonomy alignment, as well as other data from the European ESG Template, or EET. In this report, we also dive into the disclosure of principal adverse impact, or PAI, indicators at both product and entity-level. Quantitative entity PAI information was due by the end of second-quarter 2023.

Key Takeaways

- Article 8 funds suffered net redemptions of EUR 14.6 billion in the second quarter of 2023, amid continued macroeconomic pressures.
- Investors continued pouring net new money into Article 9 funds, but the EUR 3.6 billion these attracted in the last three months represent the lowest inflows on record for such products.
- Assets in Article 8 and Article 9 funds rose by 1.4% and for the first time passed the EUR 5 trillion-milestone.
- Reclassifications slowed down. About 180 funds upgraded to Article 8 from Article 6, while only six downgraded to Article 8 from Article 9. Seven Handelsbanken Paris-aligned index funds, which were previously downgraded to Article 8 from Article 9, reverted to Article 9.
- Asset managers continued fine-tuning their measurement of sustainable investments in portfolios. In the last three months, about 230 Article 8 and Article 9 funds updated their minimum sustainable-investment allocations. Half of Article 8 funds target an allocation of at least 10%.
- The majority of Article 8 funds consider at least half of the 14 mandatory PAIs for corporate investments, while the majority of Article 9 funds consider at least 11 of them. But less than 10% of Article 9 funds consider all 14 corporate PAIs.
- By June 2023, asset managers had to disclose entity-level PAI statements on a comply-or-explain basis. Differences in scope, asset mix, data sources, and methodologies render comparisons between managers impossible. These statements should prove their value over time.
- Asset managers are increasingly keen to add carbon emission reduction objectives to their strategies. Close to 600 Article 8 and Article 9 funds now report having a carbon reduction objective.

The Article 8 and Article 9 Fund Universe

The Article 8 and Article 9 fund universe in this study encompasses open-end and exchange-traded funds in the scope of the SFDR that state in their prospectuses that they either promote environmental and/or social characteristics (Article 8, "light green" funds) or have a sustainable-investment objective (Article 9, "dark green" funds). We identified these funds using the EU SFDR Fund Type (Article 8 or Article 9) data point in the Morningstar Direct database. Funds in the scope of the SFDR that are neither Article 8 nor Article 9 are Article 6 funds (Not Stated in Morningstar Direct). This report uses SFDR disclosures collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

Article 8 Funds in the Red, While Article 9 Remain Favored

Amid continued macroeconomic pressures, including rising interest rates, inflation, and a looming recession, Article 8 funds shed EUR 14.6 billion in the second quarter after inflows of EUR 26 billion in the first quarter of 2023.

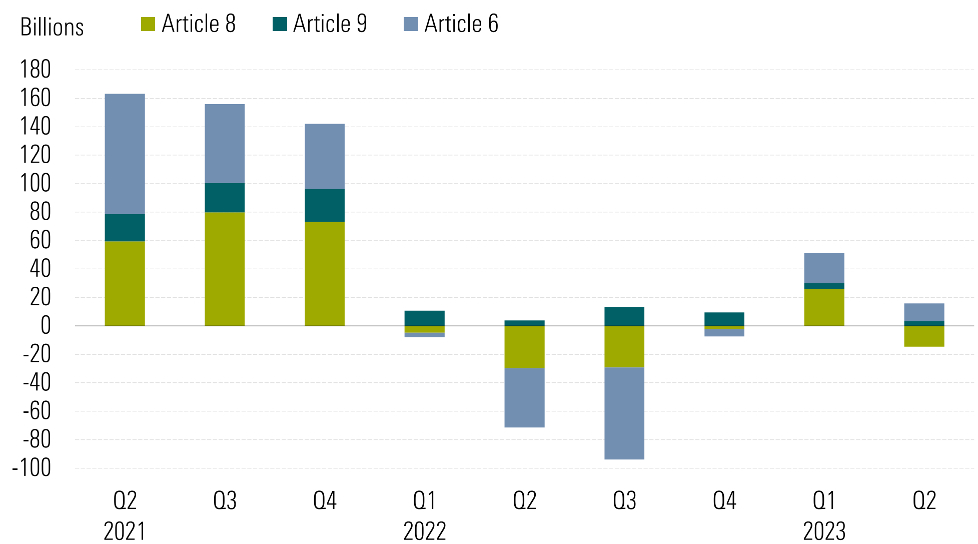
The redemptions in the last three months disproportionally affected the Article 8 funds with no commitment to sustainable investments[1] as these registered outflows of EUR 9.8 billion, representing two thirds of the total Article 8 outflows over the period, while funds with no minimum sustainable investments account for less than one third of the Article 8 fund universe[2].

Meanwhile, investors continued pouring net new money into Article 9 products as these attracted EUR 3.6 billion in the second quarter. Nevertheless, this is less than the restated EUR 4.4 billion for the previous quarter. It represents the lowest inflows for Article 9 funds since the introduction of SFDR in March 2021. The consecutive substantial flow slump since the last quarter of 2022 reflects the continued influence from the reclassification of about 350 Article 9 funds to Article 8 following ESMA's clarification of the EC's June 2021 Q&A last summer. It specified that funds making Article 9 disclosures should hold only sustainable investments, except for cash and assets used for hedging purposes.

Article 6 products continued gathering net new money, too, though the inflow momentum softened to EUR 12.3 billion from the restated EUR 21 billion in the first quarter of 2023.

1 Funds with a value equal to zero in the EU SFDR Minimum or Planned Investments Sustainable Investments field in Morningstar Direct.
2 Based on assets at the end of June 2023.

Exhibit 1 Quarterly Flows Into Article 8 and Article 9 Funds Versus Article 6 Funds (EUR Billion)



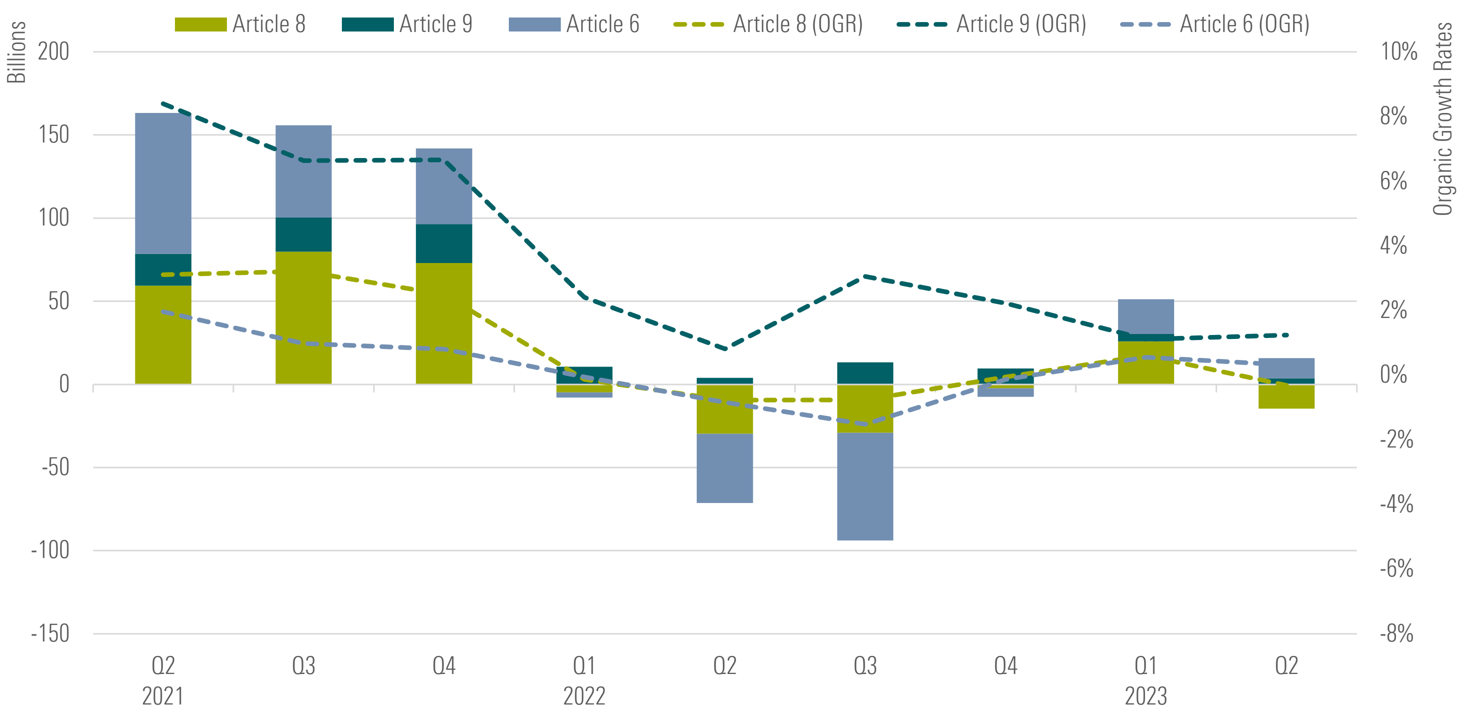
Source: Morningstar Direct. Data as of June 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

Organic growth rates almost mirror the findings above. Organic growth rates measure the growth of flows relative to assets.[3] Over the quarter, assets in Article 8 funds shrunk organically by 0.3%, whereas Article 9 funds rose by 1.2%, and Article 6 funds by 0.3%.

Monthly flow data shows that Article 8 funds wound down and even moved into negative territory toward the end of the quarter. Article 9 funds shared a similar story. Reclassifications pushed their OGRs to slump from December, but they remained positive at quarter end.

3 Organic growth rate is calculated as current period flows divided by beginning-of-period net assets.

Exhibit 2 Quarterly Flows Into Article 8 and Article 9 Funds Versus Article 6 Funds (EUR Billion) and Organic Growth Rates (%)



Source: Morningstar Direct. Data as of June 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

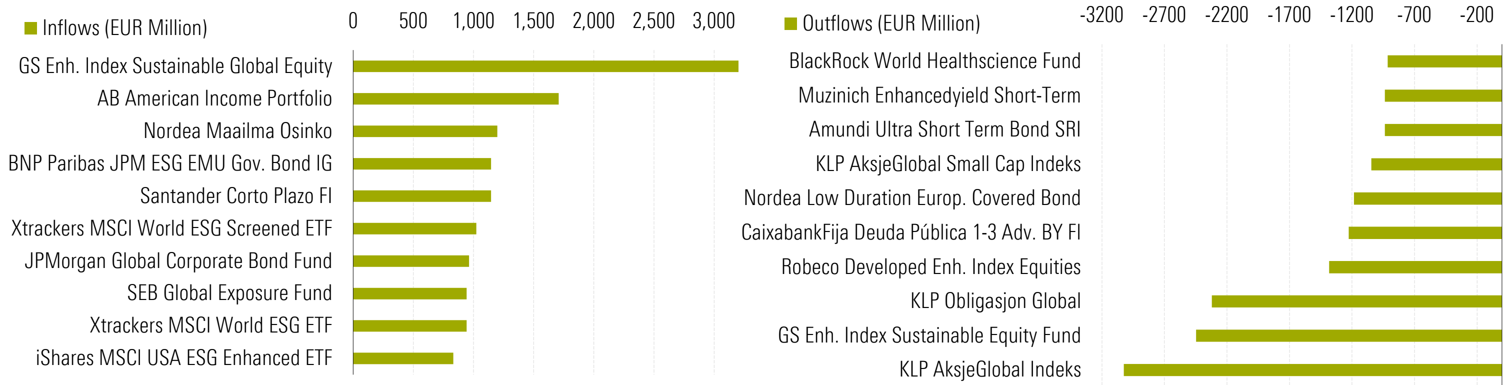
Flows—Leaders and Laggards

Below are the Article 8 and Article 9 funds that saw the largest inflows and outflows over the second quarter of 2023.

We see a stronger presence of passive strategies among the bestselling sustainable products relative to the previous quarter. **Goldman Sachs Enhanced Index Sustainable Global Equity Fund** hauled over EUR 3.2 billion. However, this significant flow movement was due to a client switching accounts between this fund and another two Goldman Sachs Enhanced Index ETFs, including **Goldman Sachs Enhanced Index Sustainable Equity Fund**, which is listed in the outflow leaderboard of Article 8 funds.

AB American Income Portfolio remained as one of the bestselling products and captured another EUR 1.7 billion in the second quarter. **Nordea Maailma Osinko** elevated to the third place, after pocketing almost EUR 1.2 billion. The fund uses a proprietary quantitative PAI tool that assesses the impact of its investment universe across multiple PAI indicators and identifies potential outliers. It refrains from investing in companies that have significant exposure to fossil fuels unless they have a credible transition strategy. The fund was closely followed by **BNP Paribas JPM ESG EMU Government Bond IG**, which follows an exclusionary approach based on ESG scores. The underlying index ranks issuers' three-month rolling average ESG scores provided by Sustainalytics and RepRisk and divides them into 10 bands. Issuers in Band 9 or 10 are excluded from the index.

Exhibit 3 Article 8 Funds With the Largest Inflows and Outflows in the Second Quarter of 2023



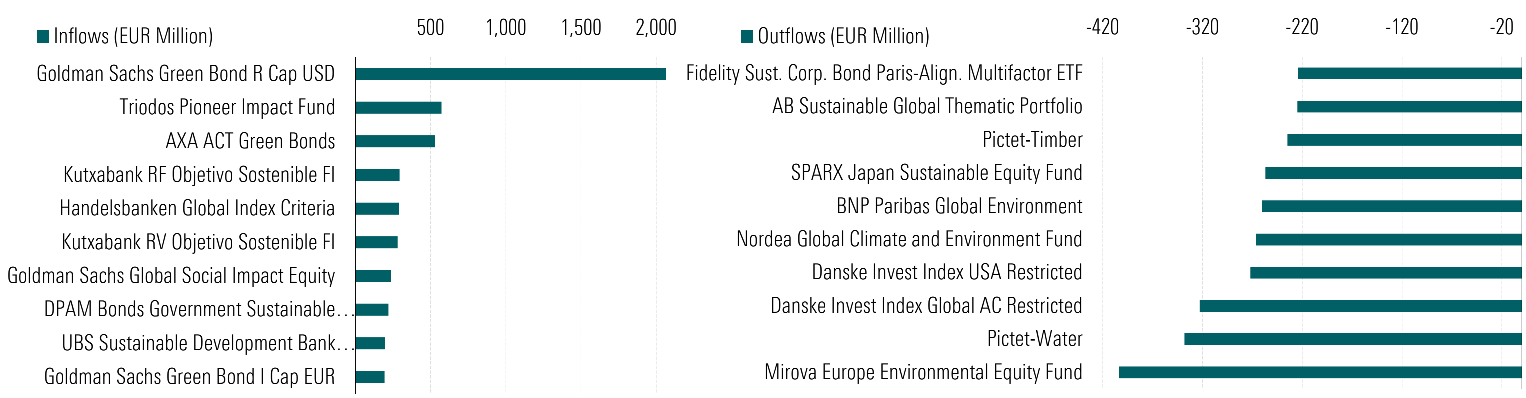
Source: Morningstar Direct. Data as of March 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

Among the Article 8 funds registering the biggest outflows, we see three KLP funds.

Meanwhile, topping the list of Article 9 bestselling products in the second quarter was **Goldman Sachs Green Bond R Cap USD**, followed distantly by **Triodos Pioneer Impact Fund** and **AXA ACT Green Bonds**. The Triodos impact-focused strategy invests in equities of companies in developed countries and whose products or services contribute to at least one of the transition themes defined by Triodos, including sustainable food and agriculture, renewable resources, circular economy, sustainable mobility and infrastructure, prosperous and healthy people, innovation for sustainability, or social inclusion and empowerment.

AXA ACT Green Bonds applies a proprietary green, social, and sustainability bonds assessment framework, mainly based on the ICMA Green and Social Bond Principles and the Climate Bonds Initiative Guidelines.

Exhibit 4 Article 9 Funds With the Largest Inflows and Outflows in the First Quarter of 2023



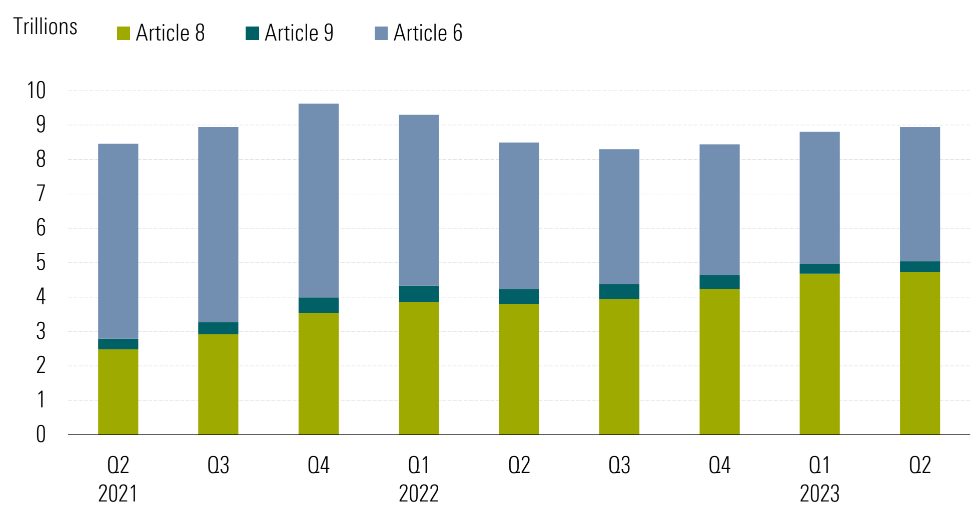
Source: Morningstar Direct. Data as of March 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

Article 8 and Article 9 Fund Assets Hit the EUR 5 Trillion Mark for the First Time

Despite the outflows, assets in Article 8 and Article 9 funds rose by 1.4% over the second quarter of 2023, driven by newly launched funds, products reclassified to Article 8 from Article 6, and, to a lesser extent, market appreciation. Article 6 fund assets rose by 1.7% over the period, surpassing the asset growth rate of Article 8 and Article 9 funds for the first time since the enactment of SFDR in March 2021.

For the first time as well, Article 8 and Article 9 fund assets passed the EUR 5 trillion milestone, reaching EUR 5.04 billion at the end of June, from the restated EUR 4.9 trillion at the end of March. The two fund groups accounted for a constant share of the EU universe of 56.4%.

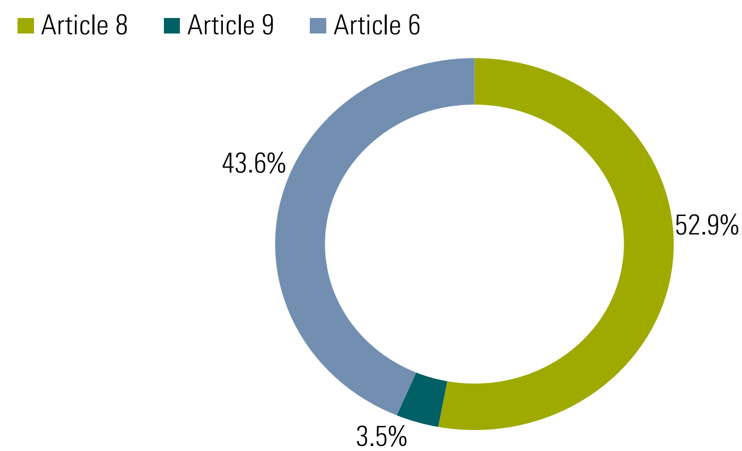
Exhibit 5 Quarterly Asset Breakdown by SFDR Classification (EUR Trillion)



Source: Morningstar Direct. Assets as of June 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

Caused by the redemptions, Article 8 funds saw their market share decline slightly to 52.9% at the end of June from last quarter's 53.8%. The share of Article 9 product, however, inched ahead to 3.5%, as their assets expanded by 7.8% over the past three months to EUR 310 billion after four consecutive quarters of contraction caused by the wave of reclassifications.

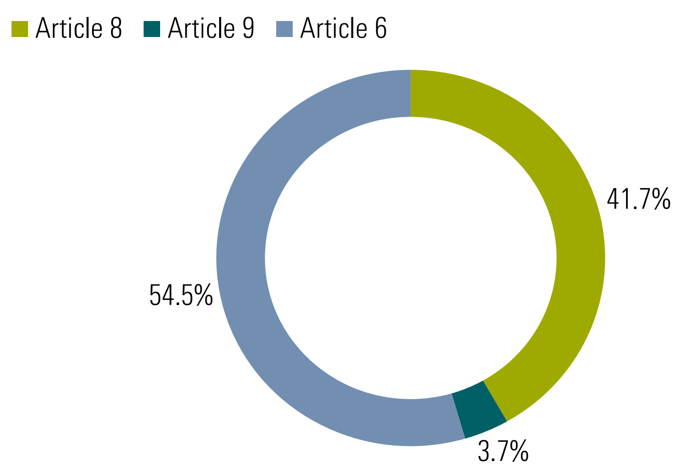
Exhibit 6a SFDR Fund Type Breakdown (by Assets)



Source: Morningstar Direct. Assets as of June 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

Measured by number of funds,[4] the combined market share of Article 8 and Article 9 products rose slightly to 45.5%. The number of Article 9 funds increased to 947 from 887 three months earlier, representing a market share of 3.7%, from 3.6% at the end of March. Meanwhile, the Article 8 category grew steadily to 10,649 at the end of June, expanding its market share to over 41.7%.

Exhibit 6b SFDR Fund Type Breakdown (by Number of Funds)



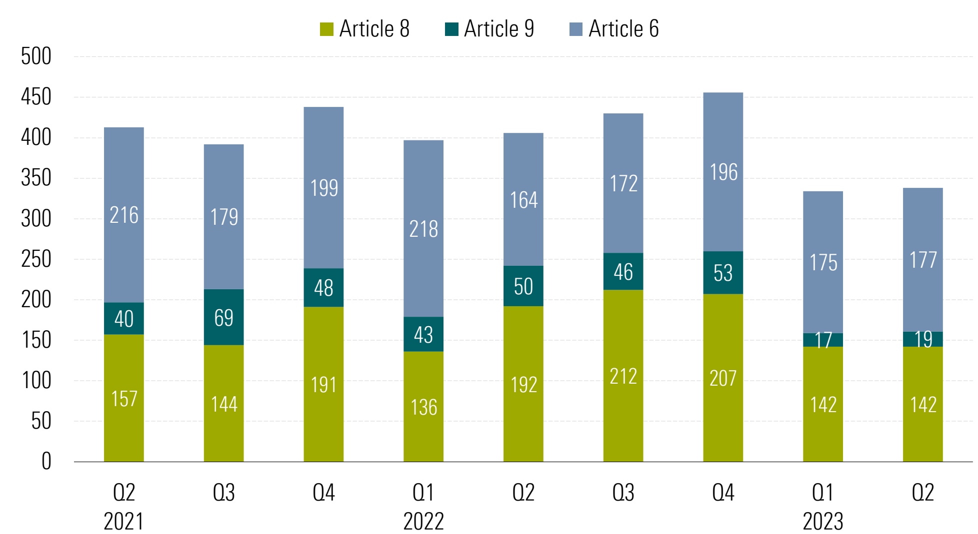
Source: Morningstar Direct. Assets as of June 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

4 Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

Fund Launches

The number of newly launched Article 8 and Article 9 funds totaled 161 in the second quarter. While this number shows little change from the first quarter's, it will likely be restated in future reports as we identify more launches and as additional ones are reported to Morningstar. Depending on the extent of the restatement, we may observe a continued slowdown in product development activity for Article 8 and Article 9 strategies.

Exhibit 7 Quarterly Number of Fund Launches

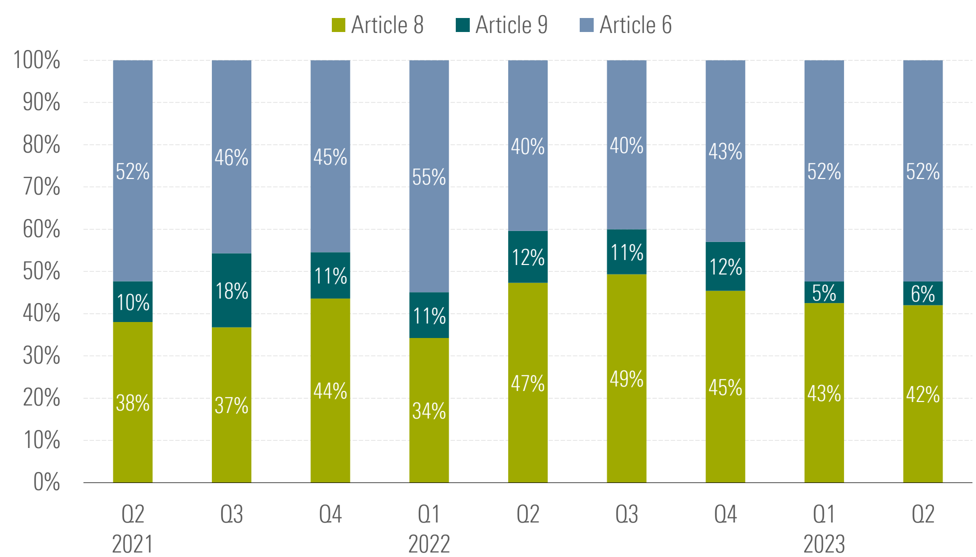


Source: Morningstar Direct. Data as of June 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

The decline in new products can be partly attributed to the overall market sentiment damped by the challenging macro environment of sticky inflation, a looming recession, and other economic uncertainties. Additional factors potentially contributing to the slow Article 8 and Article 9 product development activity are greenwashing accusations and the ever-evolving regulatory environment. A clarification by ESMA[2] in the summer 2022 led to about 350 Article 9 funds to be downgraded to Article 8 funds in the second part of last year, while waiting for further guidance on fund classification and how to interpret the definition of a "sustainable investment" provided by Article 2 No. 17 of SFDR.

In the second quarter of 2023, newly incepted Article 8 and Article 9 funds still accounted for almost half of the total number of funds launched in the EU.

Exhibit 8 Quarterly Breakdown of Fund Launches



Source: Morningstar Direct. Data as of June 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

Asset managers continued to expand the range of Article 8 and Article 9 options available to investors in terms of asset class, market exposure, investment style, and theme. Equity and fixed income represented the major source of the greatest product proliferation and with greater numbers of new offerings of 65 and 61, respectively, compared with previous quarters, followed by allocation (39), respectively. Alternatives and miscellaneous made up the rest.

Examples of newly launched equity funds include **Lombard Odier Future Electrification** and **Amundi MSCI World ESG Leaders ETF.** The former aims to capture "green alpha" from companies contributing to the electrification of global energy systems, including electric vehicles, heat pumps, and renewable energy.

Furthermore, two green bond funds, namely **Goldman Sachs Green Bond R Cap** and **UBS Global Green Bond ESG 1-10 ETF**, came to the market, as investors are drawn to higher yield prospect and a narrowing "greenium." The latter tracks the Bloomberg Barclays MSCI Global Green Bond Index. Eligible green bonds fulfill much of the criteria articulated in the Green Bond Principles—that is, demonstrate sufficient transparency of stated use of proceeds, process for green project evaluation, process for proceeds management, and continued disclosure of the environmental performance of the use of proceeds.

Reclassifications Are Slowing Down

In the second quarter of 2023, asset managers continued to upgrade funds by enhancing ESG integration processes, adding binding ESG criteria (including carbon reduction objectives -see the last section of this report), or in some cases completely changing the mandate of the strategy.

Since our last report at the end of March, we identified about 210 funds that have altered their SFDR status: 197 were upgrades, the majority of which (182) moved to Article 8 from Article 6, three upgraded to Article 9 from Article 6, and 12 funds moved to Article 9 from Article 8. Meanwhile, six funds downgraded to Article 8 from Article 9.

Exhibit 8a Funds Reclassified to Article 9 from Article 8 in the Second Quarter of 2023

Name	Old SFDR Fund Type	New SFDR Fund Type	AUM (EUR Million)	Morningstar Category	Active / Passive
Handelsbanken Global Index Criteria	Article 8	Article 9	7,311	Global Large-Cap Blend Equity	Passive
Handelsbanken USA Index Criteria	Article 8	Article 9	4,530	US Large-Cap Blend Equity	Passive
Handelsbanken Norden Index Criteria	Article 8	Article 9	3,208	Nordic Equity	Passive
Mercer Passive Sustainable Global Equity	Article 8	Article 9	2,986	Other Equity	Passive
Handelsbanken Europa Index Criteria	Article 8	Article 9	1,920	Europe Large-Cap Blend Equity	Passive
Handelsbanken Global Småbolag Index Criteria	Article 8	Article 9	1,097	Global Small/Mid-Cap Equity	Passive
Handelsbanken Emerging Markets Index	Article 8	Article 9	831	Global Emerging Markets Equity	Passive
Danske Invest Kehittyvät Osakemarkkinat	Article 8	Article 9	112	Global Emerging Markets Equity	Active
Handelsbanken Norge Index Criteria	Article 8	Article 9	102	Norway Equity	Passive
Arca Blue Leaders	Article 8	Article 9	21	Global Large-Cap Blend Equity	Active
Man GLG Sustainable Strategic Income	Article 8	Article 9	16	Global Corporate Bond - USD Hedged	Active
LFR Actions Solidaires ISR	Article 8	Article 9	15	Eurozone Flex-Cap Equity	Active

Source: Morningstar Direct. Assets as of June 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

Of the 12 upgrades to Article 9 from Article 8 (Exhibit 8a), seven Handelsbanken Paris-aligned index funds happen to be funds that were downgraded by their managers to Article 8 from Article 9 at the end of last year or early this year. These funds were reclassified following the long-awaited clarification from the European Commission in its answers to the European Supervisory Authorities' questions published in April that funds tracking Paris-aligned and climate-transition benchmarks automatically qualify for Article 9 and don't need to additionally ensure compliance with the Article 2(17) sustainable investments test. This view back tracked from previous guidance given by the EU authorities on this point (as they had previously stated that Article 2(17) must be applied on top. It remains to be seen if more PAB/CTB funds currently classified as Article 8 will be upgraded. Managers are currently consulting with clients and monitoring market practices and regulatory developments to inform their decisions.

Noteworthy among the six funds that downgrades to Article 9 from Article 8 (Exhibit 8b), there is **UBS Global Green Bond ESG 1-10 ETF**. A couple of other green bond ETFs have been downgraded in the past, but most green bond funds have remained classified as Article 9.

Exhibit 8b Funds Reclassified to Article 8 from Article 9 in the Second Quarter of 2023

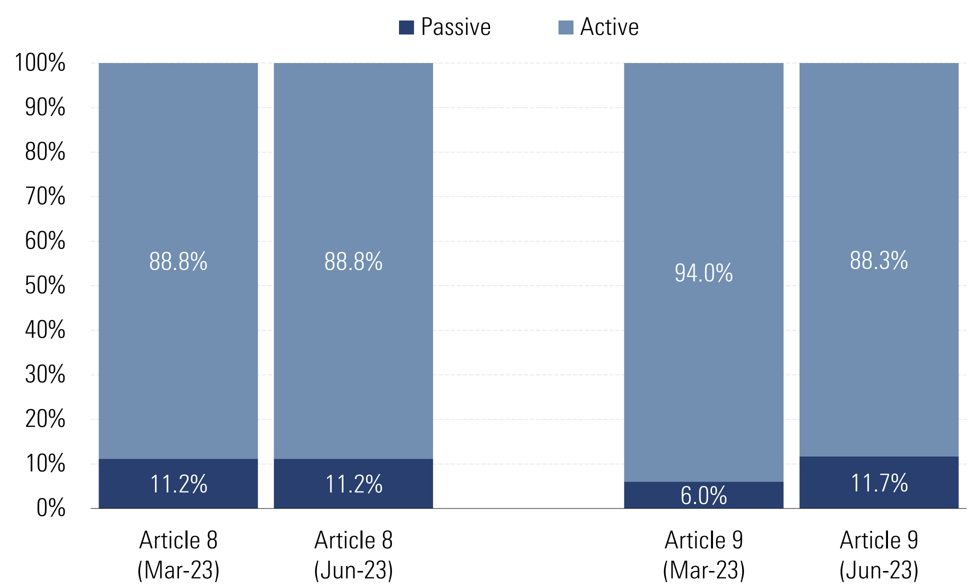
Name	Old SFDR Fund Type	New SFDR Fund Type	AUM (EUR Million)	Morningstar Category	Active / Passive
BL-Bond Emerging Markets Euro	Article 9	Article 8	328	Global Emerging Markets Bond	Active
BL- Global Bond Opportunities	Article 9	Article 8	305	Global Bond - EUR Hedged	Active
Globalance Zukunftbeweger focused	Article 9	Article 8	90	Global Flex-Cap Equity	Active
BL - Bond Emerging Markets Dollar	Article 9	Article 8	47	Global Emerging Markets Bond	Active
BL-Bond Euro	Article 9	Article 8	21	EUR Diversified Bond	Active
UBS Global Green Bond ESG 1-10 ETF	Article 9	Article 8	19	Global Bond	Active

Source: Morningstar Direct. Assets as of June 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

Passive Article 9 Funds Regain Ground on the Back of Fresh Upgrades

Following the Article 9 to Article 8 reclassification of sizable index funds and ETFs tracking EU climate benchmarks, the market share of Article 9 passive funds shrunk significantly to 5.1% in December 2022 from 24.1% in September. But by the end of June 2023, this percentage rebounded to almost 12% from 6% three months earlier, after Handelsbanken reclassified its seven Paris-aligned passive strategies (see previous section).

Exhibit 9 Market Share of Active and Passive Funds Classified as Article 8 and Article 9 for Second-Quarter 2023



Source: Morningstar Direct. Assets as of June 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

Meanwhile, the market share of Article 8 passive funds leveled with the previous quarter, at 11.2%.

The Largest Article 8 and Article 9 Funds

Over the past three months, the league table of the 20 largest Article 8 funds has remained relatively stable.

Meanwhile, we count a majority (11) of funds that target no or low (up to 10%) exposure to sustainable investments. Three funds have committed to a minimum of 20%, while **Pictet-Global Megatrend Selection** targets a 51% sustainable investment allocation.

Exhibit 10 The 20 Largest Article 8 Funds

Name	SFDR Fund Type	Min % Sustainable Investments	Morningstar Category	AUM (EUR Billion)	Active / Passive	Morningstar Sustainability Rating
Flossbach von Storch Multiple Opportunitie	8	0	EUR Flexible Allocation - Global	25.1	Active	🌐🌐🌐
Morgan Stanley Global Brands Fund	8	10	Global Large-Cap Blend Equity	20.6	Active	🌐🌐🌐🌐🌐
DWS Top Dividende	8	15	Global Equity Income	19.8	Active	🌐
AB FCP I - American Income Portfolio	8	0	USD Flexible Bond	18.7	Active	🌐🌐
JPMorgan Global Income Fund	8	10	EUR Moderate Allocation - Global	18.2	Active	🌐🌐
Deka-ImmobilienEuropa	8	N/A	Property - Direct Europe	18.1	Active	–
hausInvest	8	5	Property - Direct Europe	17.4	Active	–
UniImmo: Deutschland	8	N/A	Property - Direct Europe	16.5	Active	–
Fidelity Funds - Global Technology Fund	8	5	Sector Equity Technology	16.2	Active	🌐🌐🌐
UniImmo: Europa	8	N/A	Property - Direct Europe	15.0	Active	–
DWS Concept Kaldemorgen	8	10	EUR Flexible Allocation - Global	14.2	Active	🌐🌐🌐🌐🌐
BlackRock World Healthscience Fund	8	0	Sector Equity Healthcare	12.7	Active	🌐🌐🌐🌐
AB FCP I - Global High Yield Portfolio	8	0	Global High Yield Bond	12.5	Active	–
Flossbach von Storch Multiple Opport.	8	0	EUR Flexible Allocation - Global	12.2	Active	🌐🌐🌐
DWS Vermögensbildungsfonds I	8	15	Global Large-Cap Blend Equity	12.0	Active	🌐🌐🌐
Mercer Multi Asset Growth Fund	8	20	GBP Allocation 60-80% Equity	11.9	Active	🌐🌐🌐🌐
Fidelity Funds - Global Dividend Fund	8	20	Global Equity Income	11.7	Active	🌐🌐🌐🌐
Pictet-Global Megatrend Selection	8	51	Global Flex-Cap Equity	11.3	Active	🌐🌐🌐🌐
iShares MSCI USA ESG Enhanced ETF	8	20	US Large-Cap Blend Equity	11.2	Passive	🌐🌐🌐🌐
Morgan Stanley Global Opportunity Fund	8	0	Global Large-Cap Growth Equity	10.8	Active	🌐🌐🌐

Source: Morningstar Direct. Data as of June 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

With the return of Handelsbanken PAB funds to the Article 9 category, the three largest funds of the range reappeared in the top 20 Article 9 fund table at the end of June. Another passive fund, **Mercer Passive Sustainable Global Equity CCF,** is a new entry, too. The fund, which tracks the Solactive Sustainable Global Developed Equity EU Paris-Aligned Index, reclassified as Article 9 from Article 8 in the second quarter.

As expected, all (but one) Article 9 funds in the table above have high sustainable investment targets (above 80%), with the rest representing various allocations to cash and hedging instruments. The only exception is **Mercer Passive Sustainable Global Equity**, with a minimum sustainable investment commitment of only 35%.

Exhibit 11 The 20 Largest Article 9 Funds

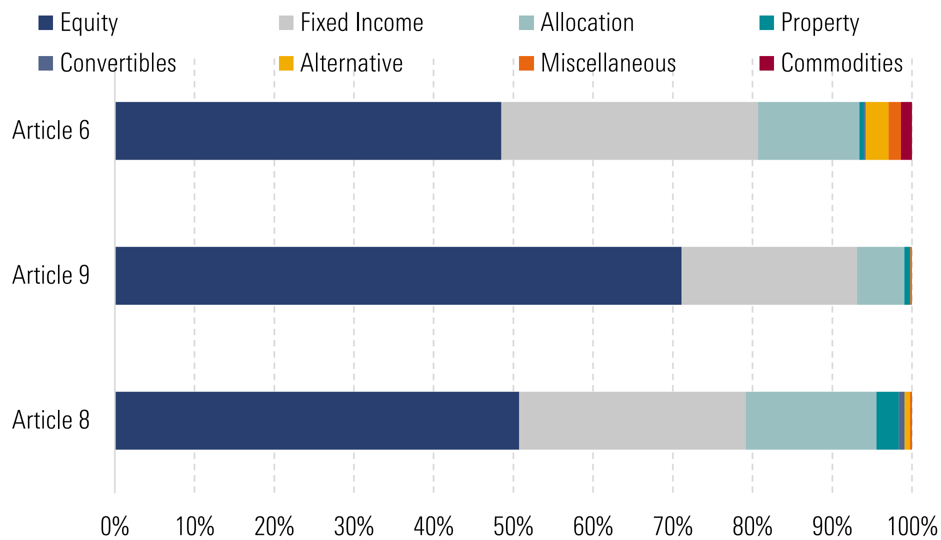
Name	SFDR Fund Type	Min % Sustainable Investments	Morningstar Category	AUM (EUR Billion)	Active / Passive	Morningstar Sustainability Rating
Nordea Global Climate and Environment	9	85	Sector Equity Ecology	9.9	Active	🌐🌐🌐🌐
Pictet-Water	9	80	Sector Equity Water	8.0	Active	🌐🌐🌐🌐
Pictet Global Environmental Opportunities	9	80	Sector Equity Ecology	7.7	Active	🌐🌐🌐🌐🌐
Handelsbanken Global Index Criteria	9	90	Global Large-Cap Blend Equity	7.3	Passive	🌐🌐🌐
BlackRock Sustainable Energy Fund	9	80	Sector Equity Alternative Energy	6.7	Active	🌐🌐🌐🌐🌐
Pictet-Clean Energy Transition	9	80	Sector Equity Alternative Energy	4.9	Active	🌐🌐🌐🌐🌐
Mirova Global Sustainable Equity Fund	9	90	Global Large-Cap Growth Equity	4.8	Active	🌐🌐🌐🌐🌐
Handelsbanken USA Index Criteria	9	90	US Large-Cap Blend Equity	4.5	Passive	🌐🌐🌐🌐
RobecoSAM Smart Energy Equities	9	90	Sector Equity Alternative Energy	4.1	Active	🌐🌐🌐🌐🌐
BNP Paribas Funds Aqua	9	85	Sector Equity Water	3.7	Active	🌐🌐🌐🌐
BNP Paribas Aqua	9	85	Sector Equity Water	3.5	Active	🌐🌐🌐🌐
RobecoSAM Sustainable Water Equities	9	90	Sector Equity Water	3.4	Active	🌐🌐🌐🌐
Handelsbanken Norden Index Criteria	9	90	Nordic Equity	3.2	Passive	🌐🌐🌐
BNP Paribas Funds Climate Impact	9	85	Sector Equity Ecology	3.1	Active	🌐🌐🌐🌐🌐
DPAM Bonds EM Sustainable	9	80	Global EM Bond - Local Currency	3.0	Active	🌐🌐🌐🌐
Mercer Passive Sustainable Global Equity	9	35	Other Equity	3.0	Passive	🌐🌐🌐🌐
AB Sustainable Global Thematic Portfolio	9	80	Global Large-Cap Growth Equity	2.9	Active	🌐🌐🌐🌐🌐
Handelsbanken Hållbar Energi	9	90	Sector Equity Alternative Energy	2.8	Active	🌐🌐🌐🌐
BNP Paribas Funds Global Environment	9	85	Sector Equity Ecology	2.7	Active	🌐🌐🌐🌐🌐
Impact ES Actions Europe	9	90	Europe Large-Cap Blend Equity	2.6	Active	🌐🌐🌐🌐

Source: Morningstar Direct. Data as of June 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

Article 8 and Article 9 Funds Per Broad Asset Class

While Article 8 funds resemble Article 6 funds in terms of asset-class distribution, Article 9 funds continue leaning more toward equity. Such funds account for 71% of Article 9 products as of June 2023, versus 51% and 48% in the Article 8 and Article 6 fund group, respectively.

Exhibit 12 Article 8 and Article 9 Funds Per Broad Asset Class



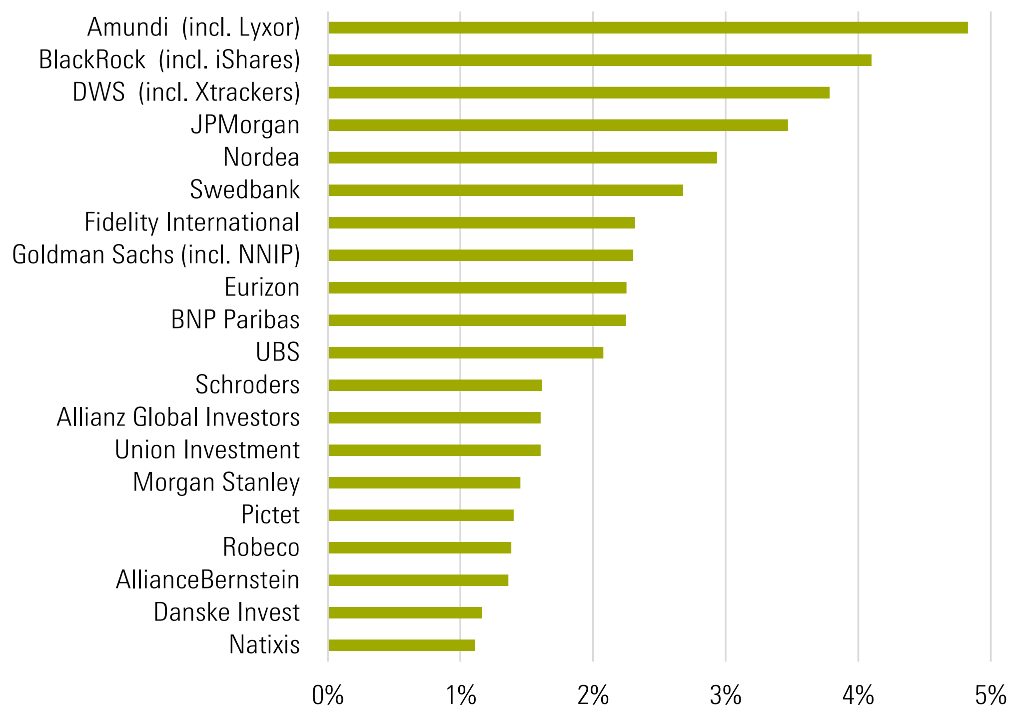
Source: Morningstar Direct. Data as of June 2023. Based on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds.

Provider League Tables

Exhibits 13 and 14 show the 20 asset managers with the highest market share in Article 8 and Article 9 funds, ranked by assets.

With reclassifications easing off, the Article 8 fund provider league table saw little change compared with the first quarter of 2023.

Exhibit 13 Top 20 Asset Managers by Article 8 Fund Assets

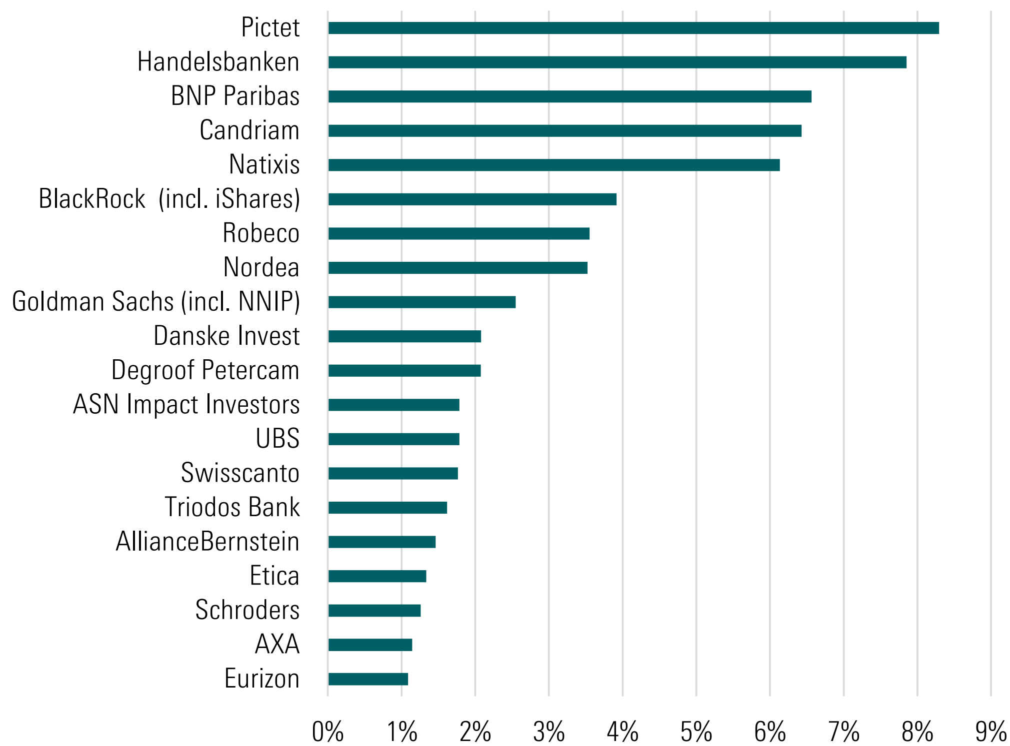


Source: Morningstar Direct. Assets as of June 2023 on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds. Using Branding Name in Morningstar Direct, a manager's market share is calculated as following: manager's Article 8 fund assets divided by total market Article 8 fund assets.

After reclassifying its range of Paris-aligned index funds totaling EUR 19 billion in assets, Handelsbanken reemerged in the top Article 9 fund provider league table and landed in second position, pushing down many other managers. While remaining the largest provider of Article 9 products, Pictet saw its market share shrink by 0.7 percentage points to 8.3% in the last three months. BNP Paribas dropped to the third place with a 6.6% market share, down from 7.2% at the end of March.

Meanwhile, Natixis, while losing one place, saw a notable increase in its Article 9 fund market share in the last three months, to 6.1% from 4.8%.

Exhibit 14 Top 20 Asset Managers by Article 9 Fund Assets



Source: Morningstar Direct. Assets as of June 2023 on SFDR data collected from prospectuses on 97.6% of funds available for sale in the EU, excluding money market funds, funds of funds, and feeder funds. Using Branding Name in Morningstar Direct, a manager's market share is calculated as following: manager's Article 9 fund assets divided by total market Article 9 fund assets.

Article 8 and Article 9 Funds Through the Lens of the EET

Since August 2022, the amended MiFID II requires financial intermediaries to consider clients' sustainability preferences when conducting suitability assessments. If clients express interest in making sustainable investments, financial intermediaries have to accommodate. Depending on the specific client's preferences, financial intermediaries will have to source products that have a minimum proportion of sustainable investments as defined by the SFDR or the EU Taxonomy. Clients may also choose only investments that consider principal adverse impacts, or PAIs.

To facilitate this process, a European ESG template, or EET, was developed by industry representatives (FinDatEx) to ease the exchange of data between asset managers and distributors. Asset managers marketing their funds in the EU have been submitting EET data to third-party data organizations like Morningstar Sustainalytics on a voluntary basis since June 2022.

As of end of June 2023, Morningstar had collected EET data on 105,630 share classes, accounting for 73.8% of all share classes in the scope of MiFID II. These represent 19,896 funds,[5] including 9,168 Article 8 funds and 800 Article 9 funds.

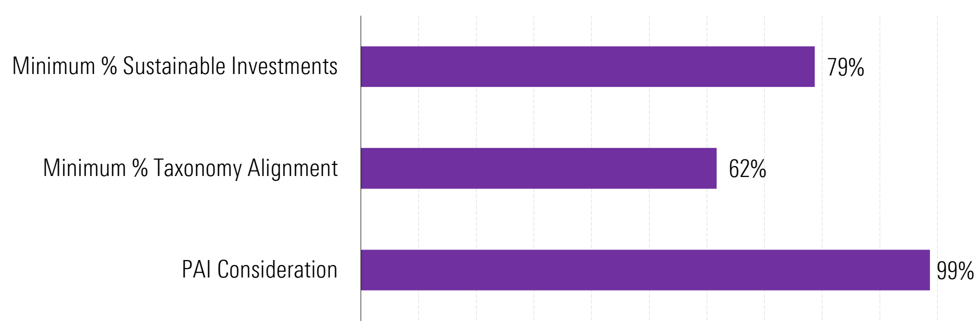
5 The number of funds and share classes estimated to be in the scope of the EET is 38,330 and 143,179, respectively. Money market funds, funds of funds, and feeder funds are included in this section on the EET.

In this section, we analyze the coverage and values of the three following EET fields, as featured in the Morningstar Direct database, namely:

1) **EU SFDR Minimum or Planned Investments Sustainable Investments**, representing the minimum percentage of portfolio investments that are deemed sustainable but are not taxonomy-aligned. Answers are numerical values.[6]
2) **EU SFDR Minimum or Planned Investments Sustainable Investments Taxonomy Aligned**, representing the minimum percentage of the portfolio that is aligned with the EU Taxonomy. Answers are numerical values.[7]
3) **PAI Consideration**, indicating whether a product considers principal adverse impact in its investments. Answers are "Yes" or "No."[8]

Exhibit 15 shows the coverage of these three fields for the surveyed Article 8 and Article 9 funds at the end of June 2023.

Exhibit 15 Coverage of Key EET Data Points for the Surveyed Article 8 and Article 9 Funds



Source: Morningstar Direct. Data as of June 2023. Based on 9,168 and 800 reported as Article 8 and Article 9 products, respectively.

All Article 8 and Article 9 products are required to disclose whether they consider PAI indicators, explaining the high percentage (99%) of surveyed funds that populated the PAI Consideration field, as of the end of June. With the regulatory requirement since Jan. 1 of adding detailed SFDR annexes to product disclosures, managers have stepped up their reporting through the EET, resulting in rising coverage of the two other metrics. As of the end of June, 79% of the surveyed Article 8 and Article 9 funds reported a minimum percentage of sustainable investments, compared with 69% three months earlier, and 62% disclosed a minimum percentage of taxonomy-aligned investments, versus 53% previously.

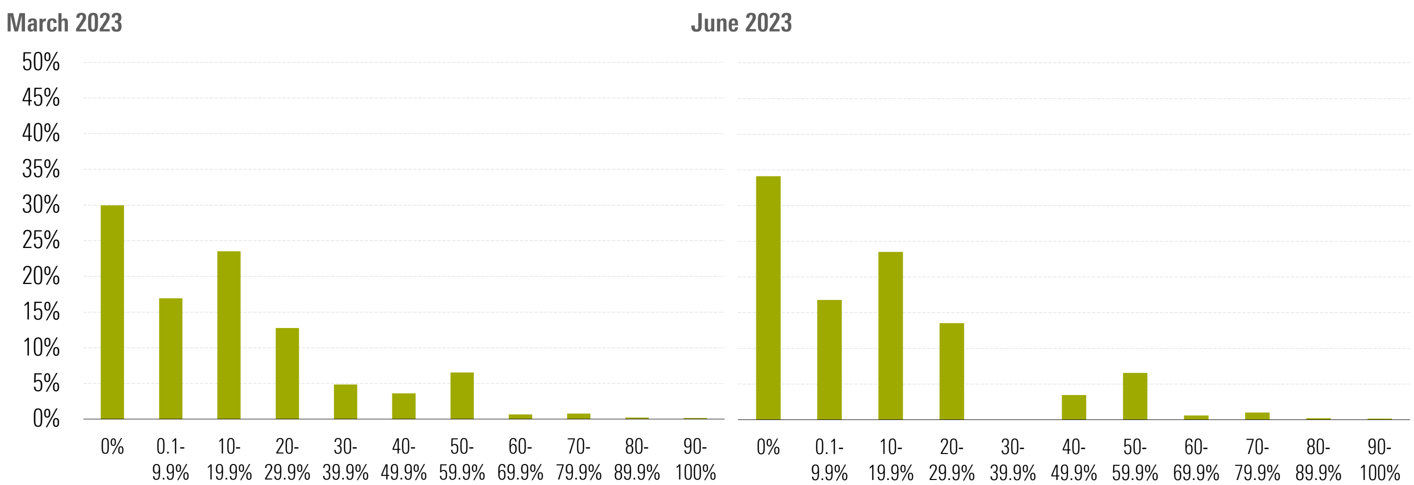
6 EET Name: 20420_Financial_Instrument_EU_SFDR_Minimum_Or_Planned_Investments_Sustainable_Investments
7 EET Name: 20450_Financial_Instrument_EU_SFDR_Minimum_Or_Planned_Investments_Sustainable_Investments_Taxonomy_Aligned
8 EET Name: 20100_Financial_Instrument_Does_This_Product_Consider_Principal_Adverse_Impact_In_Their_Investment

Sustainable Investments in Article 8 and Article 9 Funds

Exhibit 16 compares the March and June 2023 distributions of "**Minimum Proportion of Sustainable Investments**" for surveyed Article 8 funds.

We see a rising number of Article 8 funds with no less than 50% commitment in sustainable investment, from 513 three months ago to 584 at the end of June, albeit less visible in percentage terms due to an expanded sample.

Exhibit 16 Proportion of Article 8 Funds (Y-axis) With Various Commitments to Sustainable Investments (X-axis)



Source: Morningstar Direct. Data as of June 2023. June 2023 data is based on 6,826 Article 8 funds that report the field. March 2023 data is based on 6,142 Article 8 funds that report the field.

The percentage of Article 8 funds with 0% values rose to 34% at the end of June from 30% in March, while the percentage of funds targeting up to 10% exposure stayed almost constant at just under 17%. Meanwhile, the proportion of Article 8 funds targeting a sustainable investment allocation between 20% and 20.9% continued rising to 13.5% at the end of June, compared with 12.8% in March.

In the second quarter of 2023, about 190 Article 8 revise their minimum sustainable investment commitment, almost equally split between increases and decreases.

Exhibit 17 lists the Article 8 funds that saw the largest increases in minimum exposure to sustainable investments between March and June.

Exhibit 17 Article 8 Funds With the Highest Increases in Minimum Sustainable Investments

Fund Name	SFDR Type	Min % of Sustainable Investments in Q1 2023	Min % of Sustainable Investments in Q2 2023	Fund Size (EURO Mil)	Morningstar Category
Lannebo Sverige Hållbar	Article 8	0	50	106	Sweden Equity
Lannebo Sustainable Corporate Bond	Article 8	0	50	46	SEK Flexible High Yield Bond
Lannebo Norden Hållbar	Article 8	0	50	13	Nordic Equity
Ampega Global Rentenfonds	Article 8	10	51	79	Global Bond
Grönemeyer Gesundheitsfonds Nachhaltig	Article 8	10	51	24	Sector Equity Healthcare
Amundi - KBI Aqua ISR	Article 8	10	50	928	Sector Equity Water
AXA Europe Actions	Article 8	10	50	478	Europe Large-Cap Blend Equity
Amplegest Pricing Power	Article 8	0	40	327	Eurozone Large-Cap Equity
SG Amundi Actions Monde Eau	Article 8	10	50	293	Sector Equity Water
Mercer Passive Sustainable Global Equity Feeder Fund	Article 8	0	35	320	Global Large-Cap Blend Equity
AXA Euro Crédit	Article 8	10	40	54	EUR Corporate Bond
Bankinter Sostenibilidad FI	Article 8	20	50	44	Global Large-Cap Blend Equity
AXA World Funds II - Evolving Trends Equities	Article 8	10	40	13	Global Large-Cap Growth Equity
R-co Opal 4Change Equity Europe	Article 8	2	30	85	Europe Flex-Cap Equity
Mercer Global Buy & Maintain Credit Fund	Article 8	0	25	1,321	Global Corporate Bond - GBP Hedged
DWS SDG Multi Asset Dynamic LC	Article 8	25	50	825	EUR Aggressive Allocation - Global
BNP Paribas A Fund Sustainable Thematic Select	Article 8	0	25	9	USD Aggressive Allocation
Mercer Diversified Growth Fund	Article 8	0	20	7,456	USD Aggressive Allocation
MGI Global Equity Fund	Article 8	0	20	3,540	Global Large-Cap Blend Equity
Mercer Diversified Retirement Fund	Article 8	0	20	1,441	GBP Flexible Allocation

Source: Morningstar Direct. Data as of June 2023. Based on 190 Article 8 funds that revised their minimum sustainable investment. Funds are ranked first by change in sustainable-investment exposure and second by fund size.

Some funds saw their minimum 'sustainable investment' exposure increase following the assessment of the actual share of sustainable investments in the portfolios. In some cases, the actual share was higher than expected and portfolio managers felt comfortable with the higher commitment for the strategy.

There were also funds that reported lower sustainable investment commitments in June compared with March, due to a slight change in methodology or portfolio construction, or for other reasons. Exhibit 18 lists the Article 8 funds that saw the largest decreases in minimum exposure to sustainable investments over the period.

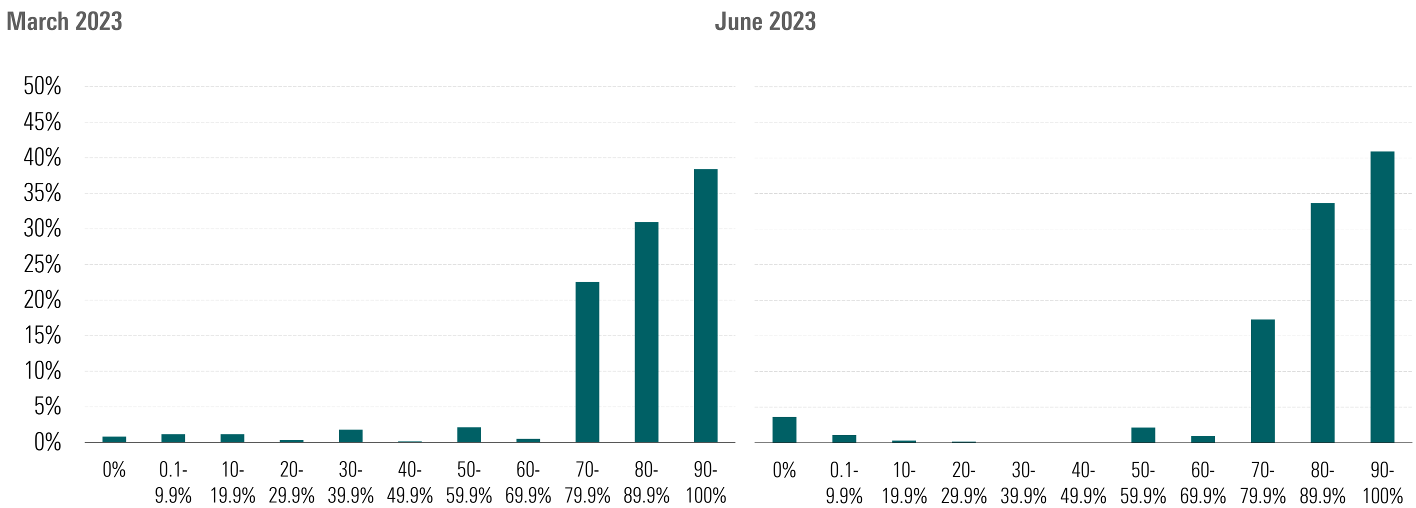
Exhibit 18 Article 8 Funds With the Highest Decreases in Minimum Sustainable Investments

Fund Name	SFDR Type	Min % of Sustainable Investments in Q1 2023	Min % of Sustainable Investments in Q2 2023	Fund Size (EURO Mil)	Morningstar Category
Oddo BHF Global Target 2028	Article 8	75	2	180	Fixed Term Bond
Multipar Actions Socialement Responsable	Article 8	65	0	424	Eurozone Large-Cap Equity
Vontobel TwentyFour Sustainable Short Term Bond Income	Article 8	70	15	1,078	GBP Corporate Bond - Short Term
Top Strategie Zukunft	Article 8	51	0.1	44	EUR Flexible Allocation - Global
Top Strategie Aktiv	Article 8	51	0.1	24	Global Large-Cap Blend Equity
Multipar Solidaire Dynamique Socialement Responsable	Article 8	50	0	898	EUR Aggressive Allocation
IP BremenKapital FairInvest	Article 8	50	1	28	Global Large-Cap Value Equity
ALPORA Sustainable Technologies	Article 8	50	1	2	Global Small/Mid-Cap Equity
Multipar Solidaire Equilibre Socialement Responsable	Article 8	40	0	217	EUR Moderate Allocation
Multipar Solidaire Oblig Socialement Responsable	Article 8	30	0	705	EUR Diversified Bond
Robeco Customized US Large Cap Equities N.V.	Article 8	30	0	115	US Large-Cap Value Equity
Aegon Global Sustainable Sovereign Bond Fund	Article 8	95	67	104	Global Bond - EUR Hedged
Arctic Aurora Biotech Select	Article 8	40	15	19	Sector Equity Biotechnology
BNP Paribas Deep Value ISR	Article 8	58	35	137	Eurozone Flex-Cap Equity
Alfred Berg Norge Transition	Article 8	20	0	304	Norway Equity
Alfred Berg Nordic Investment Grade FO	Article 8	20	0	278	NOK Bond - Short Term
Multipar Actions Europe Bas Carbone	Article 8	70	50	196	Eurozone Large-Cap Equity
Arctic Aurora LifeScience	Article 8	50	30	194	Sector Equity Healthcare
Bnl Azioni America	Article 8	45	25	43	US Large-Cap Growth Equity
BNL Azioni Europa Dividendo	Article 8	60	40	41	Europe Equity Income

Source: Morningstar Direct. Data as of June 2023. Based on 190 Article 8 funds that revised their minimum sustainable investment. Funds are ranked first by change in sustainable-investment exposure and second by fund size.

Exhibit 19 compares the March and June 2023 distributions of **"Minimum Proportion of Sustainable Investments"** for surveyed Article 9 funds.

Exhibit 19 Proportion of Article 9 Funds (Y-axis) With Various Commitments to Sustainable Investments (X-axis)



Source: Morningstar Direct. Data as of June 2023. June 2023 data is based on 665 Article 9 funds that report the field. March 2023 data is based on 607 Article 9 funds that report the field.

Exhibit 19 shows the continued shift to the right of the Article 9 fund distribution of targeted sustainable investments. A much higher proportion (75% versus 69% three months ago) report committing at least 80% exposure to sustainable investments. Additionally, 41% of Article 9 funds now report targeting between 90% and 100%, compared with 38% in March. We identified 60 Article 9 funds targeting 100% exposure to sustainable investment, almost unchanged from 62 three months ago.

The declining percentage of Article 9 funds with low (less than 50%) sustainable investment allocations is a direct result of the ESMA's clarification last summer that Article 9 funds should hold 100% of sustainable investments, except for cash and assets used for hedging purposes. Following that clarification, asset managers downgraded funds they believed couldn't achieve that level of sustainable investments and simultaneously increased the level of commitments for funds they believed could meet the requirement, either through a change in portfolio holdings, a change in methodology, or by simply deciding to "harmonise" minimum sustainable investments across the range and "align with market practice."

It remains to be seen whether the Article 9 distribution of targeted sustainable investments will continue shifting towards the higher end of the spectrum. It may depend partly on the decision by managers to reclassify passive funds tracking EU climate benchmarks from Article 8 to Article 9 following the clarification from the European Commission in its answers to the European Supervisory Authorities' questions published in April that passive funds tracking Paris-aligned or climate-transition benchmarks automatically qualify for Article 9 and don't need to additionally ensure compliance with the Article 2(17) sustainable investments test, and these products are not required to hold 100% of sustainable investments.

Another factor that could impact the distribution of sustainable investment commitments for Article 9 funds is the way asset managers account for instruments held for hedging or liquidity purposes. When asset managers report commitments lower than 100%, the difference corresponds in practice to a maximum allocation to cash and hedging instruments. This allocation varies across funds, as evidenced by Exhibit 19, and could evolve over time. For example, a fund allowing itself to hold up to 30% of cash may review this allocation down in the future as it proves too conservative in practice. The fund would then report a higher minimum sustainable investment, to, say, 85%, from 70% currently. Conversely, a fund currently reporting to target 100% of sustainable investments may review this number down to account for cash and hedging instruments.

Furthermore, it's worth remembering that sustainable investment commitments depend on the way asset managers interpret the definition of a "sustainable investment" as defined under SFDR,[9] and how they calculate sustainable investments in portfolios. As previously reported, different interpretations of the regulation have led asset managers to adopt different approaches to the calculation of sustainable-investment exposure[10]. A change in methodology by an asset manager could lead to changes in reported sustainable investment commitments.

Compared to three months ago, 43 Article 9 funds changed their minimum sustainable investment commitment, of which 31 showed increases and 12 decreases.

Exhibit 20 lists the Article 9 funds that saw the largest increases in minimum exposure to sustainable investments between March and June.

---

14 We previously reported that in addition to the different criteria used by asset managers to determine the sustainable nature of companies, there are two main ways sustainable companies are counted in portfolios: the most common approach is the "pass-fail" approach, whereby the entirety of a sustainable company (beyond a certain level of revenue derived from sustainable activities) is counted. The other approach is revenue-weighted, whereby only the proportion of revenue generated from sustainable activities is counted as a sustainable investment. These two approaches could produce opposite results: high percentages of sustainable investments in the first case and much lower levels in the latter case.

Exhibit 20 Article 9 Funds With the Highest Increases in Minimum Sustainable Investments

Fund Name	SFDR Type	Min % of Sustainable Investments in Q1 2023	Min % of Sustainable Investments in Q2 2023	Fund Size (EURO Mil)	Morningstar Category
Regnan Sustainable Water and Waste Fund	Article 9	0	90	60	Sector Equity Water
Stewart Investors Global Emerging Markets Leaders Fund	Article 9	0	90	45	Global Emerging Markets Equity
Regnan Global Equity Impact Solutions	Article 9	0	80	33	Global Flex-Cap Equity
AXA ACT Social Progress	Article 9	10	80	38	Global Large-Cap Growth Equity
Swiss Life Equity Environment & Biodiversity Impact	Article 9	30	80	164	Sector Equity Ecology
Assenagon Credit Selection ESG	Article 9	22	65	159	EUR Flexible Bond
Arca Green Leaders	Article 8	50	90	147	EUR Flexible Allocation
Swiss Life Equity Green Buildings & Infrastructure Impact	Article 9	40	80	95	Other Equity
Swiss Life Equity Climate Impact	Article 9	50	80	75	Sector Equity Ecology
Man GLG Sustainable Strategic Income	Article 9	75	90	19	Global Corporate Bond - USD Hedged
BNP Paribas Aqua	Article 9	75	85	3,441	Sector Equity Water
Danske Invest Index USA Restricted	Article 9	75	80	1,331	US Large-Cap Blend Equity
Danske Invest Index Global AC Restricted	Article 9	75	80	1,127	Global Large-Cap Blend Equity
Danske Global Sustainable Future	Article 9	75	80	778	Global Large-Cap Blend Equity
Danske European Corporate Sustainable Bond	Article 9	75	80	614	EUR Corporate Bond
Danske Invest SICAV Global Index Restricted	Article 9	75	80	583	Global Large-Cap Blend Equity
Danske Invest Index Global Emerging Markets Restricted	Article 9	75	80	548	Global Emerging Markets Equity
Danske Invest Global StockPicking Inc	Article 9	75	80	461	Global Large-Cap Blend Equity
Danske Invest Index Europe Restricted	Article 9	75	80	346	Europe Large-Cap Blend Equity
Danske Invest Global Sustainable Future	Article 9	75	80	324	Global Large-Cap Blend Equity

Source: Morningstar Direct. Data as of June 2023. Based on 12 Article 9 funds that revised their minimum sustainable investment. Funds are ranked first by change in sustainable-investment exposure and second by fund size.

Exhibit 21 lists the 12 Article 9 funds that saw a decrease in minimum exposure to sustainable investments between March and June.

Exhibit 21 Article 9 Funds With a Decrease in Minimum Sustainable Investments

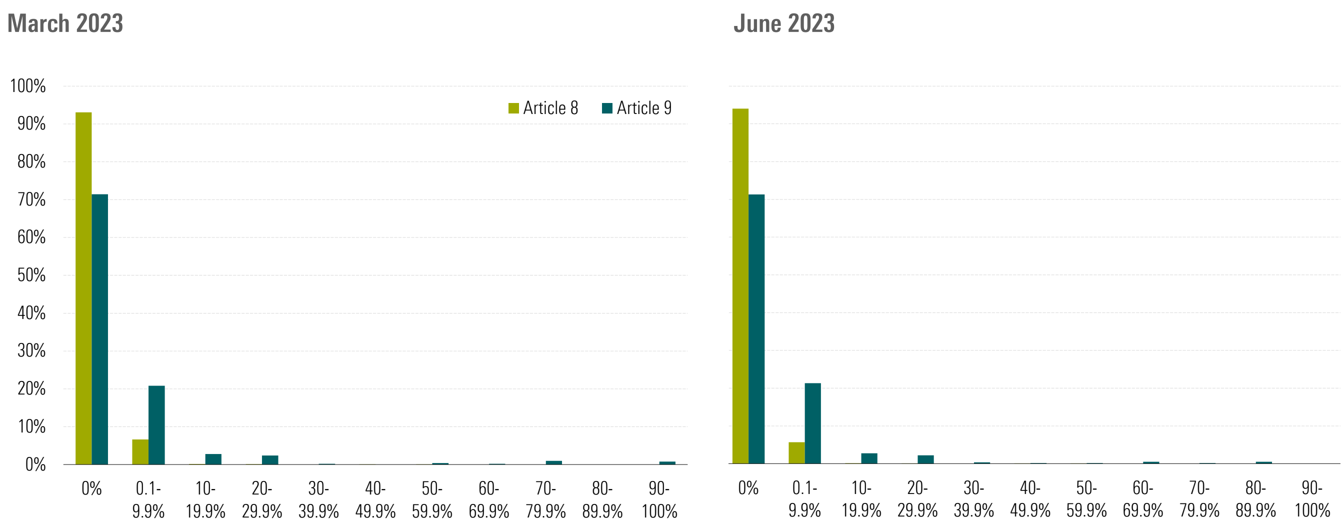
Fund Name	SFDR Type	Min % of Sustainable Investments in Q1 2023	Min % of Sustainable Investments in Q2 2023	Fund Size (EURO Mil)	Morningstar Category
BlueBay Impact-Aligned Bond Fund	Article 9	100	66	88	Global Corporate Bond - GBP Hedged
Storbrand Global Solutions	Article 9	100	80	800	Global Large-Cap Blend Equity
DNCA Invest Beyond Global Leaders	Article 9	100	80	399	Global Large-Cap Growth Equity
DNCA Invest Beyond Semperosa	Article 9	100	80	385	Europe Large-Cap Growth Equity
DNCA Invest Beyond Alterosa	Article 9	100	80	167	EUR Cautious Allocation
DNCA Invest Beyond Climate	Article 9	100	80	102	Sector Equity Ecology
DPAM Bonds EUR Quality Sustainable	Article 9	80	70	1,306	EUR Corporate Bond
Carnegie All Cap	Article 9	100	90	152	Sweden Equity
Carnegie Listed Infrastructure	Article 9	100	90	56	Sector Equity Infrastructure
Carnegie High Yield	Article 9	100	90	26	SEK Flexible High Yield Bond
Echiquier Health Impact For All	Article 9	100	90	16	Sector Equity Healthcare

Source: Morningstar Direct. Data as of June 2023. Based on 12 Article 9 funds that revised their minimum sustainable investment. Funds are ranked first by change in sustainable-investment exposure and second by fund size.

Minimum Proportion of Taxonomy-Aligned Investments

As previously mentioned, the number of surveyed Article 8 and Article 9 funds reporting minimum sustainable-investment exposure as defined under the EU Taxonomy has risen in the past three months. As of June 2023, over 62% populated the Minimum or Planned Investments Sustainable Investments Taxonomy Aligned field, a significant increase from the 53% coverage rate reported in our last report. Exhibit 22 shows the distribution of reported values.

Exhibit 22 Proportion of Article 8 and Article 9 Funds (Y-axis) With Various Commitments to Taxonomy-Aligned Sustainable Investments (X-axis)



Source: Morningstar Direct. Data as of June 2023. March 2023 data is based on 4,641 Article 8 funds and 504 Article 9 funds that report the field. June 2023 data is based on 5,564 Article 8 funds and 586 Article 9 funds that report the field.

Unsurprisingly, 0% values continue to account for the overwhelming majority of the responses received (94% for Article 8 funds and 71% for Article 9 funds), while over 21% of Article 9 funds (up by 0.5% from three months ago) reported minimum taxonomy-aligned sustainable investments between 0% and 10%. However, 6.8% of Article 9 funds (slightly down from 7.7% three months ago) target exposure of at least 10%. Eight funds reported exposure higher than 60%.

These low figures can be explained by the lack of issuer-level taxonomy-alignment data. It will become mandatory for companies to start disclosing the taxonomy alignment of their activities only from this year. To bridge the data gap, the ESA and the EC have pushed asset managers to be conservative in their taxonomy disclosure (for example, by the prudent use of estimates for companies out of the scope of the nonfinancial reporting directive, or non-NFRD companies).

Exhibit 23 features the 20 Article 8 funds with the highest level of taxonomy-alignment ranked by fund size. The proportions fall to below 50% very quickly. Only nine Article 8 products reported exposure of 20% or greater. At the top, two Maj Invest funds, namely **Maj Invest Global Sundhed** and **Maj Invest Net Zero 2050** invest in companies focused on health issues associated with demographic evolution and in companies that contribute to the net zero transition.

Exhibit 23 Top 20 Article 8 Funds by Minimum % of Taxonomy-Aligned Investments

Fund Name	SFDR Type	Min % of Taxonomy Aligned Sustainable Investments	Fund Size (EURO Mil)	Morningstar Category	Broad Category
Maj Invest Global Sundhed	Article 8	100	119	Other Equity	Equity
Maj Invest Net Zero 2050	Article 8	100	79	Global Flex-Cap Equity	Equity
Maj Invest Net Zero 2050 W	Article 8	100	32	Global Flex-Cap Equity	Equity
S-Bank Forest	Article 8	50	220	Property - Direct Other	Property
S-Bank Housing	Article 8	40	285	Property - Direct Other	Property
WI Immobilienaktien Asia Pacific ESG TX	Article 8	26	20	Property - Indirect Asia	Equity
PATRIZIA Capital Low Carbon Core Infrastructure Fund	Article 8	25	259	Sector Equity Infrastructure	Equity
Van Lanschot Kempen (Lux) Eurp Property	Article 8	25	115	Property - Indirect Europe	Equity
WI Immobilienaktien EMEA ESG TX	Article 8	22	13	Property - Indirect Europe	Equity
Van Lanschot Kempen Global Property Fund N.V. N	Article 8	19	55	Property - Indirect Global	Equity
3 Banken Mensch & Umwelt Mischfonds	Article 8	15	201	EUR Moderate Allocation - Global	Allocation
BNP Paribas Easy ECPI Global ESG Hydrogen Economy	Article 8	15	74	Other Equity	Equity
Swedbank Robur Fastighet	Article 8	10	771	Property - Indirect Global	Equity
Swedbank Robur Transition Energy	Article 8	10	600	Sector Equity Alternative Energy	Equity
WERTGRUND WohnSelect D	Article 8	10	465	Property - Direct Europe	Property
ERSTE GREEN INVEST MIX	Article 8	10	312	EUR Flexible Allocation - Global	Allocation
Sparinvest Danske Aktier KL	Article 8	9	119	Denmark Equity	Equity
Sparinvest SICAV Danish Equities	Article 8	9	155	Denmark Equity	Equity
WI Global Challenges Index-Fonds	Article 8	7	334	Global Large-Cap Blend Equity	Equity
Sparinvest SICAV Long Danish Bonds	Article 8	7	303	DKK Domestic Bond	Fixed Income

Source: Morningstar Direct. Data as of June 2023. Based on 5,564 Article 8 funds that report the field.

Exhibit 24 features the 20 Article 9 funds with the highest proportions of taxonomy-aligned sustainable investments. Unsurprisingly, most focus on an environmental theme such as climate and alternative energy. We also see a number of fixed-income strategies investing in green bonds and other types of "impact" bonds for which it is easier to evidence the contribution to environmental objectives.

Exhibit 24 Top 20 Article 9 Funds by Minimum % of Taxonomy-Aligned Investments

Fund Name	SFDR Type	Min % of Taxonomy Aligned Sustainable Investments	Fund Size (EURO Mil)	Morningstar Category	Broad Category
Multiflex SICAV - Carnot Efficient Energy Fund	Article 9	90	109	Sector Equity Ecology	Equity
Sustainable Alpha Fund	Article 9	90	10	EUR Aggressive Allocation - Global	Allocation
Stewart Investors Indian Subcontinent Sustainability Fund	Article 9	90	4	India Equity	Equity
Ålandsbanken Vindkraft Specialplaceringsfond	Article 9	80	249	Other	Miscellaneous
KlimaVest ELTIF	Article 9	75	1,207	Other Allocation	Allocation
Triodos Energy Transition Europe Fund	Article 9	75	178	Other	Miscellaneous
Triodos Emerging Markets Renewable Energy Fund	Article 9	75	30	Other Allocation	Allocation
Assenagon Funds Green Economy	Article 9	65	31	Sector Equity Ecology	Equity
Triodos Groenfonds	Article 9	50	846	Other Bond	Fixed Income
Fondita Sustainable Europe	Article 9	50	115	Europe Flex-Cap Equity	Equity
Wealth Invest AKL TimeInvest Sustainable Opportunities	Article 9	50	14	Nordic Equity	Equity
Luxembourg Selection Fund Active Solar	Article 9	48	248	Sector Equity Alternative Energy	Equity
Man GLG Sustainable Strategic Income	Article 9	35	19	Global Corporate Bond - USD Hedged	Fixed Income
Rize Environmental Impact 100 UCITS ETF	Article 9	30	62	Sector Equity Ecology	Equity
Goldman Sachs Green Bond	Article 9	25	2,089	EUR Diversified Bond	Fixed Income
Goldman Sachs Corporate Green Bond	Article 9	25	1,297	EUR Corporate Bond	Fixed Income
Goldman Sachs Green Bond Short Duration	Article 9	25	704	EUR Diversified Bond - Short Term	Fixed Income
Raiffeisen-SmartEnergy-ESG-Aktien	Article 9	25	395	Sector Equity Alternative Energy	Equity
Goldman Sachs Sovereign Green Bond	Article 9	25	226	EUR Government Bond	Fixed Income
TT Environmental Solutions Fund	Article 9	25	86	Sector Equity Ecology	Equity

Source: Morningstar Direct. Data as of June 2023. Based on 586 Article 9 funds that report the field.

Consideration of Principal Adverse Impacts

The principal adverse impact is a cornerstone of SFDR. It captures the second leg[11] of the regulation's double materiality concept: the potential negative impacts that a financial product may have on sustainability factors relating to environmental, social, and employee matters; respect for human rights; and anticorruption and antibribery matters.

SFDR requires financial market participants to disclose PAI information on a product level (Article 7) in precontractual financial product documentation, such as fund information memoranda or prospectuses.

SFDR outlines 64 adverse sustainability indicators to measure such PAIs. Of these, 14 are currently mandatory (on a comply or explain basis) for corporate investments, two for sovereign issuers, and two for real estate assets. The 18 PAIs are outlined in the table below.

11 The first leg is sustainability risks, such as climate-related or social risks.

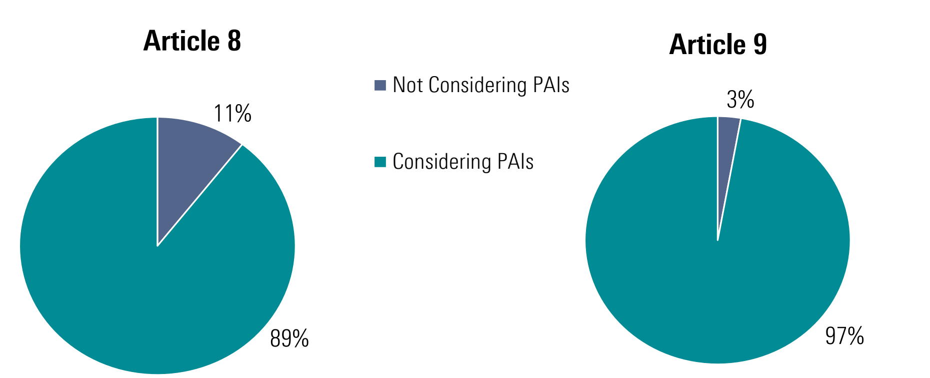
Exhibit 25 18 of the 64 PAI Indicators Under the EET

Corporate		
Greenhouse gas emissions	1	GHG emissions
	2	Carbon footprint
	3	GHG intensity of investee companies
	4	Exposure to companies active in the fossil fuel sector
	5	Share of nonrenewable energy consumption and production
	6	Energy consumption intensity per high impact climate sector
Biodiversity	7	Activities negatively affecting biodiversity-sensitive areas
Water	8	Emissions to water
Waste	9	Hazardous waste ratio
Social and employee matters	10	Violations of the UNGC principles and OECD Guidelines for Multinational Enterprises
	11	Lack of processes and compliance mechanisms to monitor compliance
	12	Unadjusted gender pay gap
	13	Board gender diversity
	14	Exposure to controversial weapons
Sovereign and supranational		
Environmental	15	GHG intensity of investee countries
Social	16	Number of investee countries subject to social violations
Real estate		
Fossil fuels	17	Exposure real estate assets involved in the extraction, storage, transport of fossil fuels
Energy efficiency	18	Exposure to energy-inefficient real estate assets

Source: SFDR delegated regulation-annex I.

As previously mentioned, almost the entirety of the Article 8 and Article 9 universe—99% and 98%, respectively—has populated the PAI Consideration field by June 2023. And among those, the vast majority stated they do consider PAIs (89% for the respondent Article 8 funds and 97% for the respondent Article 9 funds). The 11% and 3% of Article 8 and Article 9 funds, respectively, that have reported not considering PAIs include funds that may not have updated this EET field since last year. Thus, it may not reflect their current process. If no PAI on sustainability factors are considered for a certain product, the pre-contractual information must include a statement to this effect, including the reasons for non-consideration.

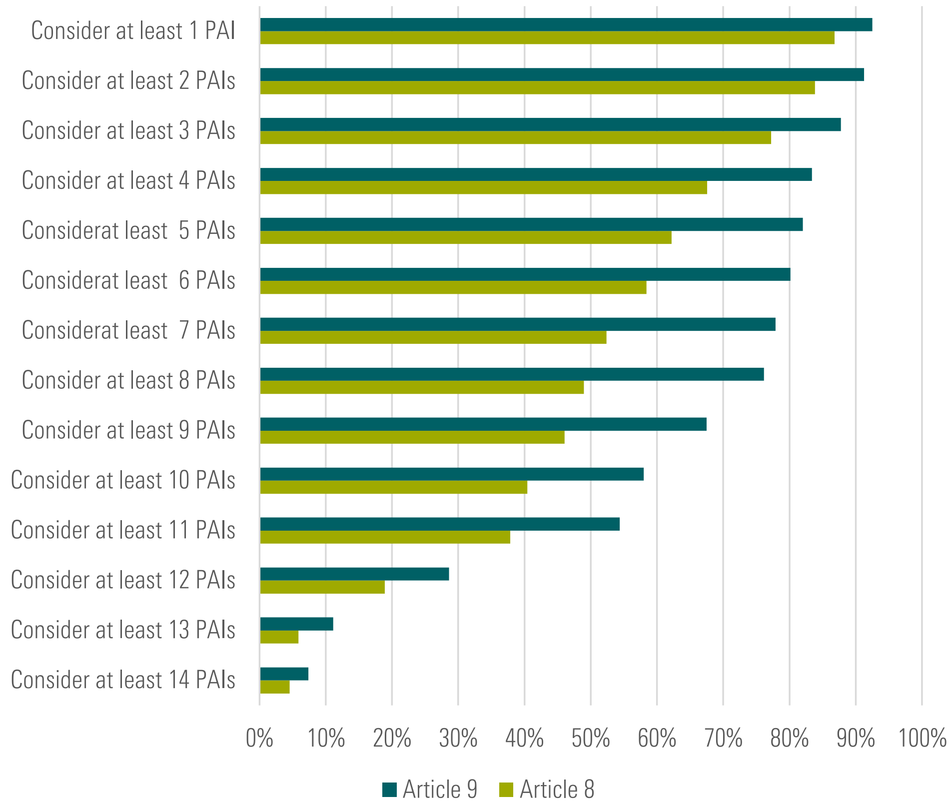
Exhibit 26 SFDR Product Type and PAI Consideration



Source: Morningstar Direct. Data as of June 2023. Based on 9,054 Article 8 funds and 782 Article 9 funds that reported the field.

The exhibit below shows the number of corporate PAIs considered by Article 8 and Article 9 funds.

Exhibit 27a Number of Article 8 and Article 9 Funds Considering Corporate PAIs

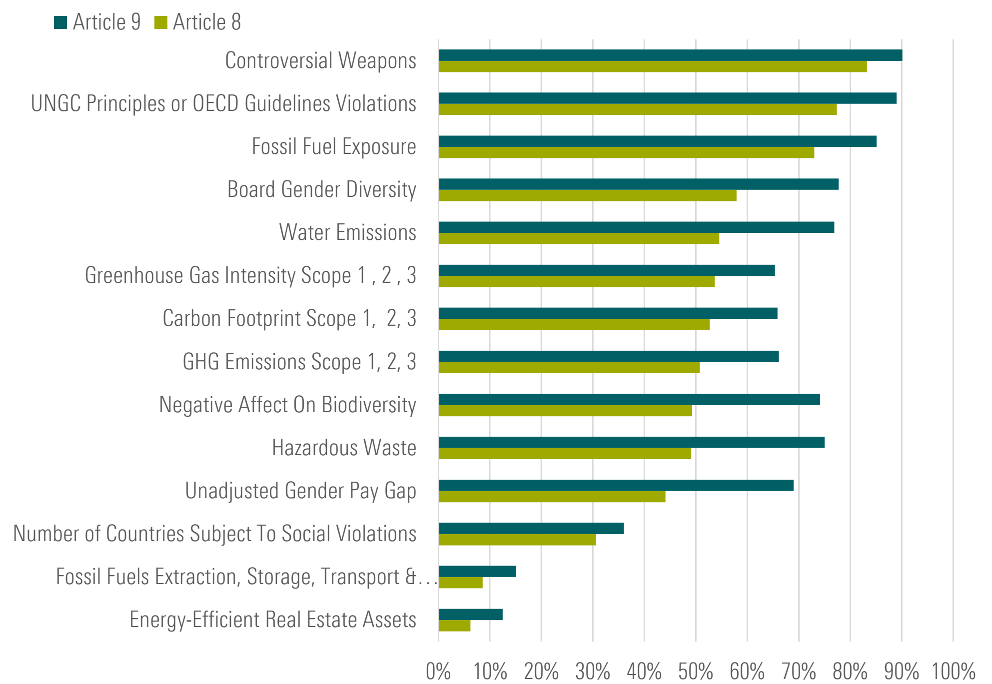


Source: Morningstar Direct. Data as of June 2023. Based on 9,054 Article 8 funds and 782 Article 9 funds that reported the field. Note that these numbers include funds for which corporate PAIs may not be relevant.

The table above reveals that the majority of Article 8 funds (more than 50%) consider at least seven of the 14 mandatory PAIs for corporates, while the majority of Article 9 funds (more than 55%) consider at least 11. However, less than 10% of Article 9 funds consider all 14 PAIs. This may come as a surprise, given that Article 9 products should only hold sustainable investments, for which the "do not significantly harm" requirement applies. This, however, can be explained by the different interpretations that asset managers take of the definition of "sustainable investment" and the different criteria they use to assess "significant harm" to a sustainability objective. While some managers are indeed considering all PAIs for their Article 9 funds, others have taken a selective approach and are considering only the most relevant indicators for their strategies.

The exhibit below shows the level of consideration for the 14 mandatory corporate PAIs (in decreasing order).

Exhibit 27b Consideration of Mandatory PAIs for Corporates

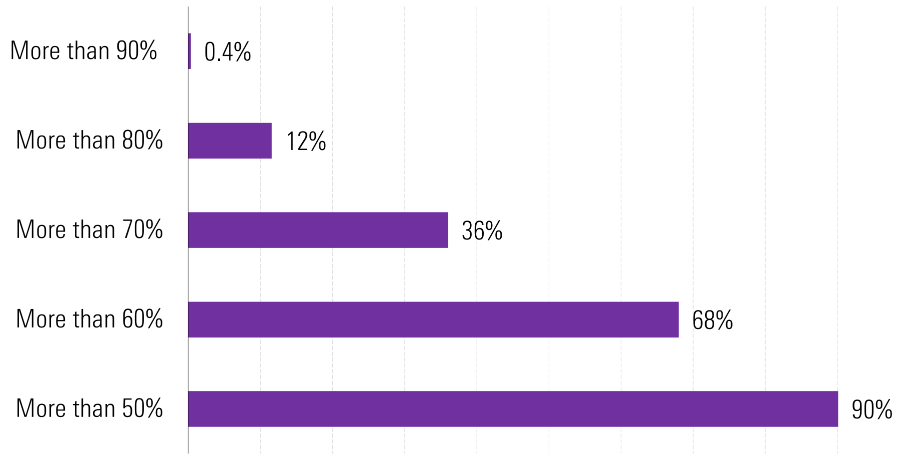


Source: Morningstar Direct. Data as of June 2023. The exact numbers for Article 8 and Article 9 funds that reported each of the data fields vary.

Exhibit 27b reveals a wide range of PAI consideration, with "Controversial Weapons," "UNGC Principles or OECD Guidelines Violations," and "Fossil Fuel Exposure" being the three most considered metrics among both Article 8 and Article 9 funds. For certain PAIs, however, we find significant disparities of consideration between Article 8 and Article 9 products. For example, 75% of the Article 9 funds consider Hazardous Waste, whereas only less than half of the Article 8 do. As for social indicators, the percentage of the Article 9 funds considering Unadjusted Gender Pay Gap reaches almost 70%, compared with only 44% for Article 8 funds.

As previously discussed, these differences in consideration can be partly explained by the fact that not all PAIs may be relevant for all strategies. But the lack of consideration in many cases can also be explained by a lack of data availability and quality. Gaps in issuer-level reporting for mandatory PAIs are particularly notable. A Sustainalytics analysis in February revealed that there was no single company with available data across all mandatory PAIs. Furthermore, only 44 companies (0.4%) had relevant data that covered more than 90% of the mandatory indicators. Nevertheless, 90% of companies had data covering at least 50% of the mandatory PAIs.

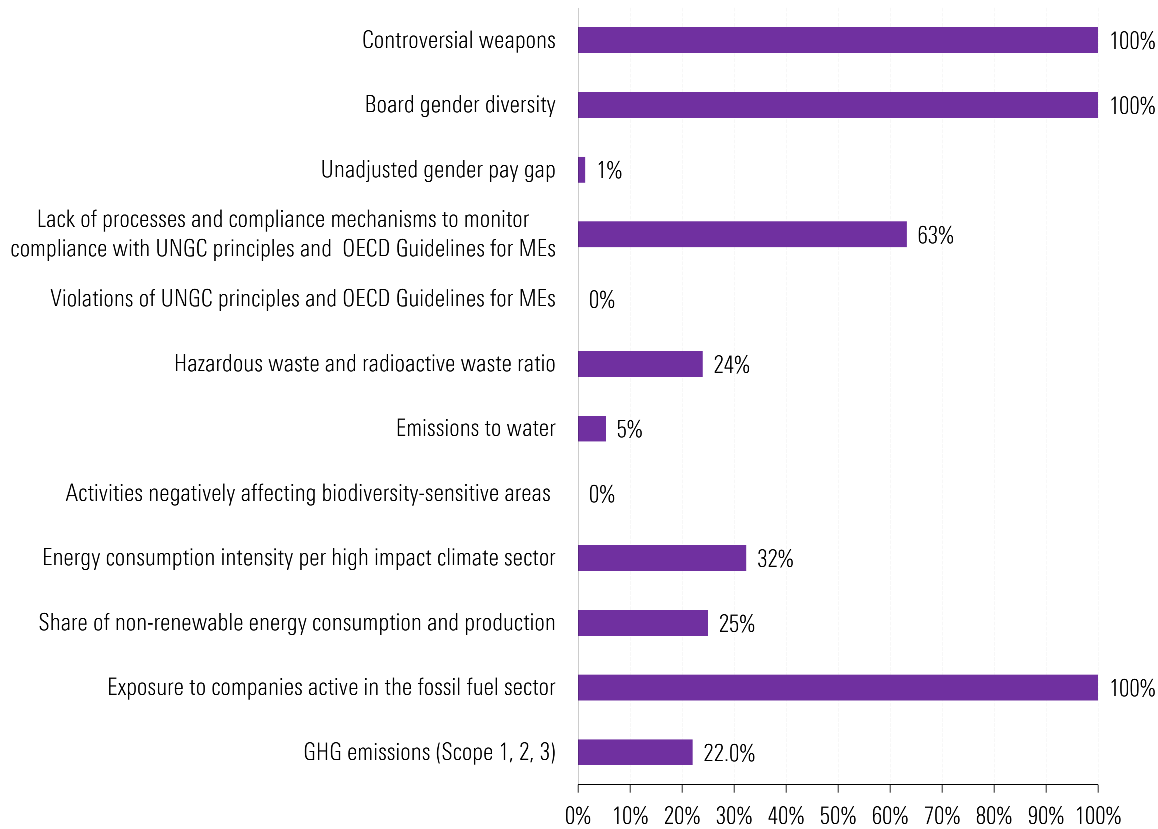
Exhibit 28a Number of Companies Covering the Mandatory PAIs



Source: Morningstar Sustainalytics. Data as of February 2023. Filling in the Data Gaps: The Current State of Reporting on Principal Adverse Impacts Disclosures for the SFDR (sustainalytics.com)

Sustainalytics' analysis also shows that the data available for mandatory PAIs ranges from extremely limited to high. For example, less than 10% of companies have reported data for gender pay gap and emissions to water (see the following exhibit). Only 162 companies disclosed relevant information regarding gender pay gaps, while 621 disclosed information related to emissions to water. However, indicators that have been traditionally included in sustainability reporting, such as board diversity or human rights, have ample data to report. Data on controversial weapons and fossil fuel involvement activities is abundant, too.

Exhibit 28b Consideration Levels for a Sample of PAIs



Source: Morningstar Sustainalytics. Data as of February 2023. Filling in the Data Gaps: The Current State of Reporting on Principal Adverse Impacts Disclosures for the SFDR (sustainalytics.com)

To address data shortages, regulation stipulates that financial market participants should use "best effort" strategies to fill gaps, such as resorting to external data providers or experts or making “reasonable assumptions." Financial market participants are required to address such gaps in a narrative disclosure, as they cannot exclude investments from PAI calculations because of a lack of data.

With the implementation of the Corporate Sustainability Reporting Directive, which will apply gradually from 2024, and an increase in sustainability reporting across the market, data availability limitations should diminish. However, in the meantime, estimated data is a key factor contributing to the vast differences in PAI reporting seen at product-level and at entity-level, too.

Consideration of Principal Adverse Impacts at Entity-Level

In addition to disclosing PAIs at product level, financial market participants have been required since June 2023 to disclose on their website how they consider PAIs at entity level and, in case they do not consider them, to explain the reasons for not doing so[12].

12 SFDR’s Article 4, which sets the guidelines for the implementation of PAIs at entity level. Publication of the PAI statement is mandatory for financial market participants with 500 or more employees. For other undertakings, a “comply or explain” requirement applies instead.

The structure of the "statement on PAIs of investment decisions on sustainability factors" is stipulated by SFDR and includes a description of the PAIs, actions taken and planned to mitigate the PAIs, as well as historical comparisons.

PAI indicators at entity-level include the same set of 18 mandatory indicators required for products and in addition several voluntary indicators[13].

PAIs provide a useful framework for disclosing the effects of investments on sustainability factors, promoting harmonization and comparability. However, at this stage, the implementation of PAIs at entity-level is subject to a number of challenges that make like-for-like comparisons across entities almost impossible. The main challenges are:

► Different data sources and methodologies

The challenges discussed in the previous section around data availability and quality are the same when PAIs are aggregated at entity level. For the selection and calculation of PAIs, asset managers use a variety of data, including reported and estimated data from third-party data providers as well as internal data (mainly from analyst research and engagement). But while some metrics are largely available and straightforward to compute, others require interpretation and leave room for varying methodologies. Asset managers using different data sources and methodologies will inevitably report different values in their PAI statements.

► Varying scopes of disclosure and asset mix

First, financial market participants can choose to publish several entity statements or a single, consolidated, one. This means that the investments subject to the disclosure can vary greatly in terms of size, asset mix and geographic exposure. One entity may mainly be providing broadly diversified ETFs, while another may be focusing more on a specific region or asset class. An entity's geographic bias could skew its disclosed numbers. Moreover, some statements may cover all types of investments, including listed equities, corporate debts, sovereign debts, cash and certain illiquid assets, while others may be more selective and include only asset classes for which reliable data and methodologies exist. Eligibility criteria may vary at the product level too. Some may include segregated mandates and funds managed for other entities or by other entities, while others don't. Many of the differences related to scope of disclosure come from different interpretations and applications of the regulation.

To illustrate the extent to which all these factors can result in widely divergent PAI disclosures, we have built Exhibits 29 and 30, which show the 18 mandatory indicators disclosed by a selection of eight asset managers. For the managers that published several entity statements, which is the case for Amundi, BlackRock, DWS, and UBS, we picked the statement published by the largest entity. But these statements still vary in scope and asset mix. They also use a variety of data sources and methodologies that render like-for-like comparisons impossible. In the tables, we highlighted the data that illustrate the

13 Voluntary PAI disclosures require financial market participants to select a minimum of two from a list of 46 indicators: one environment-related indicator and one social-related indicator.

largest divergences between managers. And we do the same in the commentary below the tables. But by no means does our commentary represent an opinion on the quality of the data disclosed by the managers.

Exhibit 29 Mandatory PAI Indicators Across Eight Asset Managers as Disclosed in Selected PAI Statements

Corporate			Amundi	BlackRock	Candriam	DWS	JP Morgan	Nordea	Robeco	UBS
Greenhouse gas emissions	1	GHG emissions (tCO2e)								
		Scope 1	49,152,045	27,728,968	3,316,240	13,759,879	10,831,621	3,368,336	7,984,216	7,801,851
		Scope 2	8,513,921	6,182,890	1,014,823	3,421,136	2,763,084	983,988	2,566,216	1,863,097
		Scope 3	19,335,857	196,487,328	N/A	99,925,299	79,154,187	23,780,378	79,328, 847	60,972,922
		Total GHG emissions	77,021,824	233,064,529	4,331,064	117,087,046	88,112,702	4,352,325	89,879,279	70,499,868
	2	Carbon footprint (tCO2e/€m invested)	92.5	271	52.6	489	221	45.5	632	296
	3	GHG intensity of investee companies (tCO2e /€m revenue)	220.5	597	120.8	1,088	864	134.8	1,428	929
	4	Exposure to companies active in the fossil fuel sector (% AUM)	13.5%	9%	3.7%	17.1%	1.2%	2.9%	4.09%	6.1%
	5	Share of nonrenewable energy consumption and production (% total energy sources)	77.1% 65.1%	64% 60%	72.16%	75.1%	0.97% 0.83%	65.7% 74.6%	64.9%	75.6%
	6	Energy consumption intensity per high impact climate sector (GWh/€m revenue)	Breakdown	0.7 + Breakdown	0.54 + Breakdown	Breakdown	Breakdown	Breakdown	0.96	15.5
Biodiversity	7	Activities negatively affecting biodiversity-sensitive areas (% AUM)	0.04%	2%	2.98%	0.08%	1.12%	0.70%	5.43%	0.06%
Water	8	Emissions to water (t/€m invested)	348.4	0	59.2	238.6	1,904	0.3	0.02	2.67
Waste	9	Hazardous waste ratio (t/€m invested)	12.2	57	1.4	8.3	2.6	0.74	27.1	2.1
Social and employee matters	10	Violations of the UNGC principles and OECD Guidelines for Multinational Enterprises (% AUM)	0.27%	10%	0.65%	0.17%	0.03%	0.31%	0.11%	0.58%
	11	Lack of processes and compliance mechanisms to monitor compliance (% AUM)	13.5%	1.0%	3.8%	44.7%	32.8%	0.2%	6.1%	39.4%
	12	Unadjusted gender pay gap	12.6%	15%	12.2%	14.3%	8.3%	10.6%	15%	13.2%
	13	Board gender diversity	34.9%	32%	36%	32.9%	4.9%	34%	31%	31.3%
	14	Exposure to controversial weapons	0.02%	<0.01%	0%	0%	0.01%	0%	0.10%	0.06%
Sovereign and supranational										
Environmental	15	GHG intensity of investee countries (tCO2e/€m GDP)	254	51	246	295	32	303	0.01	451
Social	16	Number of investee countries subject to social violations (absolute and relative to all investee countries)	7 (6.2%)	4 (2%)	0	6 (5.7%)	1 (0.001%)	2 (2.4%)	0	7 (6.3%)
Real estate										
Fossil fuels	17	Exposure real estate assets involved in the extraction, storage, transport of fossil fuels (% AUM)	NA	0%	-	NA	NA	NA	NA	0%
Energy efficiency	18	Exposure to energy-inefficient real estate assets (% AUM)	NA	0%	-	NA	NA	NA	NA	0.17%

Source: Managers' entity-level PAI statements: Amundi, BlackRock, Candriam, DWS, JP Morgan, Nordea, Robeco, UBS. These statements vary in scope, asset mix, data sources, and methodologies, rendering like-for-like comparisons impossible.

Attempting to compare the data disclosed by the eight managers in their selected statements, we note the following.

Greenhouse Gas Emissions (PAIs 1, 2, 3, 4, 5, 6)

Of our sample of eight asset managers, two, namely Candriam and Nordea, didn't include scope 3 emissions in the calculation of total GHG emissions (PAI 1) and carbon footprint (PAI 2), although Nordea reported scope 3 emissions, while Candriam didn't. Reporting Scope 3 emissions isn't indeed a legal requirement before next year and data reliability is a well-known issue[14] as most of the input for the calculation of the metrics is estimated.

The data challenge can also explain why Amundi chose to only account for the emissions linked to tier 1 suppliers and why the manager shows as having the lowest Scope 3 emissions of all.

As a result of its exclusion of scope 3 emissions, Candriam shows the lowest total GHG emissions, carbon footprint, and carbon intensity (PAI 3) of all the managers in our sample. Meanwhile, Robeco, which uses different datasets, disclosed the highest carbon footprint and intensity figures.

Managers also reported a wide range of exposures to companies active in the fossil fuel sector (PAI 4), from 1.2% to 17.1%, while the share of nonrenewable energy consumption and production (PAI 5) looks more consistent, with the exception of JPMorgan, which reported very low numbers of 0.97% and 0.83%, respectively, mainly due to its different way of addressing data gaps.

Biodiversity (PAI 7)

The divergence in disclosed levels of activities negatively affecting biodiversity-sensitive areas appear smaller than for other PAIs, between 0.04% and 5.43%. A lack of data at issuer-level, as highlighted in Exhibit 28b, can also explain these low figures.

Water (PAI 8)

This indicator shows the widest range of all PAIs in the table, with three managers reporting close to zero ton of emissions to water generated by investee companies, while JP Morgan disclosed 1,904 ton/€m invested, the highest value in our sample.

Waste (PAI 9)

Disclosure of tons of hazardous waste and radioactive waste generated by investee companies varies significantly too, from close to zero to 57.

Social and employee matters (PAIs 10, 11, 12, 13, 14)

Partly due to different data sources and methodologies again here, BlackRock reported the highest exposure (10%) to violations of the UNGC principles and OECD Guidelines for Multinational Enterprises (PAI 10), while JP Morgan disclosed the lowest (0.03%).

---

14 Corporate Carbon Emissions Data for Equity and Bond Portfolios by Thijs D. Markwat, Laurens Swinkels :: SSRN

Similarly, a wide range of values is observed for PAI 11 (lack of processes and compliance mechanisms to monitor compliance), from close to zero to 44.7%.

Average unadjusted gender pay gap (PAI 12) and average ratio of female/male board members in investee companies (PAI 13) are among the most homogeneous reported data. Ratios in our sample hover around 13% and 33% for the two PAIs, respectively. JPMorgan's numbers of 8.3% and 4.9% stand out as much lower, due to methodological differences.

As expected, given their common exclusions from European portfolios, disclosed exposures to controversial weapons (PAI 14) are close to zero across our sample of managers.

Sovereign and Supranational (PAIs 15, 16)

Looking at sovereign and supranational PAI disclosures, greenhouse gas intensity of investee countries (PAI 15) shows an extremely wide range, with Robeco reporting the lowest number (0.01) and UBS the highest (451). Meanwhile, Robeco reported zero exposure to countries subject to social violations (PAI 16). Amundi and UBS reported the highest (seven countries, representing over 6% of all investee countries).

Real Estate (PAIs 17, 18)

Out of our sample, only UBS disclosed some exposure (0.17%) to energy-inefficient real estate assets (PAI 18), and none reported having or considering exposure to fossil fuels through real estate assets (PAI 17). For some managers, including Nordea, these PAIs are not applicable given their investment universe.

Optional PAI Indicators

In addition to the set of 18 mandatory PAIs discussed above, asset managers disclosed a selection of optional indicators, as set out below.

Exhibit 30 Optional PAI Indicators Across Eight Asset Managers as Disclosed in Selected PAI Statements

Climate and other environment-related indicators			Amundi	BlackRock	Candriam	DWS	JP Morgan	Nordea	Robeco	UBS
Emissions	4	Investments in companies without carbon emission reduction initiatives	69.1%	81%	11.4%	43.1%			18%	21.3%
Water, waste and material emissions	8	Exposure to areas of high water stress						2.2%		
	15	Deforestation							92.5%	
Green Securities	16	Share of securities not issued under Union legislation on environmentally sustainable bonds							93.9%	
	17	Indicators applicable to investments in sovereigns and supranationals: Share of securities not issued under Union legislation on environmentally sustainable bonds							91.2%	
Indicators for social and employee, respect for human rights, anti-corruption and anti-bribery matters										
Social and employee matters	8	Excessive CEO pay ratio							252.9	
Human Rights	9	Lack of a human rights policy	17.4%	11%	6.3%			3.1%		
	14	Number of identified cases of severe human rights issues and incidents				0.01				
Anti-corruption and anti-bribery	15	Lack of anti-corruption and anti-bribery policies			2.9					5.02%
Governance	21	Average corruption score							1.65	

Source: Managers' entity-level PAI statements: Amundi, BlackRock, Candriam, DWS, JP Morgan, Nordea, Robeco, UBS. These statements vary in scope, asset mix, data sources, and methodologies, rendering like-for-like comparisons impossible.

Other Climate and Other Environment-Related Indicators

Among the additional climate and other environment-related indicators, the share of investments in companies without carbon emission reduction initiatives (optional PAI 4) is the most reported. BlackRock and Amundi disclosed the highest numbers (81% and 69%, respectively), while Candriam reported the lowest (11.4%). For BlackRock, a company is deemed to have an emissions reduction initiative in place if it has a Science-Based Targets initiative-approved target set to 1.5˚C or well-below 2.0˚C. Companies with only committed targets are not considered to have emission reduction initiatives in place.

Additional indicators reported only by Robeco include deforestation (optional PAI 15) (92.5%) and share of securities not issued under Union legislation on environmentally sustainable bonds for companies and sovereigns and supranationals (optional PAIs 16, 17) (93.9% and 91.2%). Only Nordea disclosed exposure to areas of high-water stress (optional PAI 8) (2.2%).

Other Indicators for Social and Employee, Respect for Human Rights, Anticorruption, and Antibribery Matters

Among the other optional indicators, the lack of a human rights policy (as a share of assets under management) (optional PAI 9) is the most commonly reported on, ranging from 3.1% to 17.4%.

Meanwhile, Robeco was the only firm disclosing an average corruption score (optional PAI 21) (1.65) and excessive CEO pay ratio (optional PAI 8) (252).

How Managers Address PAIs?

Beyond the challenges in computing PAIs and the lack of comparability across entities, investors should understand how asset managers integrate PAIs throughout the investment process and the steps they take to mitigate them. These may vary depending on the indicator as well as the asset class and the investment product, but typically include exclusions, ESG analysis, engagement, and voting.

Disclosures of actions taken to address PAIs vary across managers, with some being more detailed than others. Most managers in our sample have taken a PAI-by-PAI approach, detailing the specific actions taken to address each PAI, even when the consideration of certain PAIs only applies to a specific range of strategies. Some managers have taken more of an overall disclosure approach, whereby they outline the firmwide process and specify, where relevant, that the consideration of certain PAIs applies only to sustainable products.

Below are examples of actions taken and planned by asset managers to mitigate negative impacts, as disclosed in their PAI statements.

Exclusions

To address PAI 6 (energy consumption intensity per high-impact climate sector), among other action items, Robeco has the following exclusion policy:

> "*Robeco's Exclusion Policy covers the exclusion of activities with highly negative climate impacts (e.g. thermal coal, oil sands and Arctic drilling). Thresholds and scope can be found in Robeco's Exclusion Policy.*"
> *A number of Robeco funds use a Paris-Aligned Benchmark (PAB) or Climate Transition Benchmark (CTB) and apply the exclusion criteria as set out in Article 12(1) of the EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks.*"

To address PAI 14 (exposure to controversial weapons (antipersonnel mines, cluster munitions, chemical weapons and biological weapons), among other action items, Candriam has the following exclusion policy:

> "*Candriam is firmly committed to excluding from all its investments companies directly involved in the development, production, testing, maintenance and sale of controversial weapons (anti-personnel landmines, cluster bombs, depleted uranium weapons and armor, chemical weapons, biological weapons and white phosphorus weapons). We consider these damaging activities to present systemic and reputational risks.*
> *For certain financial products classified as article 8 and for all our financial products classified as article 9, we also exclude companies involved in conventional weapons which account for more than 3% of their sales, thus reinforcing our global weapons policy.*

During 2022, in addition to the companies already excluded, two companies lost their eligibility due to their involvement in these activities."

Commitments to Industry Initiatives

To address PAIs 1, 2, 3, 4 (greenhouse gas emissions), among other action items, Nordea has made following commitment:

> "*We are a signatory to the Net Zero Asset Managers Initiative and committed to supporting the goal of net zero greenhouse gas emissions by 2050 or sooner, in line with global efforts to limit warming to 1.5°C. We have an organisational-wide target to reduce the weighted average carbon intensity (WACI) of our investments; a set of portfolio-specific carbon footprint reduction targets, and a complementary target to ensure that individual companies are engaged to become 1.5°C aligned. We have set a 2025 target to ensure that 80% of our top 200 largest carbon footprint contributors are on a Paris-aligned trajectory or else subject to engagement to become aligned.*"

To address PAI 7 (activities negatively affecting biodiversity-sensitive areas), among other action items, Nordea has made following commitment:

> "*We are a member of the Finance for Biodiversity Pledge, a commitment of financial institutions to protect and restore biodiversity through finance activities and investments.*" *[…]*

Engagement

To address PAIs 1, 2, 3, 4 (greenhouse gas emissions), among other action items, UBS states the following:

> "*UBS-AM has run a dedicated climate engagement program since early 2018, focused on companies in high emitting sectors.*"

To address PAI 7 (activities negatively affecting biodiversity-sensitive areas), among other action items, Robeco has the following programs:

> "*In 2022, Robeco continued its three-year engagement program focused on deforestation linked to 5 high-risk commodities starting in 2021. Additionally, Robeco launched a Natural Resource Management engagement program, which focuses on the responsible management of natural resources and the mitigation of significant adverse impacts on the environment.*"

To address PAI 12 (unadjusted gender pay gap), among other action items, Candriam stated the following:

> "*In 2022, concerning our direct and collaborative dialogues (active and passive) with companies, respectively 12% and 47% of them were related to PAI 12. Most of our dialogues (collaborative or direct) addressing the issue of good diversity and inclusion management focus on the gender pay gap, which explains the figure above. Our support for the Workforce Disclosure Initiative is reflected in these statistics. As part of our voting activities, we supported the 4 shareholder resolutions on the voting of our portfolios and linked to the PAI 12.*"

To address PAI 15 (greenhouse gas intensity) and PAI 16 (investee countries subject to social violations) applicable to investments in sovereigns and supranationals, among other action items, JP Morgan has made the following commitment:

> "*JPMAME's DIM is committed to continuing to enhance its approach to engaging sovereign issuers on financially material ESG issues.*"

Proxy Voting

To address PAIs 1, 2, 3, 4 (greenhouse gas emissions), among other action items, Amundi has the following voting policy:

> "*Criteria requirement linked to the energy transition in executive compensation for sectors with a significant impact on climate, use of voting rights as an escalation in the event of significant negative impacts.*"

To address PAI 13 (board gender diversity), among other action items, Amundi has a voting policy:

> "*Part of Amundi´s voting policy on companies with controversial social practices.*"

To address PAIs 1, 2, 3, 4 (greenhouse gas emissions), among other action items, DWS has the following voting policy:

> "*In the Actively and Passively Managed Portfolio Business, DWS13 expects the boards and the management of investee companies to assess risks and impacts arising from or associated with environmental developments. Additionally, DWS is generally supportive of ESG-related shareholder proposals while considering recognised standards, including the goals of the Paris Agreement, and evaluates them on a case-by-case basis. For example, if deemed appropriate, DWS may vote for proposals asking investee companies to adopt (science-based) greenhouse gas reduction targets, and to commit to net zero until 2050 or sooner.*"

General Framework

Outlining its general approach, BlackRock explains, among other action items:

> "*Outside of sustainable Products, BAMIL does not make Product-level commitments to meet environmental and social standards. BlackRock incorporates into firmwide processes relevant, financially material information, including financially material data and information related to ESG, this may include PAIs.*"

To address PAI 8 (emissions to water), among other things, DWS explains:

> "*DWS has developed an ESG materiality matrix for the identification and prioritisation of principal adverse impacts in various sectors. Thereby, DWS aims to consider emissions to water in fundamental research analysis for relevant sectors in the Actively Managed Portfolio Business.*"

Key Considerations for Investors Assessing Entity-Level PAI Statements

To help investors with their assessment of asset managers' PAI statement, we have put together the following checklist: These considerations are key for investors to understand a manager's approach to sustainability.

1. Has the manager published a PAI statement on its website and for which entity? If it hasn't, why?
2. What is the scope of the PAI statement? What investments and asset classes are included?
3. Does the asset manager report on all mandatory PAIs? Does it disclose additional voluntary indicators?
4. Does the asset manager provide full transparency on the underlying data and methodologies used to compute PAIs?
5. Does the manager integrate PAIs in the investment process, and if it does, how?
6. Does the manager aim to mitigate PAIs over time, and what steps are taken?

It's worth noting that not all managers published an entity-level PAI statement at the end of June. Article 4 of SFDR requires this disclosure on a "comply or explain" basis, and some managers have chosen to opt out and explain why they're not considering PAIs at entity level. This is the case for US managers Vanguard and State Street Global Advisors which both explained that they don't meet the 500-employee threshold in Europe, so they are not required to consider PAIs at entity level. Nevertheless, other managers that equally do not meet the threshold still decided to publish a statement with PAI metrics and actions. They did so because they believe their clients would expect them to do so given their focus on sustainable investing and/or their global footprint. For example, JP Morgan, another US manager with fewer than 500 employees in Europe, chose to publish an entity-level statement.

Are Entity-Level PAI Statements Useful?

As previously mentioned, inconsistencies in data and methodology, in addition to differences in scope and other factors, make comparing entity-level PAI statements difficult. Moreover, PAI numbers provide only part of a manager's sustainability approach. For example, there is no PAIs revealing the emission transition outlook for a manager's investments. Other key elements are around voting or other active ownership activities are missing too.

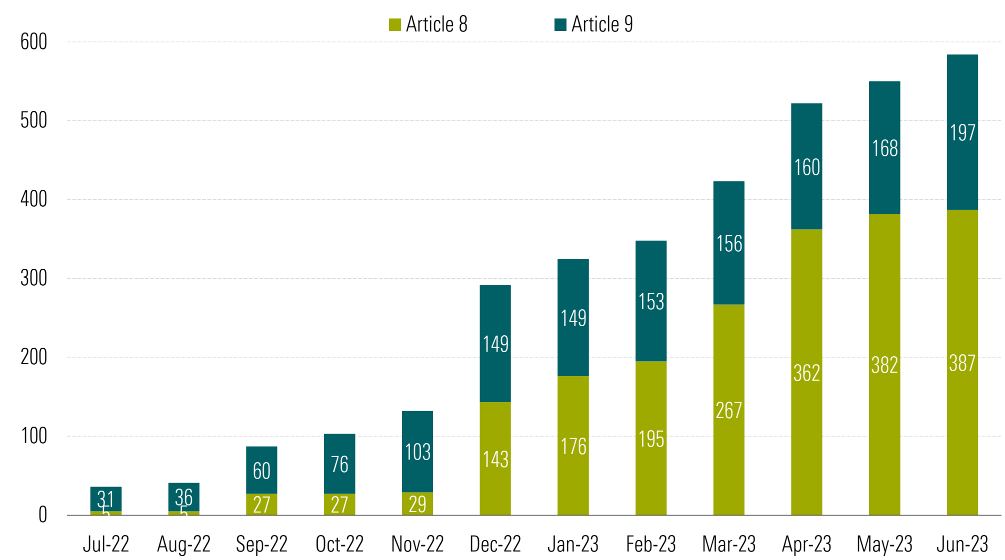
Yet, despite all the limitations, we believe entity-level PAI disclosures have the benefit of providing investors with evidence of what asset managers are claiming to do. Furthermore, the statements will prove useful for investors over time, provided that data and methodologies become more standardized. This year, the PAI reports are purely a set of stand-alone data points, but over time, by comparing reported information year over year, investors should be able to track the progress made by their asset managers.

In the meantime, investors should be careful when looking at PAI statements and understand the limitations. They should first scrutinize the underlying data and methodologies used. Asset managers, in turn, should be transparent about their approaches for computing PAIs.

Carbon Emission Reduction Objectives

Another important field in the EET is "Carbon Emission Reduction Objective"[15], which asset managers are increasingly keen to add to their funds, as evidenced below by the growing number of funds responding "Yes" to the field. Close to 600 Article 8 and Article 9 funds reported having a carbon reduction objective at the end of June, including 387 Article 8 funds and 197 Article 9 funds.

Exhibit 31 Number of Article 8 and Article 9 Funds With Carbon Emissions Reduction Objectives



Source: Morningstar Direct. Data as of June 2023. Based on a total of 3,458 funds that populated the field, including 2,846 Article 8 funds and 612 Article 9 funds. The increase in the number of funds with carbon reduction objectives also partly reflects the increase in EET coverage.

There is, however, a range of objectives represented in this universe of Article 8 and Article 9 funds with emissions reduction objectives. The least constraining goal is to reduce a portfolio's carbon intensity relative to a benchmark or an investment universe. For example, **Invesco Sustainable Multi-Sector Credit Fund** states in its prospectus that it "*aims to provide a positive total return over a full market cycle, while maintaining a lower carbon intensity than that of the fund's investment universe*."

Other strategies offer a quantified emission reduction between 10% and 50%. Examples include **AXA World Funds - ACT European High Yield Bonds Low Carbon**, which "*seeks a high level of income from an actively managed bond portfolio whose carbon footprint, measured as carbon intensity, is at least 30% lower than that of the ICE BofA European Currency High Yield Hedged EUR index (the "Benchmark")*.

Additionally, funds that track or reference themselves to Paris-aligned benchmarks and climate-transition benchmarks target emission reduction of 50% and 30%, respectively. **Northern Trust World Natural Capital PAB Index Fund** tracks an index that is "*designed to meet the standards of the EU Paris Aligned Benchmark (PAB), aiming to reduce the weighted average greenhouse gas intensity relative to the*

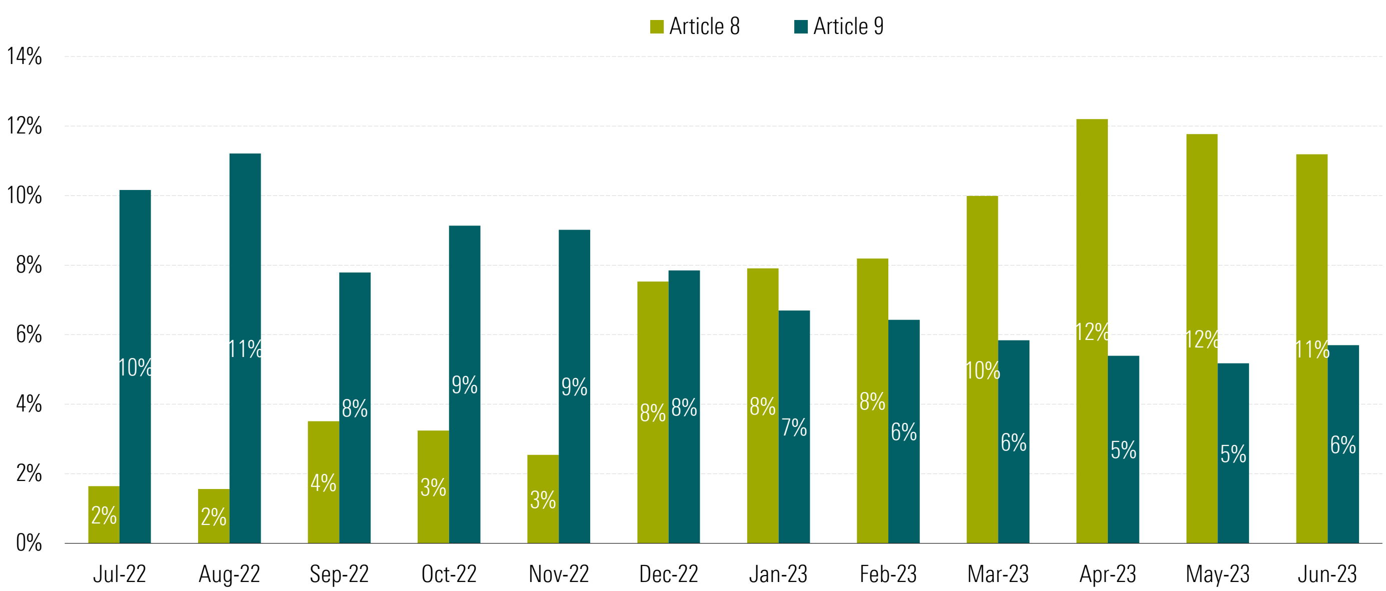
15 EET reference: 20570_Financial_Instrument_With_Objective_Of_A_Reduction_In_Carbon

MSCI World Index (the "Parent Index") by 50% and reduce the weighted average greenhouse gas (GHG) intensity by 7% on an annualized basis."

Funds tracking MSCI ESG-screened indices, including **iShares MSCI World ESG Screened ETF**, now also target a minimum 30% reduction in carbon intensity relative to the parent index.

While a carbon reduction objective was a more likely feature found in Article 9 funds a year ago, this has changed. More than 11% of Article 8 funds now include this objective, compared with only 6% for Article 9 funds. The downgrades of the vast majority of PAB/CTB passive funds late last year from Article 9 to Article 8 has been the biggest contributor to this reversal.

Exhibit 32 Proportion of Article 8 and Article 9 Funds With Carbon Emissions Reduction Objectives



Source: Morningstar Direct. Data as of 14 July 2023. Source: Morningstar Direct. Data as of June 2023. Based on a total of 3,458 funds that populated the field, including 2,846 Article 8 funds and 612 Article 9 funds.

Regulatory Update

EU regulators are continually refining their rules to combat greenwashing and ensure greater transparency in sustainable finance. For market participants, the ever-changing regulatory landscape demands caution and dedicated resources.

The EU Is Pressing Ahead With Its Sustainable Finance Strategy

On 13 June 2023, the European Commission proposed to expand its EU Taxonomy beyond climate-related activities to encompass biodiversity, water, pollution, and the circular economy. The new criteria include a total of 35 activities across eight economic sectors. The EC also took the opportunity to introduce to the existing climate criteria two new activities spanning six sectors. However, key sectors such as agrifood and mining are not yet covered. By 2026, financial institutions will be expected to factor in mandatory taxonomy-alignment reporting. The proposed criteria should allow them to showcase even greater alignment figures.

That same day, the EC published a proposal to regulate ESG rating providers. Among other requirements, the proposal sets requirements for the management of potential conflicts of interest and transparency of methodologies. It also contains an obligation for EU entities and non-EU entities wishing to provide ESG ratings in the EU to be respectively authorized and endorsed by the European Securities and Markets Authority.

In parallel, the EC, which is about to finalize standards under the Corporate Sustainability Reporting Directive mandating disclosure of ESG information, issued a four-week consultation. The proposed standards, which are set to apply from Jan. 1, 2024, contain significant revisions to the draft standards recommended by the European Financial Reporting Advisory Group in November 2022, including additional phase-ins and making most disclosure requirements subject to materiality assessments. The proposal, which does not mandate disclosure against SFDR Principal Adverse Impacts, was criticized by investors who highlighted that it would "reduce financial markets participants' ability to meet their own mandatory reporting obligations."

On the supervision front, the ESAs (ESMA, European Banking Authority, and European Insurance and Occupational Pensions Authority) have published their progress reports to the European Commission on greenwashing in the financial sector. In the reports, the ESAs propose a common high-level understanding of greenwashing and already provide sector-specific assessments for key sectors under ESMA's remit such as issuers, investment managers, benchmark administrators, and investment service providers. The ESAs will publish their final reports on greenwashing in May 2024 and will propose recommendations on possible change to EU rules.

On July 6, 2023, ESMA announced that it was launching a common supervisory action with EU national competent authorities on sustainability-related disclosures and the integration of sustainability risks. The goal is to assess the compliance with SFDR, the taxonomy regulation, and relevant implementing measures. In 2023 and until third-quarter 2024, the NCAs will undertake their supervisory activities and share knowledge and experiences through ESMA to foster convergence in how they supervise sustainability-related disclosures and sustainability risk integration in asset managers.

Finally, ESMA has opened, until Sept. 16, 2023, call for evidence to assess the integration of sustainability preferences in the suitability assessment and product governance arrangement introduced less than a year ago on Aug. 2, 2022.

About Morningstar Manager Research

Morningstar Manager Research provides independent, fundamental analysis on managed investment strategies. Analyst views are expressed in the form of Morningstar Analyst Ratings, which are derived through research of five key pillars—Process, Performance, Parent, People, and Price. A global research team issues detailed Analyst Reports on strategies that span vehicle, asset class, and geography. Analyst Ratings are subjective in nature and should not be used as the sole basis for investment decisions. An Analyst Rating is an opinion, not a statement of fact, and is not intended to be nor is a guarantee of future performance.

About Morningstar Manager Research Services

Morningstar Manager Research Services combines the firm's fund research reports, ratings, software, tools, and proprietary data with access to Morningstar's manager research analysts. It complements internal due-diligence functions for institutions such as banks, wealth managers, insurers, sovereign wealth funds, pensions, endowments, and foundations. Morningstar's manager research analysts are employed by various wholly owned subsidiaries of Morningstar, Inc. including but not limited to Morningstar Research Services LLC (USA), Morningstar UK Ltd, and Morningstar Australasia Pty Ltd.

For More Information

Morningstar Manager Research Services
ManagerResearchServices@morningstar.com

MORNINGSTAR®

22 West Washington Street
Chicago, IL 60602 USA