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SFDR, two years on - Trends and Anatomy of Article 8 & 9 funds in 2023

More than two years on from the launch of the EU Sustainable Finance Disclosure Regulation (SFDR), SFDR continues to drive flows and the transition of non-ESG funds towards ESG in Europe and beyond. Article 8 and 9 Equity funds have received 3.4x the cumulative inflows vs. non-ESG counterparts (Article 6) since 2019, with noticeable distinctions emerging in flows between Art 8 funds with 'sustainable investments' (Article 8+) and Article 8 funds with no 'sustainable investments' (Article 8 no SI). **With 'downgrades' of Article 9 funds slowing meaningfully and now more than 60% of equity AUM now categorised under Article 8 and 9, the commercial dynamics of SFDR are leading to a trend of 'light upgrading' of Article 8 funds towards Article 8+.**

This transition of flows into SFDR ESG funds has significant impacts on capital flows. We highlight the most widely owned and overweight stocks in Article 8 and 9 funds, which shows continued preference for owning thematically aligned companies. However, as Article 8 and 9 funds are maturing, we are witnessing a significant rise in improver & transition funds as a sign of differentiation and shift towards connecting investment outcomes with the real economy. We continue to believe this will expand the investable universe to include companies and sectors across the supply chain of energy transition, including Greenablers and companies in high-carbon industries. **Given Article 8 and 9 funds must report alignment to the EU Taxonomy, we see Taxonomy adoption becoming a major catalyst for owning such companies and sectors, helping provide critical capital towards improving sustainable outcomes.**

Though guidance and disclosures have broadly improved, current disclosures still indicate a wide interpretation of key SFDR concepts. In this report, we assess large Article 8 and 9 funds to explore how they are tackling key requirements of SFDR, including Art. 8 & 9 classification; Sustainable Investment frameworks; Principal Adverse Impacts; Do No Significant Harm and Good Governance.

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Executive Summary

Trends and flows:

- **SFDR continues to drive flows and trends towards everything ESG in Europe with Article 8 required at a minimum.** Our industry conversations indicate that managers find it increasingly difficult to market Article 6 funds, driving all funds towards Article 8 at a minimum. 435 funds were upgraded from Art 6 to 8 across equity and fixed income year-to-date, representing $131bn in AUM.
- **Downgrades slow significantly with much broader trend of 'light upgrading' from Article 8 to 8+ and funds disclosing higher levels of 'sustainable investments'.** Since the start of the year, Article 9 to 8 'downgrades' represented 53 funds and $17.6bn in AUM. In addition to funds generally committing to higher SI% overtime, we find all funds reporting higher actual SI% than commitments. Notably, Article 8+ funds reported ~25% higher actual SI than commitments on average (actual SI% of 44.5% vs. committed SI of 19.7%).
- **Article 9 funds seeing most consistent inflows across Equities and Fixed Income over the past few years...**
- **...with noticeable distinction in fund flows between Art 8 funds with 'sustainable investments' (Article 8+) and Article 8 funds with no 'sustainable investments' (Article 8 no SI).** According to our analysis, Article 8+ funds saw 3.2x of cumulative flow vs. Article 8 (No SI) funds since Jan '19, reaching ~U$378bn of cumulative flow by Jul '23, despite the total number of Article 8 (No SI) funds being 24% higher than Article 8+ funds.
- **Global transition/improvers funds have grown meaningfully.** As highlighted in our latest ESG tracker looking through the global ESG fund universe, **Transition and Improvers strategies reached $50 bn in AUM in July, and have seen net inflows in each month of 2023.**

Article 8 & 9 fund holdings:

- **Updated Article 8 and 9 fund holdings highlight a clear preference for thematically aligned companies.**
- **In Article 8 fund universe**, Water Utilities (+202%), Health Care Technology (+200%), Diversified Consumer Services (+185%) remain the most overweight sectors, while Tobacco (-74%), Aerospace & Defense (-71%), Oil, Gas & Consumable Fuels (-52%), Residential REITs (-42%) are the most underweight sectors. We saw a significant increase in the relative weight for sectors like Passenger Airlines, Energy Equipment & Services, and Water Utilities.
- **For Article 9 funds**, Water Utilities (+2,399%), Mortgage REITs (+880%), Independent Power & Renewable Electricity Producers (+789%) are the most overweight GICS3 sectors while Tobacco (-100%), Aerospace & Defense (-98%), Oil, Gas & Consumable Fuels (-95%) are the most underweight. Water Utilities, Mortgage REITs, and Independent Power and Renewable Energy saw the most positive change in the GICS 3 sector relative weights.

- **Aerospace & Defense, and Oil & Gas sectors observed an expansion of their average underweight since Feb'23 across Article 9 funds, which we would attribute mostly to downgrades to Article 8.** Number of funds owning at least one Oil & Gas sector company went down for both Article 8 and 9 funds (Article 8: 51% to 47%; Article 9: 22% to 16%), while funds owning at least 1 Aerospace and Defense Company remained constant for Article 8 (24%) and fell from 14% to 7% for Article 9 universe from Feb'23 to Aug'23.

Takeaways from the latest SFDR Art. 8 and 9 disclosures:

- **Many funds are now disclosing more detail associated with SFDR requirements, though challenges remain with DNSH and PAI disclosures.** In this report, we analyse the latest SFDR disclosures and ESG fund prospectuses amongst large Article 8 and 9 funds and provide our views on lessons learned.
- **Taxonomy disclosure remains limited given lack of data, but signs of disclosure and adoption emerging.** As of Jul '23, 1,710 (~32%) of Article 8 Equity funds and 266 (~45%) Article 9 Equity funds have reported their fund-level Taxonomy alignment. Of those reported, Taxonomy alignment level averages 1.2% for Article 8 Equity funds and 5.4% for Article 9 Equity funds.
- **Comparability of SI% will be naturally challenging given differences among methodologies, something we see leading towards a shift in eventual preference by fund managers and end investors to reference Taxonomy alignment % as the main sustainable indicator for credentialising a fund as green.**

Expectations and direction of travel for the future of SFDR in 2024

We are expecting a number of regulatory updates to SFDR throughout this year and into 2024, including:

- **1) ESMA Response to Consultation on usage of PAIs and updated amendments to the RTS** (fund-level reporting templates) - this includes updates to PAI metrics, and fund-level reporting templates. Expected in Q4.
- **2) EU Commission consultation on amending level 1 SFDR text** with aim to simplify definitions and address the main struggles of implementation. Expected to start in Q4.

Commercial dynamics of SFDR will continue to drive trend of 'upgrading' of strategies and disclosures, in our view. As Article 8 funds reach critical mass (now ~55% of total equity AUM currently), we expect a continued shift in 'upgrading' towards Article 8+ and eventually Article 9 as we continue to hear that end clients are demanding more differentiated and innovative products, particularly as April guidance made it clear that SFDR is strategy agnostic and quite flexible. While the commercial preference for funds categorized as Article 8+ and 9 is quite clear (Exhibit 4), this guidance and flexibility will take time for local regulators and investors to get comfortable with, which could delay 'upgrades' of funds disclosing under Article 9.

The lack of comparability of 'sustainable investments' could benefit from more

granular disclosures of sub-strategies, which could lead to creation of a market-developed 'Sustainability Style Box' for funds. Given the lack of comparability of defining 'sustainable investment' objectives, we envisage market developed granular sub-categories emerging across **Leaders**, **Improvers**, **Engagement** strategies, which would help end-investors differentiate between funds with similar 'sustainable investment' objective percentages (Exhibit 30). This could lead to growth in generalists Article 9 funds that deploy a blend of various 'sustainable investment' objectives, rather than thematic funds which currently dominate Article 9 categories. Additionally, this could also benefit the market by aligning elements of SFDR with the UK's Sustainability Disclosure Requirements's (SDR) labels, which cover 'Sustainable Focus', 'Sustainable Improver', and 'Sustainable Impact'.

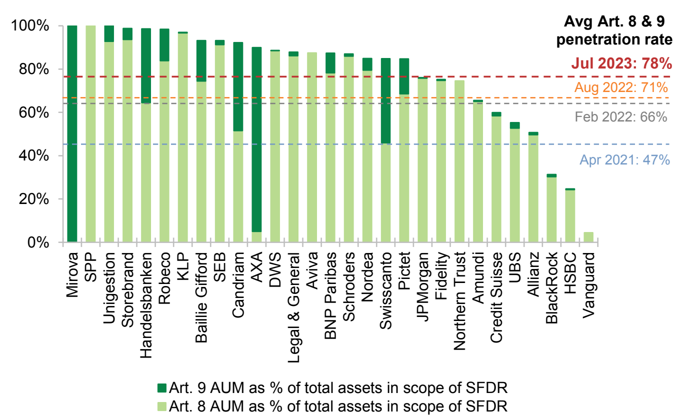
The relevance of a fund's EU Taxonomy alignment will become increasingly important for defining 'sustainable' funds, especially under new 'safe harbour guidance. Recent guidance now allows a company's Taxonomy-aligned turnover or capex to automatically qualify as 'sustainable investments' for SFDR purposes. However, data availability and quality of estimates will be key to EU Taxonomy's usage in investment decision-making and marketing initially. Taxonomy relevance should improve further in 2024 as we expect companies to report higher quality figures in the second year of reporting, and coverage improves with additional objectives coming online with Water, Circular Economy, Pollution, and Biodiversity. Usage of the EU Taxonomy remains ambitious today, but we are seeing signs of growing reporting adoption, with some practitioners stating they see Taxonomy alignment becoming standard market practice for defining 'sustainable' investments in 2-3 years time.

SFDR continues to drive fund flows - latest trends

In this section, we look at **1)** the SFDR penetration growth for a subset of large asset managers we monitor over time; **2)** the dynamic of flows into Article 8, 9 and 6 funds year-to-date and over the past four years; **3)** the reclassification movements amongst the three fund categories; **4)** the overview of committed and actual 'Sustainable Investment' (SI) among funds; and **5)** the performance of Article 8 and 9 funds over the past 12 quarters. **SFDR continues to drive flows and the transition of non-ESG funds towards ESG (disclosing under Article 8 and 9) funds as managers find it increasingly difficult to market Article 6 (non-ESG) funds in Europe. Additionally, we see a meaningful boost in both committed and actual SI% across Article 8 and 9 funds, most notably with Article 8+ funds.**

SFDR continues to lead to further penetration of ESG across all asset managers, with more managers pushing for 100% of funds to disclose under Article 8 and 9. Taking a sample of nearly 30 asset managers, we find a wide range in how much of the total fund assets in scope of SFDR asset managers are classifying as article 8 and 9, from a low of 4% to a high of 100%. Across ~30 select large asset managers, **penetration of Article 8 and 9 funds has risen from 47% to 78% since SFDR kicked in** (Exhibit 1)**.** Looking within ESG funds of the selected pool, Article 8 makes up the vast majority of ESG funds (avg. 88% of AUM) while Article 9 funds remain rare (12%).

Exhibit 1: Penetration of Article 8 and 9 funds amongst select managers rose to 78% v. 47% when SFDR kicked in
Article 8 and 9 Fund Assets as a percentage of total assets in scope of SFDR for select asset managers, Jul '23



Source: Morningstar, Goldman Sachs Global Investment Research

Flows into Article 8 & 9 funds have significantly outpaced Article 6 (or 'Not Stated'), with cumulative flows into ESG equity funds in the past three years standing at 3.4x compared to non-ESG counterparts.

- **Equity:**
  - Between Jan '19 and Jul '23, cumulative flows into Article 8 & 9 funds reached ~U$630bn, while 'Not Stated' counterparts (likely Article 6) saw inflows of only ~U$186bn.

Article 8+ funds: Article 8 funds with >0% 'sustainable investments'.

Article 8 (No SI) reflects the remainder of Article 8 funds.

- Notably, Article 8+ funds saw 3.2x of cumulative flow vs. Article 8 (No SI) funds during the period, reaching ~U$378bn of cumulative flow by Jul '23, despite the total number of Article 8 (No SI) funds being 24% higher than Article 8+ funds.

- **Fixed Income:** Between Jan '19 and Jul '23, cumulative flows into Article 8 & 9 funds reached ~U$497bn, above the likely Article 6 funds' ~U$394bn. This was despite the total number of Article 6 funds being still higher than ESG funds.

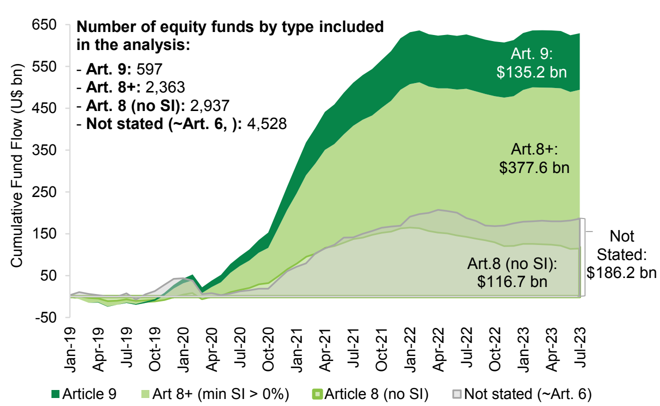
Article 9 funds have shown significantly stronger flows per fund versus Article 8 and 6 funds... Average cumulative flows going into each Article 9 fund from Jan '19 to Jul '23 were significantly higher than for Article 8 and Article 6**.**

- **Equity:** Since Jan'19, Article 9 funds saw average cumulative inflow per fund of U$227 mn vs. U$160 mn for Article 8+, U$40 mn for other Article 8, and U$41 mn for Article 6.
- **Fixed income:** Article 9 funds saw an average cumulative inflow per fund of U$245 mn vs. U$154 mn for Article 8+, U$135 mn for Article 8, and U$116 mn for Article 6.

...and exhibited strong resilience amid market turbulence. Since 2022, Article 9 is the only category receiving consistent inflows across both Equity and Fixed Income categories. **During 2022**, cumulative flows for Article 9 funds reached U$18bn across Equity and Fixed Income, in contrast to Article 6 and Article 8 funds which have both seen net outflows over the period (-$32bn and -$58bn, respectively). **2023 year-to-date,** we note that all funds have seen sizable pick up in flows across the board given market rebound, except for Article 8 (no SI) equity funds, which have seen meaningful outflows (-$6.2bn).

Exhibit 2: Cumulative fund flow of Article 8 & 9 Equity funds have outgrown non-ESG counterparts by 3.4x

Cumulative fund flow of European Equity funds by type (U$bn), Jan '19 - Jul '23

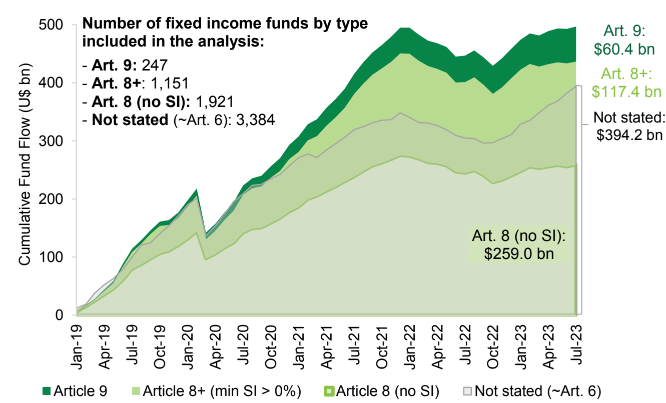


Article 8 and 9 funds are stacked, while not stated funds are charted on a second axis

Source: Morningstar, Goldman Sachs Global Investment Research

Exhibit 3: Cumulative fund flow of Article 8 & 9 Fixed Income funds have also surpassed non-ESG peers

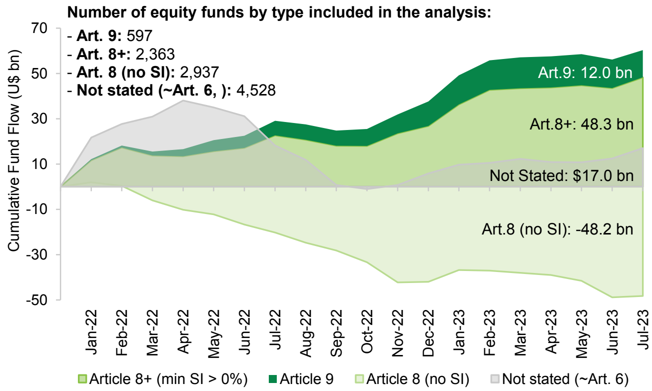
Cumulative fund flow of European Fixed Income funds by type (U$bn), Jan '19 - Jul '23



Source: Morningstar, Goldman Sachs Global Investment Research

Exhibit 4: Despite market turbulence, Article 8+ received the most cumulative inflows since 2022 on the equity side...

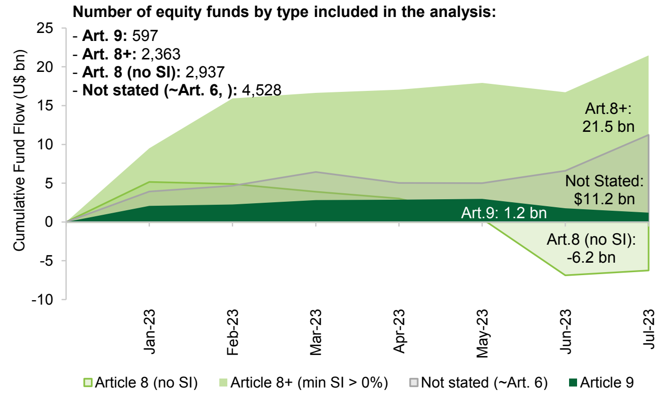
Cumulative fund flow of European Equity funds by type (U$bn), Jan '22 - Jul '23



Source: Morningstar, Goldman Sachs Global Investment Research

Exhibit 5: Article 9 equity funds have seen slight outflows in the last two months

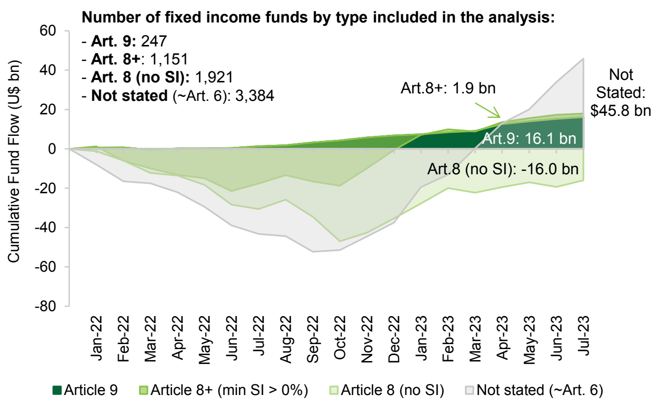
Cumulative fund flow of European Equity funds by type (U$bn), Jan - Jul '23



Source: Morningstar, Goldman Sachs Global Investment Research

Exhibit 6: Article 9 is the only resilient category on the Fixed Income side

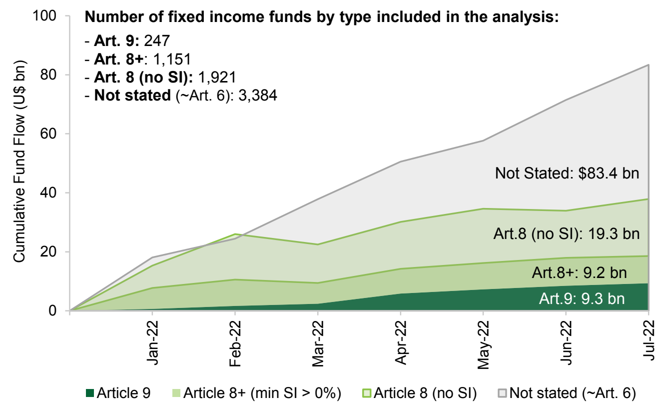
Cumulative fund flow of European Fixed Income funds by type (U$bn), Jan '22 - Jul '23



Source: Morningstar, Goldman Sachs Global Investment Research

Exhibit 7: All funds have seen inflows YTD, most notably with Not Stated funds

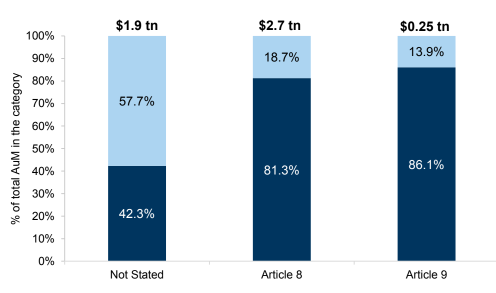
Cumulative fund flow of European Fixed Income funds by type (U$bn), Jan - Jul '23



Source: Morningstar, Goldman Sachs Global Investment Research

Exhibit 8: We see a much stronger presence of active strategies among Article 8 and 9 funds than non-ESG counterparts

% AUM by strategy; total AUM (tn USD)



Source: Morningstar, Goldman Sachs Global Investment Research

Notably, we see a much stronger presence of active strategies among Article 8 and 9 funds than non-ESG counterpart. As of Jul '23, active funds represent 81.3% and 86.1% of Article 8 and 9 Equity AUM, respectively. Among Non stated (~Article 6) equity funds, only less than half (42.3%) of AUM is actively managed.

Exhibit 9: SFDR global equity fund flows and AUM
$ billions

		2021	2022	2023 Ytd	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	May-23	Jun-23	Jul-23
Article 8	Flows	287.5	-15.2	15.2	111.7	69.3	45.0	61.5	7.7	-7.3	-10.5	-5.1	20.6	-10.7	-1.7	-8.5	5.4
	AUM	3,175	2,412	2,689	2,743	3,003	2,992	3,175	2,870	2,386	2,169	2,412	2,607	2,680	2,566	2,680	2,689
Article 9	Flows	67.2	10.8	1.2	28.9	14.2	11.7	12.3	1.7	3.6	1.4	4.1	2.8	-1.0	0.1	-1.2	-0.6
	AUM	277	220	247	212	240	251	277	249	209	196	220	239	244	234	244	247
Not Stated (~Art.6)	Flows	108.8	5.8	11.2	42.8	37.8	15.5	12.6	30.9	0.2	-30.4	5.1	6.4	0.2	0.0	1.6	4.6
	AUM	2,310	1,842	1,943	2,039	2,217	2,187	2,310	2,180	1,834	1,665	1,842	1,980	2,089	1,987	2,089	1,943
All Equity	***Flows***	*463.5*	*1.5*	*27.7*	*183.5*	*121.4*	*72.2*	*86.4*	*40.4*	*-3.5*	*-39.5*	*4.1*	*29.8*	*-11.6*	*-1.6*	*-8.1*	*9.4*
	AUM	*5,762*	*4,475*	*4,879*	*4,994*	*5,460*	*5,430*	*5,762*	*5,299*	*4,429*	*4,030*	*4,475*	*4,827*	*5,013*	*4,787*	*5,013*	*4,879*
Article 8 Breakdown																	
Active	Flows	189.5	-54.9	-8.6	82.2	50.2	26.4	30.7	-6.1	-11.1	-21.2	-16.4	5.6	-17.0	-6.6	-5.9	2.8
	AUM	2,671	1,985	2,186	2,367	2,583	2,549	2,671	2,400	1,988	1,793	1,985	2,133	2,183	2,092	2,183	2,186
Passive	Flows	98.0	39.7	23.8	29.5	19.1	18.6	30.8	13.9	3.8	10.7	11.3	14.9	6.3	4.9	-2.6	2.6
	AUM	504	427	503	375	420	443	504	469	398	376	427	475	497	474	497	503
Open-End Fund	Flows	207.7	-49.5	-3.8	85.4	55.6	30.4	36.3	-2.5	-13.0	-20.6	-13.5	11.9	-19.2	-4.7	-11.3	3.5
	AUM	2,940	2,195	2,411	2,585	2,821	2,795	2,940	2,642	2,191	1,980	2,195	2,362	2,414	2,317	2,414	2,411
ETF	Flows	79.8	34.4	19.0	26.4	13.7	14.5	25.2	10.2	5.6	10.1	8.4	8.6	8.4	2.9	2.8	1.9
	AUM	235	218	278	158	183	197	235	227	195	189	218	245	266	249	266	278
Article 9 Breakdown																	
Active	Flows	61.3	7.0	-0.2	27.8	12.0	10.0	11.6	1.1	2.7	1.0	2.2	1.4	-0.7	0.0	-0.5	-0.9
	AUM	243	192	213	187	210	219	243	217	182	171	192	207	211	202	211	213
Passive	Flows	5.9	3.9	1.4	1.1	2.3	1.7	0.8	0.6	1.0	0.4	1.9	1.4	-0.3	0.1	-0.7	0.3
	AUM	33.7	28.3	34.4	25.8	29.9	31.2	33.7	31.7	26.8	24.6	28.3	31.8	33.0	32.1	33.0	34.4
Open-End Fund	Flows	65.4	10.2	0.6	28.2	13.8	11.4	12.1	1.6	3.5	1.3	3.8	2.3	-1.1	0.1	-1.2	-0.7
	AUM	275	218	244	211	239	249	275	247	207	194	218	236	242	232	242	244
ETF	Flows	1.7	0.7	0.6	0.7	0.5	0.2	0.3	0.2	0.2	0.1	0.3	0.5	0.0	0.0	0.0	0.1
	AUM	1.9	2.0	2.9	1.0	1.5	1.6	1.9	1.9	1.7	1.6	2.0	2.7	2.7	2.6	2.7	2.9
Not Stated (~Art.6) Breakdown																	
Active	Flows	43.1	-23.8	-15.6	14.8	13.0	6.6	8.6	-2.6	-8.2	-10.7	-2.1	-7.3	-7.2	-1.6	-2.4	-1.0
	AUM	1,166	897	822	1,043	1,129	1,110	1,166	1,071	894	822	897	950	995	953	995	822
Passive	Flows	65.7	29.6	26.8	28.0	24.8	8.9	4.0	33.6	8.4	-19.7	7.2	13.8	7.4	1.5	4.0	5.6
	AUM	1,144	945	1,121	997	1,088	1,077	1,144	1,109	940	844	945	1,030	1,094	1,034	1,094	1,121
Open-End Fund	Flows	52.3	-20.1	-13.7	18.0	14.0	10.7	9.5	6.6	-9.9	-14.5	-2.3	-7.8	-5.3	0.4	-2.6	-0.6
	AUM	1,416	1,094	1,034	1,267	1,369	1,348	1,416	1,315	1,094	1,001	1,094	1,161	1,217	1,164	1,217	1,034
ETF	Flows	56.5	25.9	24.9	24.8	23.8	4.9	3.1	24.3	10.1	-15.9	7.4	14.2	5.5	-0.5	4.2	5.2
	AUM	894	748	909	772	848	839	894	865	740	665	748	819	872	823	872	909

Source: Morningstar, Goldman Sachs Global Investment Research

In our view, the general dynamic in the past few years continues to send a clear market signal for managers marketing funds in Europe to categorize funds as ESG, disclosing under Article 8 & 9 to capture flows. Since the start of 2022, >2,800 Article 6 funds representing U$1,561 bn in AUM have been 'upgraded' to Article 8 or 9. Looking at Equity and Fixed Income funds specifically, 2,020 Article 6 funds (U$878 bn in AUM) have been upgraded to Article 8, with another 78 (U$15bn in AUM) upgraded to Article 9. **This trend of recategorizing funds is corroborated by our industry conversations, where clients have difficulty selling Article 6 funds, with some stating end-clients have asked for redemptions on Article 6 funds.**

The data continues to show 'downgrades' from Article 9 to 8 in recent months, however we continue to see upgrading of the 'Sustainable Investment' %s stated by all funds.

- **Movements between Article 8 and 9:**
  - Across Equity and Fixed Income, 49 Article 9 funds representing U$16.6bn have been downgraded to Article 8 funds since the beginning of the year. This compares to 345 Article 9 funds with U$220bn downgrading to Article 8 in 2022. ***We note, that Morningstar disclosed data has a lag on fund categorizations. Based on what Morningstar has published, downgrades have effectively stopped with only six Article 9 funds being downgraded to Article 8, which matches with our industry conversations***.

- We also found a total of 27 Article 8 funds upgrading to Article 9 during Dec '22 - Jul '23.

- **Upgrades from Article 6:** Across Equity and Fixed Income, 443 Article 6 funds with U$132bn of AUM have been upgraded to Article 8 or 9 during Dec '22 - Jul '23.

Exhibit 10: Since the start of this year, U$338bn in AUM has been recategorized from Article 6 to Article 8 or 9
Overview of recategorizing within Article 6, 8 and 9 funds, Jan '22 - Jul '23

Upgrades

	Art. 6 → Art. 8			Art. 6 → Art. 9			Art. 8 → Art. 9		
	Jan - Aug 22	Aug - Dec 22	Dec 22 - Jul 23	Jan - Aug 22	Aug - Dec 22	Dec 22 - Jul 23	Jan - Aug 22	Aug - Dec 22	Dec 22 - Jul 23
Total Number of Funds	1563	579	**610**	63	18	**9**	69	32	**27**
Equity	678	264	252	41	10	7	46	17	13
Fixed Income	477	166	183	13	6	1	20	13	10
Others	408	149	175	9	2	1	3	2	4
AUM ($bn)	904.3	294.8	**338.0**	21.3	2.4	**0.7**	36.9	8.5	**5.6**
Equity	367.4	50.1	65.3	10.0	0.7	0.6	33.6	2.4	1.2
Fixed Income	225.6	104.4	65.6	2.9	0.4	0.1	3.0	5.8	3.8
Others	311.3	140.2	207.2	8.3	1.3	0.0	0.3	0.3	0.6

Downgrades

	Art. 9 → Art. 8			Art. 8 → Art. 6			Art. 9 → Art. 6		
	Jan - Aug 22	Aug - Dec 22	Dec 22 - Jul 23	Jan - Aug 22	Aug - Dec 22	Dec 22 - Jul 23	Jan - Aug 22	Aug - Dec 22	Dec 22 - Jul 23
Total Number of Funds	42	333	**53**	38	46	**75**	-	1	**2**
Equity	22	252	36	18	24	32	-	1	0
Fixed Income	13	58	13	12	13	20	-	0	2
Others	7	23	4	8	9	23	-	0	0
AUM ($bn)	31.2	207.0	**17.6**	10.8	8.7	**6.9**	-	0.1	**0.1**
Equity	12.8	173.7	14.3	5.4	4.8	3.3	-	0.1	0.0
Fixed Income	14.2	19.5	2.3	2.5	2.3	1.8	-	0.0	0.05
Others	4.2	13.9	1.0	2.9	1.6	1.8	-	0.0	0.0

Source: Morningstar, Goldman Sachs Global Investment Research

While upgrades from Article 8 to 9 have been quieter than expected, we do see a meaningful boost in both committed and actual 'Sustainable Investment' %s across Article 8 and 9 funds. Earlier this year, the Commission published a clarification document, confirming that a Pass/Fail approach can be adopted for measuring SI, where 100% of the investment qualifies as SI if thresholds are met, as opposed to a proportional view that typically reference a revenue exposure. This effectively makes reaching higher percentage of SI easier for Article 8 and 9 funds. **However, from our industry conversations, local regulators have continued to hold SFDR Article 8 and 9 categories to stricter standards than intended, causing inconsistencies across Member States. ESMA is launching a Common Supervisory Action (CSA) with local regulators to aid in convergence of supervision and application of SFDR, which should help ensure SFDR is applied consistently as a disclosure regulation across jurisdictions — reducing regulatory fragmentation.**

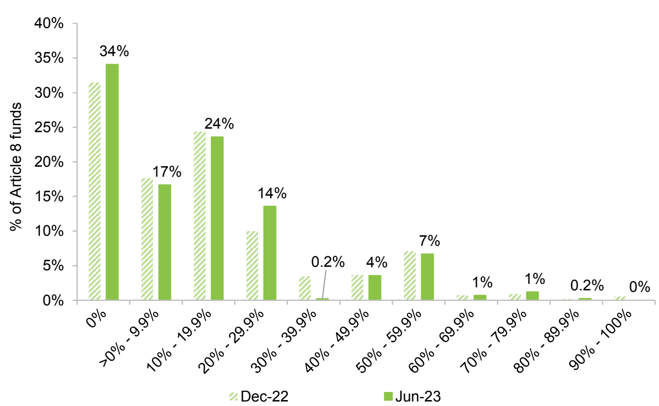
According to our analysis, as of June 2023, of those reporting their minimum SI exposure, the majority of Article 9 funds are targeting >80% SI, with 41% targeting over 90% of SI, compared with only 27% in Dec '22 (Exhibit 12).

All funds are reporting higher actual SI% than commitment, most notably with

Article 8 funds reporting actual SI an average 22% higher than current commitments (Exhibit 14). Looking through funds that have disclosed both committed and actual SI%, Article 8 funds targeting 0% of SI are reporting ~15% of SI on average. 'Article 8+' funds reported ~25% higher actual SI than commitments on average (actual SI of 44.5% vs. committed SI of 19.7%). The gap for Article 9 sits at 4.5% - smaller than other categories given the already-high SI commitments required across Article 9 funds. We also found 102 not stated (likely Article 6) funds disclosing both SI% fields, reporting an actual SI% of 25.6%, while targeting 10% of SI on average. **We see the SI % of a fund becoming one of the most commercial elements of a fund, as clearly evidenced by the benefit of stronger flows, as shown earlier.**

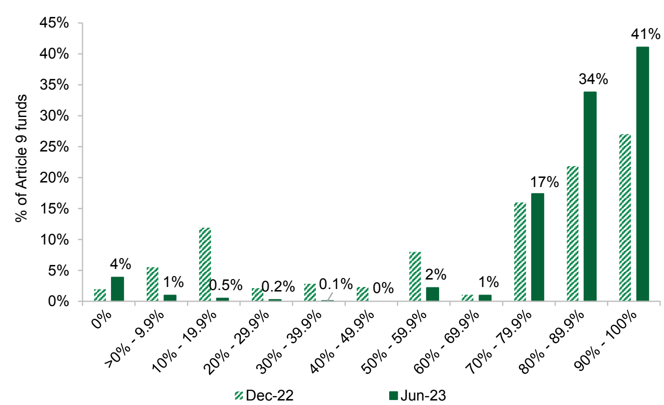
Similar trends are seen with Taxonomy alignment figures. Currently, disclosure is comparatively lacking due to data challenges, with 49% of Article 8 funds disclosing Taxonomy alignment commitments, and around a third disclosing actual fund-level Taxonomy alignment across Equity and Fixed Income. Disclosure among Article 9 funds is slightly better, with 61% and 45% disclosing committed and actual Taxonomy figures on the Equity side, compared with 63% and 41% on the Fixed Income side. Among disclosers, actual Taxonomy alignment levels are materially higher than commitment. As of Jul '23, 9% of Article 8 equity funds reported some level of Taxonomy alignment. This compares to only 2% making the commitment. Notably, 13% of Article 9 equity funds reported at least 10% of Taxonomy alignment, while only 4% committed to do so (Exhibit 15). **We see increasing Taxonomy adoption among funds as corporate Taxonomy data becomes more broadly available. Based on our industry conversations, many fund managers are incorporating some level of Taxonomy commitment into the fund, or starting to disclose fund-level Taxonomy alignment at a minimum.**

Exhibit 11: ~75% of Art 8 funds are targeting <20% SI
Distribution of Article 8 funds with various commitments to Sustainable Investments (SI), Dec '22 vs. Jul '23



Source: Morningstar, Goldman Sachs Global Investment Research

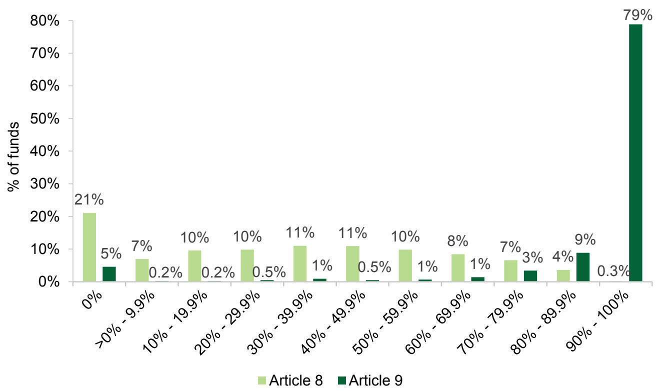
Exhibit 12: While ~75% of Art 9 funds are committing to over 80% SI
Distribution of Article 9 funds with various commitments to Sustainable Investments (SI), Dec '22 vs. Jul '23



Source: Morningstar, Goldman Sachs Global Investment Research

Exhibit 13: Looking across reported actual SI figures, ~80% of Article 9 funds have over 90% SI

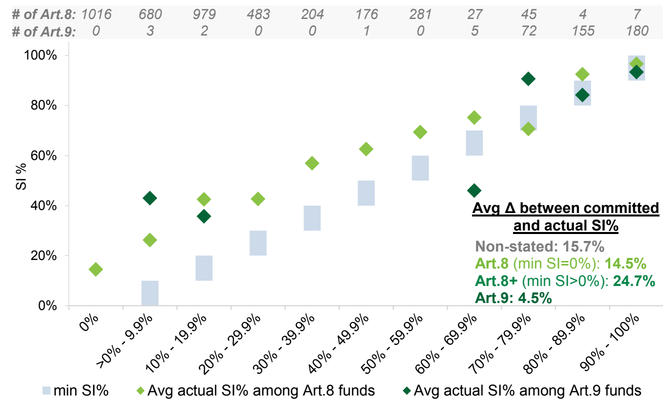
Distribution of Article 8 and 9 funds with various actual Sustainable Investments (SI), Jul '23



Source: Morningstar, Goldman Sachs Global Investment Research

Exhibit 14: Article 8 funds reported 22% higher actual SI than commitment on average

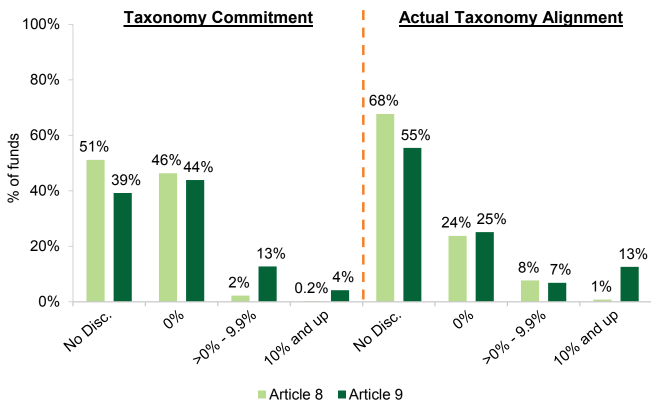
Committed and actual SI% across Article 8 and 9 funds, Jul '23



Source: Morningstar, Goldman Sachs Global Investment Research

Exhibit 15: While Taxonomy disclosure is currently low, when reported, Taxonomy alignment levels are materially higher than commitments among Article 8 and 9 Equity funds...

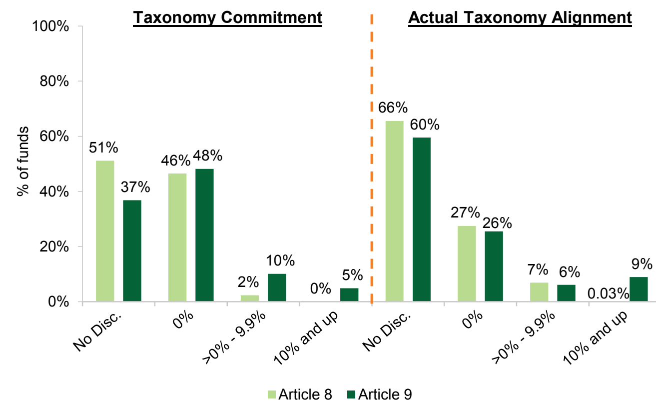
Committed and actual Taxonomy Alignment% across Article 8 and 9 Equity funds that disclosed Taxonomy data, Jul '23



Source: Morningstar, Goldman Sachs Global Investment Research

Exhibit 16: ...same holds true on the Fixed Income side

Committed and actual Taxonomy Alignment% across Article 8 and 9 Fixed Income funds, Jul '23



Source: Morningstar, Goldman Sachs Global Investment Research

Our ESG trackers cover a universe of global ESG funds per Morningstar's definition, as well as Article 8 and 9 funds not tagged as ESG.

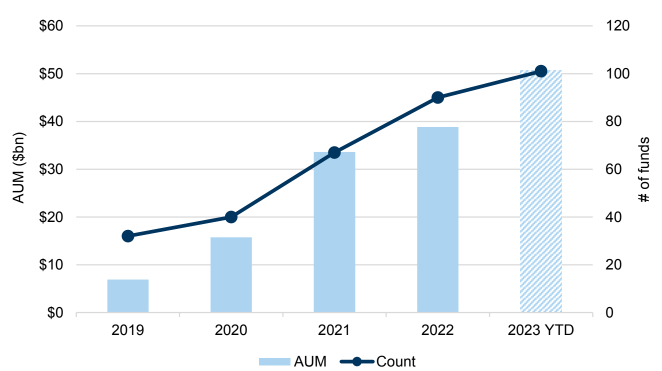
Transition / Improvers funds are becoming a fast growing category

We see transition / improvers strategy emerging as a growing impact category for ESG funds, especially in Europe as Article 8 & 9 penetration approaches critical mass and asset managers seek greater differentiation in ESG fund strategies. Recognition and appreciation for transition strategies has been growing among investors as they are measurable, additional, and connected with tangible outcomes in the real economy. **Transition and Improvers strategies reached $50 bn in AUM in July** (based on a simplified analysis of fund names among global ESG funds) (Exhibit 17), with a greater weight toward Active management vs. the broader ESG fund universe (80% of Transition/Improvers AUM is Active vs. 63% for the full universe). Additionally, Transition/Improvers funds have seen net inflows in each month of 2023.

We note that Taxonomy can serve as a powerful tool to identify companies in transition, and to credentialise companies' transition efforts. Companies with initial low levels of revenue eligibility/alignment, yet high levels of CapEx alignment to the Taxonomy could be sending a critical forward-looking signal in their transition strategy. We envisage the Taxonomy helping spur the issuance of green debt, particularly amongst transitioning companies.

Exhibit 17: We see growing interest in forward-looking ESG investment strategies

Annual count (RHS) and AUM (LHS) of Transition/Improvers ESG funds



Through 8/25/2023; universe includes Article 8 & 9 labeled funds that are not tagged as ESG; Transition/Improvers funds include those with "Transition","Paris-aligned" and "Decarbonisation" and "Improver" in fund names

Source: Morningstar, Goldman Sachs Global Investment Research

Exhibit 18: Examples of Transition funds

	Sustainable Investment Commitment	Example of Binding KPIs
Example 1 **Art.8 Climate Engagement fund**	**min. 50% SI**	**E/S characteristics - Climate transition:** focus on companies that demonstrate a transition path for their business models to become aligned with the goals of the Paris agreement. **Active ownership and engagement are key components** in seeking to influence companies' behaviour, and to initiate and accelerate the needed transition. **KPIs used to measure the attainment of the E/S characteristic:** ● **Carbon Footprint:** Defined as the total carbon emissions (scope 1 & 2) for a portfolio, normalised by the market value of the portfolio, expressed in tons CO2e / M€ invested. ● % of total investments in companies **violating the UN Global Compact (UNGC) principles or OECD Guidelines** for Multinational Enterprises. **Engagement:** The portfolio engages across 5 themes: Air and GHG Emissions, Energy management, Environmental pollution, Natural resource management and Sustainable business model. **Holdings in the fund are, in aggregate, higher emitters** than other companies in the benchmark and even within their sectors. **SI:** Invest in companies with ● **>= 20% of revenue aligned with the EU Taxonomy** ● **>=20% of revenue contributing to one or more of the SDGs** **CapEx, OpEx or other relevant activity measures will be used if these are more relevant for the respective sectors.*
Example 2 **Art.8 Transition fund**	**min. 30% SI**	Invest in companies with ● **>10% of revenue or CapEx** towards eligible EU Taxonomy activities ● **>10% of CapEx** performing efficient commodity extraction, key to industrial supply chains that contribute to mitigating climate change. In addition, to qualify as SI, if a company meets one of the above criteria but has a heavy emitting business model (defined as being in the top 25% of polluting firms within the benchmark MSCI ACWI using the metric tonnes of Scope 1-3 per € of EV incl. cash), it needs to have a science-based GHG reduction target, defined as having a Science Based Greenhouse Gas Target approved by the SBTi.
Example 2 **Art.9 Transition fund**	**min. 75% SI**	Invest in companies **generating at least 50% of revenue** from activities that contribute towards the global transition towards lower-carbon sources of energy, such as lower carbon energy production, distribution, storage, transport and associated supply chain, material provider and technology companies. Specific energy transition activities include (1) renewable energy equipment; (2) renewable energy generation; (3) transmission and distribution; (4) batteries, storage and other equipment; (5) hydrogen; (6) electrical equipment and energy; and (7) Clean mobility.

Source: Company data, Goldman Sachs Global Investment Research

Investor Example: AP7 plans to invest 10% of equity assets in transition companies by 2025

Swedish pension fund AP7, with €89bn in AuM, is planning a shift towards an active ownership strategy with a new transition-focused mandate. **AP7 pledged that, by 2025, the fund will invest 10% of equity assets (~€7.5bn based on current equity AuM) in companies with the most transition potential, while also engaging with big emitters to accelerate their transition process towards a low-carbon future.**

AP7 plans to roll out the new transition strategy together with a chosen asset manager, relaying engaging responsibilities to the asset manager, while evaluating the transition progress on a regular basis.

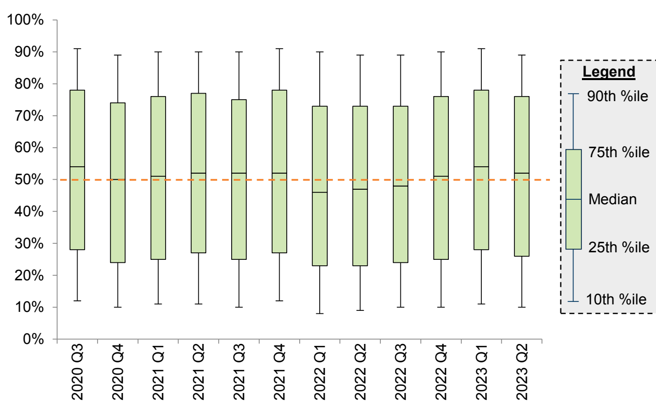
The big picture for Article 8 and 9 fund performance

Article 8 fund performance has been generally stable in the last 12 quarters, with Article 8 funds with no SI slightly outperforming category peers on average (51st percentile), while Article 8+ funds slightly lagged category peers (49th percentile on average). The same holds true when zooming into the first two quarters of 2023, with Article 8 fund performance improving and reaching 52nd percentile by 2Q23, while Article 8+ fund performance dropped below the median in the same period.

Historically, Article 9 fund performance was significantly more volatile, but saw the biggest outperformance when comparing to Article 8 funds. Median return ranges from 33rd percentile to 69th percentile in the last 12 quarters we tracked. Article 9 fund performance averaged 41st percentile in the most recent quarter, partially contributed by overall soft thematic performance from clean energy stocks.

Exhibit 19: Peer-relative performance among Article 8 funds slightly exceeded peers in 2023

Distribution of Morningstar return percentiles for Article 8 funds

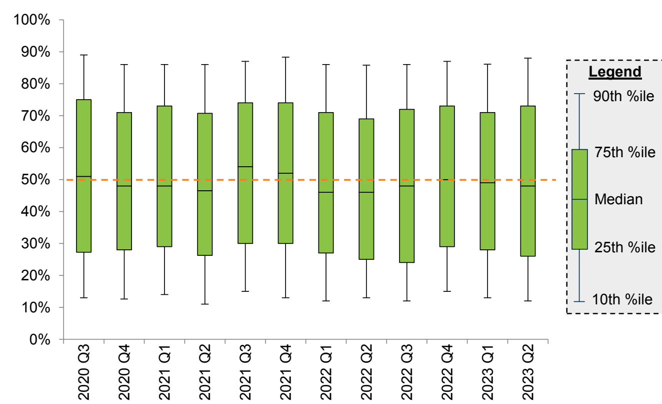


Morningstar return percentile ranks are assigned within Morningstar fund categories, which group funds based on their investment styles

Source: Morningstar, Goldman Sachs Global Investment Research

Exhibit 20: Article 8+ fund performance slightly dropped below median in 2023

Distribution of Morningstar return percentiles for Article 8+ funds

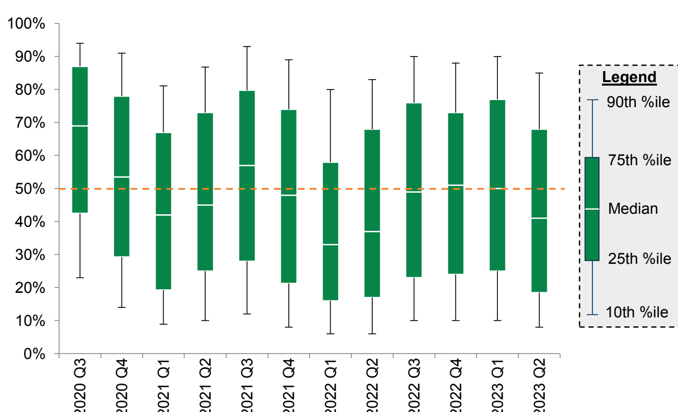


Morningstar return percentile ranks are assigned within Morningstar fund categories, which group funds based on their investment styles

Source: Morningstar, Goldman Sachs Global Investment Research

Exhibit 21: Article 9 funds' performance have been historically more volatile

Distribution of Morningstar return percentiles for Article 9 funds



Morningstar return percentile ranks are assigned within Morningstar fund categories, which group funds based on their investment styles

Source: Morningstar, Goldman Sachs Global Investment Research

Assessing Article 8 and 9 holdings

In this section, **we dig into Article 8 and 9 funds to identify companies and sectors that appear to be most-preferred among ESG investors**, based on available underlying constituents from 4,676 Article 8 equity funds (totaling ~US$1.95 tn in AUM), and 491 Article 9 funds (totaling ~US$172.7bn in AUM). Following on from our Nifty Fifty series covering ESG fund holdings, we construct two separate lists of global stocks that are currently **1) most relatively overweight in Article 8 & 9 funds** vs. the benchmark (MSCI ACWI) and **2) most widely owned across the Article 8 and 9 funds** in our analyzed universe.

Top 50 SFDR Article 8/9 'Relative Overweight' stocks is made up of companies most overweight by Article 8 or 9 funds relative to their benchmark weight (MSCI ACWI or synthetic weight), in an effort to identify stocks where ESG asset flows are likely having the most significant impact on multiples. For this list, we set a market cap floor of $5bn to help avoid outliers of small companies that may be heavily owned by only a few large funds.

We find that many stocks commonly overweight by Article 8 and 9 funds have product portfolios with tangible environmental benefits, such as enablers of resource efficiency, emissions reduction, which tend to correspond to higher EU Taxonomy and SDG alignment. This translates into overweights of Industrials, Materials and Utilities.

Top 50 SFDR Article 8/9 Widely Owned stocks is made up of companies *most owned* by Article 8 and 9 funds, tends to highlight larger market cap names that are often times well weighted in the benchmark and less likely to be excluded by Article 8 and 9 funds due to both their benchmark weight and generally inoffensive ESG exposures, such as Information Technology and Health Care companies.

Sector ownership in Article 8 and Article 9 funds

Water Utility companies are most overweight for both Article 9 (+2,399%) and Article 8 (+202%) funds vs. the benchmark among the GICS3 sectors. **Common overweights amongst Article 8 & 9 funds** include Diversified Consumer Services (+185% Art 8, +608% Art 9), Commercial Services & Supplies (+135% Art 8, +734% Art 9) and Leisure Products (+141% in Art 8, + 478% Art 9). **Sectors that are consistently most underweight amongst both Article 8 & 9 funds** include Tobacco (-74% Art 8, -100% Art 9), Aerospace & Defense (-71% Art 8, -98% Art 9), and Oil & Gas (-52% Art 8, -95% Art 9).

Article 8 sectors most overweight include Water Utilities (+202%), Health Care Technology (+200%), Diversified Consumer Services (+185%), Energy Equipment & Services (+173%), Leisure Products (+141%), Commercial Services & Supplies (+135%), and Building Products (+103%).

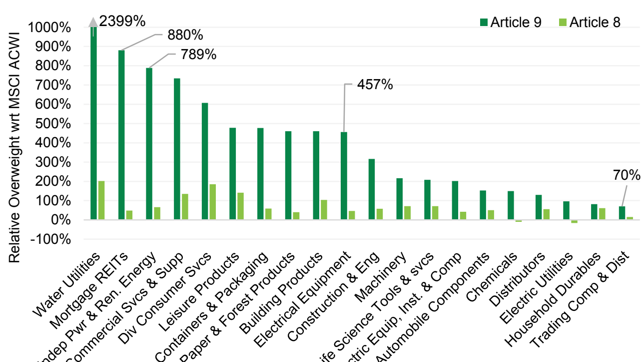
Article 8 sectors most underweight include Tobacco (-74%), Aerospace & Defense (-71%), Oil, Gas & Consumable Fuels (-52%), Residential REITs (-42%), Tech Hardware, Storage & Peripherals (-37%), and Industrial Conglomerates (-36%).

Article 9 sectors most overweight include Water Utilities (+2,399%), Mortgage REITs (+880%), Independent Power & Renewable Electricity Producers (+789%) and Commercial Services & Supplies (+734%), with 14 total sectors being over 200% overweight in these funds, as shown below.

Article 9 sectors most underweight include Tobacco (-100%), Aerospace & Defense (-98%), Oil, Gas & Consumable Fuels (-95%), Gas Utilities (-92%), Energy Equipment & Services (-89%), Beverages (-81%) and Tech Hardware (-75%).

Exhibit 22: Article 9 funds are significantly overweight Water Utilities, Mortgage REITs and Independent Power & Renewable Electricity Producers

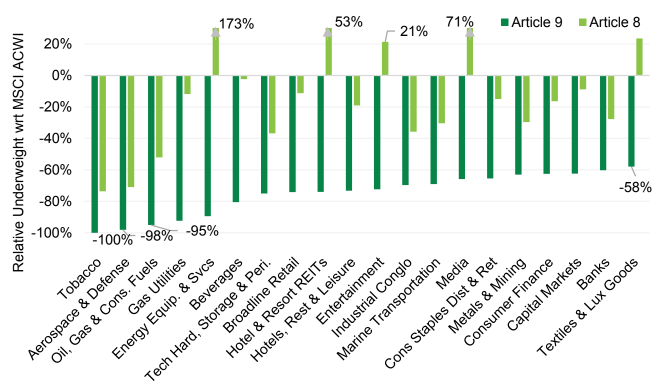
GICS 3 sub-industry overweights and underweights, percentage points relative to MSCI ACWI



Source: Refinitiv Eikon, Morningstar, Goldman Sachs Global Investment Research

Exhibit 23: Article 8 & 9 funds are significantly underweight Tobacco, Aerospace & Defense, and Oil, Gas & Consumable Fuels

GICS 3 sub-industry overweights and underweights, percentage points relative to MSCI ACWI



Source: Refinitiv Eikon, Morningstar, Goldman Sachs Global Investment Research

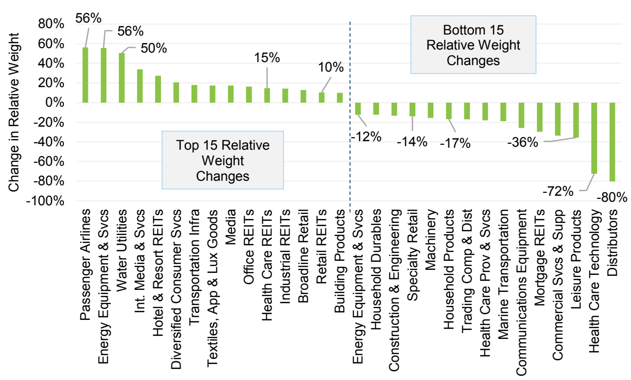
What changed since Q1 2023?

We compared the distribution of relative weights of GICS3 sectors in the latest data to the Feb'23 results to find the shifts in the holdings of Article 8 and Article 9 funds.

- **Article 8 funds:** Passenger Airlines (+56%), Energy Equipment & Services (+56%), and Water Utilities (+50%) are the sectors that gained more exposure; while Distributors (-80%), Health Care Technology (-72%) and Leisure Products(-36%) are sectors with the most reduced Relative Weight.
- **Article 9 funds:** Water Utilities (+518%), Mortgage REITs (+217%), and Independent Power and Renewable Energy (+174%) are the sectors that gained more exposure; while Leisure Products (-65%), Commercial Services & Supplies (-54%), and Containers and Packaging (-49%) have declined the most.

Exhibit 24: Compared to Q1'23, Passenger Airlines, Energy Equipment & Services, and Water Utilities have gained share in the Article 8 universe

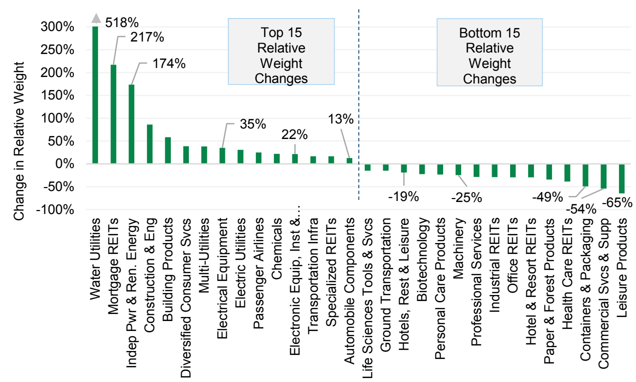
Change in Relative Weight since February 2023 for Article 8 funds



Source: Refinitiv Eikon, Morningstar, Goldman Sachs Global Investment Research

Exhibit 25: Compared to Q1 2023, Water Utilities, Mortgage REITs, and Independent Power and Renewable Energy GICS3 sectors have gained share in the Article 9 universe

Change in Relative Weight since February 2023 for Article 9 funds

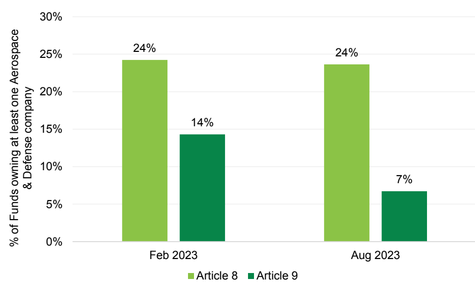


Source: Refinitiv Eikon, Morningstar, Goldman Sachs Global Investment Research

How has ownership changed for A&D and O&G companies?

Aerospace & Defense and Oil & Gas Producers continue to be among the most underweight GICS3 sectors in both Article 8 and Article 9 funds. We compare the relative weights and the % of funds that own at least one company in the respective sectors to understand the shift in the opinions of green fund owners since Feb '23.

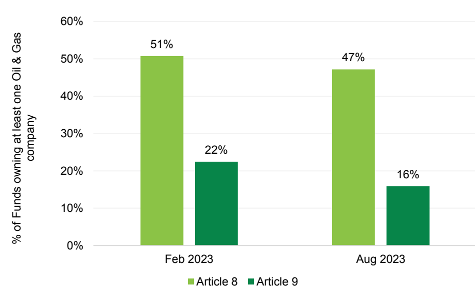
Exhibit 26: Number of funds owning at least 1 A&D company remained consistent under Article 8 and decreased significantly for Article 9 funds
Change in proportion of funds owning at least 1 company in the Aerospace and Defense sector



Source: Refinitiv Eikon, Morningstar, Goldman Sachs Global Investment Research

- **Aerospace & Defense**: A&D still remains underweight in Article 8 funds sitting at 71% underweight in Aug '23 vs 70% underweight in Feb '23. Within Article 9 funds, the relative weight dropped from -94% to -98%. As of Aug '23, 24% of Article 8 funds own at least 1 A&D company, which is consistent when compared to the Feb '23 value, while the proportion for Article 9 funds went down from 14% (Feb '23) to 7% in Aug '23.

Exhibit 27: Number of funds owning at least 1 O&G company decreased for both Article 8 and Article 9 funds
Change in proportion of funds owning at least 1 company in Oil, Gas & Consumable Fuels sector



Source: Refinitiv Eikon, Morningstar, Goldman Sachs Global Investment Research

- **Oil & Gas**: In Article 8 funds, O&G moved from -49% in Aug '23 to 52% underweight in Feb '23. In Article 9 funds, the relative weight dropped from -94% to -95%. As of Aug '23, 47% of Article 8 funds own at least one O&G company, down by 4% from Feb '23, while ownership declined by 6% for Article 9 (22% to 16%).

Dissecting latest Article 8 and 9 fund disclosures & lessons learned

The flexibility of SFDR Article 8 and 9 designations remains underappreciated and is a feature we see as a positive for promoting innovation amongst ESG financial products, while still providing needed transparency to the ESG product space — allowing for end-clients to determine an ESG fund's credibility. We analyse the latest SFDR disclosures and ESG fund prospectuses from selected EU asset managers and provide our views on interpreting the underlying disclosure requirements. **Following Q2'23 guidance from the EU Commission, SFDR was reiterated as a disclosure regulation allowing for great flexibility in how asset managers address and define key components of SFDR** such as 'promote E&S considerations', 'sustainable investments', 'do-no-significant-harm', and 'good governance'.

Looking into fund prospectuses, **we see a range of classification approaches and fund strategies taken by firms, varying in complexity, which is contributing to the difference in outcomes, most notably within Article 8.**

Principal Adverse Impact (PAI), Do No Significant Harm (DNSH) and Governance disclosure strategies follow suit with a wide range of strategies, while Taxonomy disclosures remain limited due to lack of data. Many asset managers only consider PAIs on an entity-level, lack detailed DNSH process and/or assess governance on a qualitative basis. Others conduct multi-level monitoring of all mandatory PAIs with a thorough engagement process, apply DNSH criteria across all investments with detailed disclosures and use a multi-step assessment reflecting widely recognized industry-established norms with remediation efforts for companies that lack sufficient data.

Taxonomy alignment levels among Article 8 and 9 funds remain low given lack of data availability, with Article 8 and 9 equity funds reporting an average EU Taxonomy alignment of 1.2% (n=1710 or 32.3% of Art 8 funds) and 5.4% (n=266 or 44.6% of Art 9 funds), respectively.

In this section, we assess the spectrum of approaches used across large Article 8 and 9 funds for 1) overall fund classification strategy; 2) Principal Adverse Impact identification; 3) Do No Significant Harm analysis; and 4) Good Governance assessment.

Article 8 Funds strategy overview - assessing existing approaches

Article 8 funds witness noticeable trend towards 'light upgrading' to Article 8+. Given the low threshold for achieving Article 8 status, which can include simple exclusions, many asset managers, as well as local regulators, have called for minimum standards, or are promoting a new market-defined label of **Article 8+** funds which incorporate a 'sustainable investment' (SI) objective in addition to 'promoting E&S considerations'. According to our analysis, ~45% of Article 8 equity funds are targeting some level of SI, with the actual SI level in FY22 averaging 25% higher than commitment. Among some of the largest Article 8+ funds, SI commitment ranges from a low of 5% to a high of 51%, and most asset managers are referencing the EU Taxonomy as the primary framework for defining SI (3 out of 5 funds with SI commitments), followed by SDGs and SBTi frameworks.

Our view of Article 8 fund best practices: *A fund that promotes E&S considerations by incorporating ESG risks / opportunities into the investment process in an evidence-based manner, with additional exclusions or engagement strategies adding further credibility. Exclusion-only funds are largely captured within Article 8 (no funds). Recent outflows in Article 8 (no SI) funds may indicate end clients are looking beyond exclusion-only funds.*

Exhibit 28: We see a wide spectrum of approaches used to 'promote E&S characteristics' under Article 8 Article 8 and Article 8+ classification approaches taken by different asset managers

Article 8

Promoting E&S Characteristics Approach	Example	Level of Sophistication Spectrum
Exclusion	**Exclusionary criteria** include: - Material involvement in thermal coal, tar sands extraction, and thermal coal-based power generation. - Involvement in controversial weapons and nuclear weapons; Material involvement in production and distribution of civilian firearms and tobacco - Failure to comply with the 10 UNGC Principles	**Less**
Exclusion + ESG Scoring / Carbon Intensity Enhancement	● **Norm-based Screening & Exclusion, excl. companies** - with exposure to controversial weapons - with >10% revenue exposure to tobacco - with >10% revenue exposure to mining or extraction of thermal coal, and/or the production of energy from thermal coal **subject to an allowance for entities deemed to have a credible transition plan to reduce their reliance/exposure to thermal coal in favour of less carbon intensive forms of energy such as renewable energy* - breached, or to be at severe risk of breaching, certain recognised norms/international standards ● Maintain a **weighted average carbon intensity at least 10% below that of the reference index**	
Exclusion + ESG Scoring + Engagement	● Apply norm-based and sectoral **exclusions** ● Exercise **voting rights and engage** with companies after considering the long-term sustainability of the company ● **Avoid investing in companies in the bottom 15% of its sector's overall ESG score,** as measured by proprietary ESG scoring assessment	
Enhanced exclusion + ESG Scoring + Thematic Strategy + Active Ownership & Engagement	● Norms-based **Screening & Exclusion with specified revenue threshold** ● **Enhanced exclusion filters and other limits**: assess a company's involvement in a specific activity measured by the revenue derived from this activity ● **ESG scoring**: reach a set portfolio weighted average ESG score based on third-party rating ● **Active Ownership & Engagement:** has a focus team that meets with both potential and current investee companies each year and engage on a variety of sustainability issues. An escalation strategy is also in place if engagement is deemed to be unsuccessful. ● **Thematic ESG strategies:** **- Environmental:** assess a company's alignment/commitment to science-based climate targets through metrics including *SBTs, Implied Temperature Rise, and Carbon Footprint (Intensity)*. The fund aims to have 60% of companies by weight to have committed to SBTi by 2025, and increase to 90% by 2030. **- Social:** seek to promote investee companies to progress against social issues including employee relations, as measured by external employee review sites including Glassdoor and ISS.	**More**

Article 8+

Promoting E&S Characteristic		Sustainable Investment (SI)		
Approach	**Example**	**Commitment**	**Approach**	**Example**
Exclusion	**Exclude companies**: - With any tie to fossil fuel - In below GICS sectors: energy, construction materials, utilities (excl. renewable electricity and water utilities), or metals and mining. - with any tie to controversial weapons, civilian firearms etc.	**10%**	**SDG**	Invest in companies satisfying below three criteria using third-party data: 1) have a net positive aggregate alignment score across all SDGs 2) have sufficient positive alignment with at least one SDG 3) not have any material mis-alignments on any SDGs
Exclusion + ESG Scoring	● **Exclusion:** - Firm-wide exclusion towards cluster munitions and anti-personnel landmines - Norm-based screening in accordance with UNGC ● Favourable ESG characteristics as determined by reference to **ESG ratings** (both external and internal framework)	**5%**	**EU Taxonomy** **SDG** **Decarbonisation Target**	● **aligned to the EU Taxonomy** ● **>50% of revenue** contributing to one or more SDGs ● issuers with a **decarbonisation target** consistent with a 1.5C scenario or lower (verified by the SBTi or proprietary Climate Rating)
Carbon Profile + ESG Scoring + Engagement	● **Reduce fund's carbon footprint over time**, and have a low footprint vs. benchmark index ● Invest in companies with **verified Net Zero targets** ● **Dialogues** with companies to increase their E&S responsibility	**23%** *(FY22 Actual)*	**EU Taxonomy** **SDG**	● **aligned to the EU Taxonomy** ● **>= 20% of revenue** contributing to one or more SDGs
Exclusion + ESG Scoring + Thematic Strategy + Active Ownership & Engagement	● Norms- and values- based **Screening & Exclusion** ● **ESG scoring**: reach a better ESG profile than the reference index ● **Thematic ESG strategies**: aim to achieve a positive E&S impact by investing at least two-thirds of total assets in securities that may benefit from global megatrends, i.e. long-term market trends resulting from secular changes in economic, social and environmental factors such as demographics, lifestyle or regulations. ● **Active Ownership & Engagement:** methodically exercises voting rights. The fund may also engage with the management of companies on material ESG issues and may divest if progress proves unsatisfactory.	**51%**	**EU Taxonomy** **Proprietary Social Taxonomy**	Invest in companies with **significant exposure** to energy transition, circular economy, energy efficiency, water quality and supply, sustainable forestry, sustainable cities, nutrition, human health and therapeutics, personal self-fulfilment and security etc., ***as measured by revenue, EV, EBIT, or similar).*** These could be measured using below frameworks: ● **Environmental: EU Taxonomy** and other frameworks ● **Social: developed proprietary social taxonomy framework** based on the objectives suggested in the *Report on Social Taxonomy published by the EU Platform on Sustainable Finance*. Eligible activities cover socially beneficial goods & services that enable one of the following three categories: (1) inclusive and sustainable communities, (2) adequate living standards and well-being for end users and (3) decent work.

Source: Company data, Goldman Sachs Global Investment Research

Article 9 fund strategy overview - assessing existing approaches

Interpretation of what should be defined as Article 9 funds appears to have greater consensus, with most asset managers tagging funds with **thematic / impact investment strategies**, **such as climate transition, SDG alignment, EU Taxonomy alignment**, and or products with **specific ESG fund targets** such as carbon footprint objectives, and greater ESG scores than the benchmark. We note that the level of sophistication of Article 9 funds still varies as asset managers leverage different tools to measure the ESG performance or contribution of a fund, with some adopting off-the-shelf solutions, while others utilize proprietary frameworks. The SDGs and EU Taxonomy serve as two of the clearest solutions for defining 'sustainable investments', but are not the only available methods.

Our view of Article 9 fund best practices: *A fund that can clearly articulate how a* ***binding-element****,* ***either quantitative KPI or structured qualitative framework****, is used to qualify how a company meets an environmental objective (either Taxonomy-aligned, or self-defined) or social objective (self-defined), while ensuring companies do-no-significant-harm (either related to Taxonomy or self-defined DNSH criteria), while incorporating components of the PAIs, and shows a framework for defining good governance practices.*

Exhibit 29: Current Article 9 funds have more consensus around defining a 'sustainable investment'
Article 9 classification approaches taken by a sample of asset managers

Article 9 Classification Approach		Example
Thematic		**Example of a Water-Themed fund** The fund commits to **≥80% of SI** in companies with significant exposure to water-related activities as measured by revenue, EV, EBIT, or similar. These activities could include, but not limited to, water production, water conditioning and desalination, water suppliers, transport and dispatching, collection and treatment of waste water, sewage and solid, liquid and chemical waste, sewage treatment plants and providing water equipment, consulting and engineering services and other relevant economic activities.
Specific Targets	Best-in-class	**KPI**s monitored include: ● **Carbon footprint** (Scope 1 & 2) **Target:** Fund footprint < 70% of the benchmark footprint ● **ESG Score Target:** Fund > benchmark based on proprietary methodology
	SDGs	**Contribution to SDGs**: ● The fund commits to **≥80% of SI** in companies with ≥25% of revenue contributing to selected SDGs
	EU Taxonomy	**Alignment to EU Taxonomy**: ● The fund commits to **≥85% of SI** in companies with ≥20% of revenue aligned to the EU Taxonomy ● When Taxonomy data is unavailable, the fund invests in companies with ≥20% of revenue contributing to SDG 9, 11 or 12
	Climate Agenda	**Science Based Targets and Climate Agenda:** ● Invest in companies with Science Based Targets, or ● via products and services, contribute positively to the fulfilment of one or several of the targets in Agenda 2030

Source: Company data, Goldman Sachs Global Investment Research

How are Long/Short funds Meeting Article 9 criteria?

Live Fund Example: **Article 9 Long/Short fund targeting 90% SI**

Trium Climate Impact Fund is an Article 9 Equity long/short market neutral strategy fund that aims to contribute towards decarbonisation, clean water, less waste, circular economy and improved efficiencies.

The fund **targets a 100%, and commits to a minimum of 90% Sustainable Investment (SI)** with the long book, treating the short side as a hedge and thus not capturing the short side within any of the broader fund commitments. Additionally, it aims to reach **at least 15% of Taxonomy alignment**. We provide an overview of the fund's investment strategy below.

- The **Long book** of the portfolio is composed of companies with exposure to Environmental Solutions, Alternative Energy Infrastructure, and/or Clean Technology.
- The **Short book** of the portfolio currently gets no credit for SI, as it aims to provide liquidity and hedging benefits. However, the fund will avoid any short positions in environmental solutions companies.
- **All assets of the fund** will meet minimum environmental or social safeguards, namely by applying ESG screens.

In our view, the short side of a long/short fund could be deemed to qualify as a 'hedge' under guidance for satisfying Article 9 reporting obligations that allows investments to be made alongside 'sustainable investments'. However, according to the guidance the short side should still comply with environmental and social safeguards that are not counter to the funds overall 'sustainable investment' objective. This potentially indicates that it may not be appropriate to short companies that meet an asset managers 'sustainable investment' definition. Guidance states that SFDR Article 9 remains neutral in product design and that fund disclosures should include sufficient information to explain how the Article 9 fund complies with the 'sustainable investment' (Article 2 (17)) definition and DNSH principles.

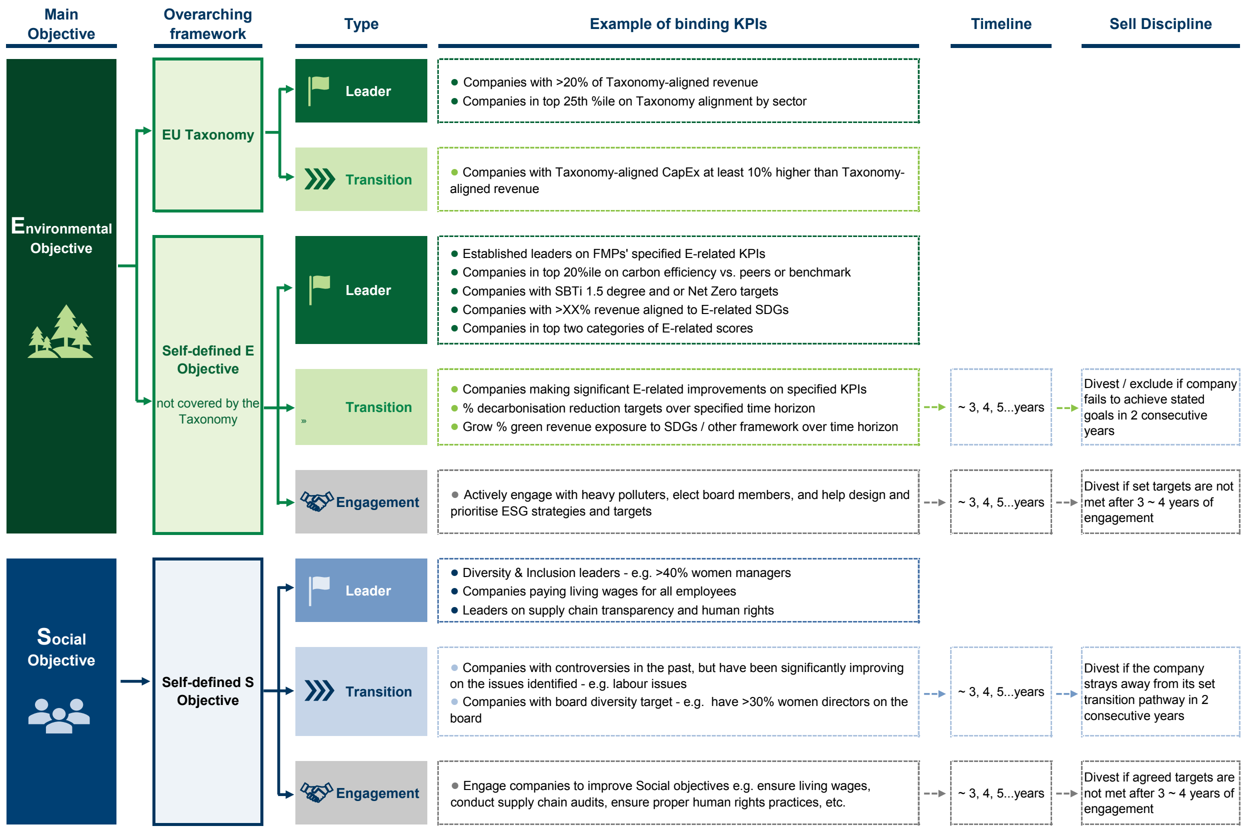
Our Proposed Framework for Defining 'Sustainable Investment' (SI)

In our view, defining 'Sustainable Investments' (SI) remains one of the most debated topics around SFDR's interpretation. Given the flexibility allowed under SFDR, we think 'more is more' when it comes to disclosing investors' SI definition to improve clarity and reduce regulatory/client scrutiny. For example, additional disclosures around binding elements, time horizons, and sell discipline could be helpful for investors taking either a 'leader', 'improver / transition', or 'engagement' approach for defining SI. Below, we reiterate our suggested framework for asset managers to qualify for SI (Exhibit 30) and DNSH (Do No Significant Harm) (Exhibit 31). We also assess current Article 9 funds disclosing their 'SI' process and show some examples of funds disclosing under their latest SFDR templates in Exhibit 32

EU Taxonomy's influence on defining 'Sustainable investments' set to grow, in our view. Recent guidance stating that **EU Taxonomy alignment** , either revenue or capex, **now automatically qualifies as 'sustainable investments'** will be an attractive choice for funds to incorporate into their definition of SI, especially given Taxonomy disclosure is mandatory for Article 8 funds promoting E characteristics and all Article 9 funds. Additionally, give the inherent non comparability of SI%s across funds, we expect the EU Taxonomy to be increasingly referenced to credentialise a fund as green, given it is standardised and comparable.

Exhibit 30: A framework for qualifying Sustainable Investments

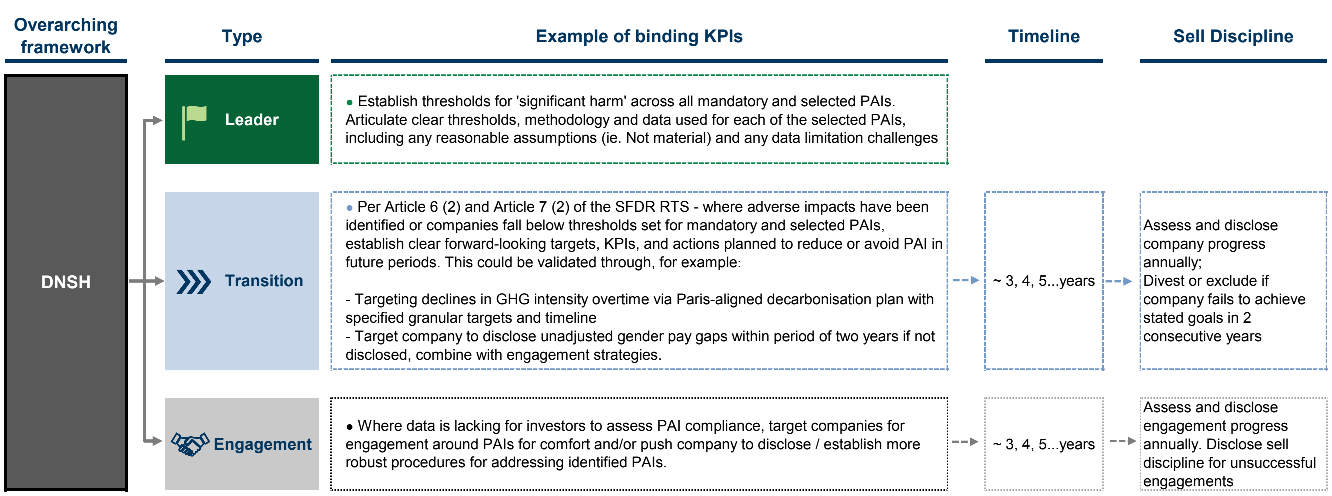
An illustrative example for qualifying Sustainable Investments with select (not exhaustive) binding elements



Source: Goldman Sachs Global Investment Research

Exhibit 31: A framework for satisfying Do No Significant Harm (DNSH)

An illustrative example for ensuring DNSH within SFDR



Source: Goldman Sachs Global Investment Research

Exhibit 32: Examples of live Sustainable Investment frameworks adopted by large Article 9 funds

Main Objective	Overarching framework	Type	Example of binding KPIs
Example 1: Environmental	≥ 85% Sustainable Investments	EU Taxonomy ≥ 2% of investments are intended to be Taxonomy-aligned	**Companies with ≥ 20% of Taxonomy-aligned revenue** Depending on the availability of feasible investment opportunities, the fund may contribute to any of the environmental objectives set out in the Taxonomy.
		SDGs	**Companies with ≥ 20% of revenue aligned to one or more of below SDGs** ● SDG 11 - Sustainable Cities and Communities ● SDG 12 - Responsible Consumption and Production ● SDG 9 - Industry, Innovation and Infrastructure
	≤ 15% Not Sustainable Cash, derivatives, other investments for which there is insufficient data		
Example 2: Environmental & Social	≥ 80% Sustainable Investments	**≥ 25%** of assets allocated to **Environmental objectives**	Invest in companies with **significant exposure (through revenue, EV or EBIT) to activities that provide solutions to environmental challenges**, such as energy efficiency, renewable energy, pollution control, water supply and technology, waste management and recycling, sustainable agriculture and forestry, etc.
		≥ 5% of assets allocated to **Social objectives**	In the absence of an EU Social Taxonomy, the asset manager developed a **proprietary social taxonomy framework** based on the objectives suggested in the Report on Social Taxonomy published by the EU Platform on Sustainable Finance, with eligible activities that enable: 1) inclusive and sustainable communities 2) adequate living standards 3) well being for end users 4) decent work
	≤ 20% Not Sustainable		
Example 3: Environmental	~100% Sustainable Investments	EU Taxonomy or SDGs	Invest in **'Solutions'** companies that make significant positive impact to any of the objectives within the SDGs framework, or EU Taxonomy.
		Other	Invest in companies **holding a minimum sustainability score** in the manager's proprietary framework. The score consists of equal parts of ESG risk and SDG alignment.
	Not Sustainable small % of cash for liquidity management		

Source: Company data, Data compiled by Goldman Sachs Global Investment Research

Principal Adverse Impact (PAI) disclosure overview - assessing existing approaches

Firm-level disclosures on Principal Adverse Impacts (PAI) requiring asset managers, financial and insurance advisers, otherwise known as financial market participants (FMPs), to make entity-level disclosures on how the firm assesses principal adverse impacts (i.e. ESG risks) and establishes fund-level disclosures on a '**comply or explain**' basis.

The European ESG Template (EET) and client demands for data needed for firm-wide disclosures are effectively requiring PAI reporting at a fund level. While explicit PAI reporting is not required at a fund level, fund-distribution platforms, and EETs are leading to great pressure to report PAIs as at a fund level, even for funds categorised under Article 6. Reporting of PAI on the 14 ESG metrics (+2 for Real Estate, +2 for sovereigns), and choice of 2 from a list of 46 optional metrics. We note that this list could expand to include 18 mandatory indicators per ESA's proposal earlier this year, but changes are unlikely to go into effect before 2025.

Practices around PAI assessments vary across market. Many asset managers consider PAIs on an entity-level, but are either disclosing a subset of the 14 mandatory metrics, or are only assessing them qualitatively. At the other end of the spectrum, we see a few asset managers building multi-level assessment process for the PAI indicators, specifying proxy metrics used, disclosing the rationale behind their methodology, and forming engagement strategies following the assessment.

We are seeing some investors directly implementing PAI considerations into pre-trade clearance, with many still considering how they formalise considerations of PAIs for compliance purposes. Some investors have set thresholds for each PAI and then provide portfolio managers with pre-trade warnings when a company breaches a given PAI. In some cases managers are allowed to override PAI breaches, typically for Article 8 funds, while Article 9 funds do not allow an override.

Our view of PAIs: *PAI indicators serve as a sort of "nutrition label" for ESG funds with disclosure of a standard list of 14 E&S KPIs. However, they do not require the meeting of any thresholds vs. peers, or the benchmark.* Considering PAIs does also not prevent an investor from taking a forward-looking view on improvement of PAI outcomes. *In our view, end-investors should not shy away from certain ESG funds simply because of their initial PAI assessment. For example, climate transition funds may screen poorly on E-related KPIs, such as carbon emissions or exposure to fossil fuel activities, yet the strategy and engagement with companies can serve as suitable methods for promoting E&S considerations and defining sustainable investment objectives.*

Exhibit 33: PAI assessment approaches taken by asset managers

PAI Assessment Approach	Example	Level of Sophistication Spectrum
Partial consideration only	The fund considers PAI 10, 11 and 14 (compliance with UNGC and OECD Guidelines, and exposure to controversial weapons)	Less
Consideration with qualitative disclosure	All PAIs are considered and monitored, and form part of the exclusion strategy of the fund.	
Entity-level disclosure	Detailed PAI statement from an entity level, including numeric data for each PAI and overall PAI framework set by the asset manager	
Fund-level disclosure	Fund level disclosure on all mandatory PAIs and select optional PAIs, but no framework is specified.	
Detailed disclosure with multi-level monitoring and engagement processes	• **Prioritise** PAI consideration based on materiality assessment • **Detailed quantitative disclosure** on all select PAIs, **specifying proxy metrics** if data is unavailable • **Rank** the performance of companies across each indicator, both intrinsically and compared to its peers • Companies identified as outliers on specific indicators are **analysed further by the Responsible Investment team** and a recommendation for action is made to the Responsible Investment Committee (RIC). • RIC is presented with an **update on the identified company on a quarterly basis** and may, based on this, **decide on the appropriate action**: Engagement, Exclusion or No Action.	More

Source: Company data, Goldman Sachs Global Investment Research

Do No Significant Harm (DNSH) - assessing existing approaches

All 'sustainable investments' within Article 8 and 9 funds must demonstrate how they have addressed the do-no-significant-harm principles by disclosing and addressing investments harm to other environmental or social objectives. **There are two options for satisfying the DNSH criteria:**

1) EU Taxonomy DNSH safe harbour - where funds use the EU Taxonomy to define 'sustainable investments' they have to satisfy the specific DNSH principle set forth by the EU Taxonomy and this can automatically qualify as passing the DNSH criteria within SFDR - this means that either company reported Taxonomy alignment or estimated-alignment following the criteria for equivalent-information can be automatically deemed as meeting the DNSH test of SFDR. **For more detail on the EU Taxonomy safe-harbour provision please see the latest EU guidance.**

2) Self-defined DNSH assessment - the portion of 'sustainable investments' not using the Taxonomy can follow the approach self-defined by the asset manager (with direct guidance requiring reference to the 14 PAI indicators). Reference to the PAIs does not require explicit threshold to be set nor require exclusions where harm may be identified. However, managers are required to highlight the practices aimed at addressing areas of harm within the investment portfolio. We note that most managers currently apply an exclusionary approach to their self-defined DNSH assessment that tends to unnecessarily limit the investable universe. **In our view, overly exclusionary approaches to DNSH can limit an investment manager's ability to influence the real economy, For example, by either missing opportunities to support and invest in companies credibly transitioning where current emissions profiles may be poor, but forward improvement is strong OR by losing the opportunity to engage and encourage specific outcomes.**

Among the prospectuses we have reviewed, disclosures around DNSH assessment lack details in many cases. Many Article 8 funds either do not make mention of DNSH, or do not elaborate on their processes to ensure DNSH. While all

Article 9 funds are required to incorporate DNSH into their investment processes for defining 'sustainable investments', we have seen only a few starting to lay out detailed steps taken, including the limiting of the investable universe through sector exclusions and international standard breaches, and negative screening through controversy research.

Exhibit 34: DNSH assessment approaches taken by asset managers

DNSH Assessment Approach & Scope	Example	Level of Sophistication Spectrum
Statement with no detail	- The fund embraces the 'do no significant harm' in its investments	Less
Statement with some detail	- DNSH is assessed and ensured through a check that the issuer meets minimum safeguards and performance on PAI metrics. This includes Norms-based screens, Activity-based screens, and quantitative PAI indicators.	
Multi-step approach **Detailed disclosure**	DNSH takes into account the mandatory PAIs. Additionally, each investment is assessed against below pillars to satisfy DNSH: - **Controversies:** Proprietary controversy score <4 - **ESG Scoring:** exclude issuers in decile 10 of ESG scoring model - **RBC Watchlist**: The asset manager keeps a 'watch list' of issuers that raise serious concerns about their alignment with the OECD Guidelines or UNGC Principles. These companies may appear on the Watch List for a variety of reasons, including the need for further research or our belief that direct engagement may lead to improvements, and SFDR assets are not allowed to invest into any companies on this watch list. In order to be removed from the list, the issuer has put in place appropriate management systems and initiatives to manage risks linked to the controversy; and these new management systems and initiatives should normally have been in place for at least 12 months with no additional controversies or issues. - **Sector Exposure**: Exclude entities in the following BICS Level 4 industries: Exploration & Production; Integrated Oils; Midstream - Oil & Gas; Refining & Marketing; Drilling & Drilling Support; Oilfield Services & Equipment; Coal Mining; Gas Utilities	More

Source: Company data, Goldman Sachs Global Investment Research

Good Governance - assessing existing approaches

SFDR requires FMPs to describe their policies for assessing good governance practices, including assessing management structure, employee relations, remuneration of staff and tax compliance.

As is the case with defining 'sustainable investments' objectives, the governance requirements are more process-focused than prescriptive in nature, leaving room for varied approaches and the level of sophistication to interpretation. Some asset managers analyse governance only qualitatively, while a few have designed comprehensive process to assess investee companies' governance practices, specifying proxy metrics identified, and remediation efforts if the proxy indicators do not in fact indicate a material impact on good governance, and detailing actions towards companies that fail the assessment.

Exhibit 35: Governance assessment approaches taken by asset managers

Governance Assessment Approach	Example	Level of Sophistication Spectrum
Qualitative assessment	**Qualitatively assess the four governance aspects** specified by the SFDR: sound management structures, employee relations, remuneration of staff and tax compliance.	Less
Quantitative assessment	**Quantitative assessment with specified metrics** for each governance pillar, which could include: - composition of the executive team and board of directors, incl. experience, diversity and distribution of roles, along with succession planning and board evaluation - executive remuneration, including short term and long term incentives and their alignment with investor interests - risk control and reporting, including auditor independence and tenure - shareholder rights, including one-share-one-vote and related-party transactions	
Multi-step assessment and efforts	**Pre Investment:** • Similar to above, specify metrics assessed with each governance area • Develop proprietary tool to monitor the increase of potential ESG-related controversies relating to investee companies *Where a company fails on one or more of the proxy indicators assessed, it could still be included in the portfolio if, upon review, the issuer is exhibiting good governance practices overall (such that the results of the proxy indicator tests do not in fact indicate a material impact on good governance). In reaching this determination, the manager may take into account any remedial actions being undertaken by the investee company.* **Post Investment:** • The manager is in dialogue with companies throughout the year to discuss and comment on proposed governance structures. • If the engagement is deemed to be unsuccessful, the manager may exercise proxy voting rights, or reduce exposure to such issuers	More

Source: Company data, Goldman Sachs Global Investment Research

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Reg AC

We, Evan Tylenda, CFA, Grace Chen, Rachit Aggarwal and Brendan Corbett, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

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