

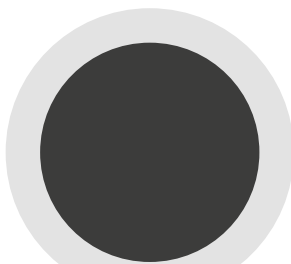
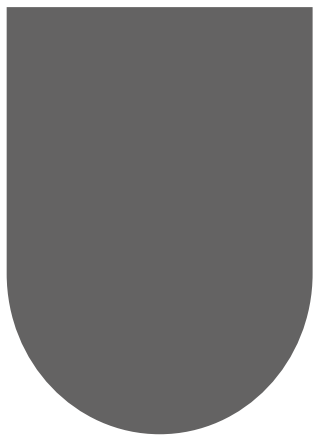
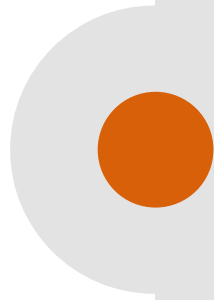
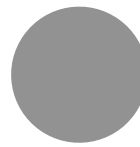
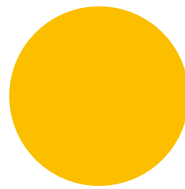
Mind the Gap

Principal Adverse Impact Statements in the AWM Industry

2024



European Sustainable Finance Series



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Executive Summary



Regulatory background

With the implementation of the Sustainable Finance Disclosure Regulation (“SFDR”) (EU/2019/2088), regulated EU management companies¹ (“ManCo”) – amongst other financial market participants – are subject to materially new disclosure requirements regarding the adverse effects of their investment decisions on pre-defined sustainability factors defined by the EU such as greenhouse gas emissions, social and governance factors. These sustainability factors are defined as principal adverse impacts (PAIs). Article 4 (3, 4) SFDR defines that ManCos have an obligation to annually report the aggregated PAI results of their investments for the respective calendar year (“PAI Statement”), if the ManCo (stand-alone or consolidated) exceeds the average number of 500 employees. ManCos that do not reach the 500-employees threshold have a choice applying a comply or explain mechanism with respect to the reporting of aggregated PAI results of their investments in line with Article 4 SFDR.



Scope of the study

Our study examined the website disclosures of more than 2,000 ManCos spread across nine European countries (France, Germany, Ireland, Italy, Luxembourg, Liechtenstein, Netherlands, Spain and Sweden) with respect to the consideration or non-consideration of PAIs at ManCo level. The sample represents 62.6% of the total number of 3,212 UCITS ManCos, AIFMs, and Super ManCos² registered with the European Securities and Markets Authority (ESMA) as of 23 July 2023.



Key findings

Our study found that:

- **29.1%** of the 2,012 ManCos have committed to disclose the PAIs of their investment decisions on sustainability factors, i.e. prepare a PAI Statement;
- **39.1%** have declared that they do not consider PAIs;
- **22.2%** have issued neither a declaration on whether they consider PAIs, nor a PAI Statement; and
- **9.6%** of the ManCos within our sample are either liquidated, acquired or merged, as per the ESMA register.



Disclosure deadline

The PAI Statements on entity level are required to be published on an annual basis (calendar year) within six months after calendar year’s end, with the first reporting period being 2022.



Disclaimer

PwC Luxembourg (referred to hereinafter as “PwC”) has assessed the existence, regulatory completeness and formal compliance of the information provided in the PAI Statements by a representative sample of management companies of the European asset and wealth management industry. PwC has not analysed and evaluated the quality of the quantitative and qualitative PAI data reported per PAI by the ManCos in scope.



PAI transparency score

PwC has developed a proprietary assessment model, the “**PwC PAI Transparency Score**,” for the 29.1% (585 ManCos) which have committed to prepare and disclose a PAI Statement. It considers the following dimensions: **(i) Disclosure Compliance, (ii) Disclosure Completeness, and (iii) Disclosure Transparency. PwC has not evaluated the completeness, accuracy (e.g. correctness of calculation) or science-based relevance of the PAI metrics.**

1. This considers Alternative Investment Fund Managers as defined in Article 2 (4) SFDR as well as UCITS Management Companies as defined in Article 2 (10) SFDR.
2. A Super ManCo is licensed as an Alternative Investment Fund Manager as defined in Article 2 (4) SFDR as well as a UCITS Management Company as defined in Article 2 (10) SFDR.



Assessment methodology & results

The **PwC PAI Transparency Score** ranges from 0 to 100:

- a. 0 refers to ManCos which either (i) did not publicly provide a PAI Statement at entity-level even though a respective commitment to prepare and disclose a PAI Statement was provided on the website to that effect, or (ii) only provided PAI results at the product-level (i.e., investment fund level), or (iii) did not make its PAI Statement publicly accessible;
- b. 100 indicates that a PAI Statement is fully compliant with the requirements of the Regulatory Technical Standards of the Sustainable Finance Disclosure Regulation ('SFDR Level II') and provides rich qualitative disclosures;
- c. The numerical score was used to assign a letter grade ranging from F ('Fail') to A ('Excellent') to the UCITS ManCos, AIFMs and Super ManCos that have committed to preparing a PAI Statement.

25.9% (152 ManCos) of these 585 ManCos obtained a grade of F, meaning they had either (a) declared that they would issue a PAI Statement but hadn't done so (130 ManCos), (b) issued PAI results only at the product-level (16 ManCos) but not as required at ManCo level, or (c) had prepared a PAI Statement but left it encrypted and not publicly accessible (5 ManCos).³



Analysis of reported data in PAI Statement

It has to be pointed out that most (403, 92.9%) ManCos are not providing details on which proportion of assets under management are considered in the PAI Statement. Therefore, the comparisons detailed below are to be understood within this context and the comparability is therefore – potentially significantly – limited between the different ManCos that have a PAI Statement.

Regarding PAI 2 (Carbon Footprint) and based on data reported and found in our sample, **Super ManCos' investments exhibit the highest average carbon footprints (450.4 tCO₂eq/EURmn)**, followed by AIFMs with an average of 399.2 tCO₂eq/EURmn. The carbon footprint of portfolio companies varies the most for AIFMs, reporting both the highest value (carbon footprint of 4,927.5 tCO₂eq/EURmn) and the lowest value (carbon footprint close to 0 tCO₂eq/EURmn).

As for PAI 5 (share of non-renewable energy consumption and production), while **AIFM obtained the highest average of 57.8% when it comes to consumption – meaning that over half of the energy consumed by their investee companies comes from non-renewable sources** – the averages for Super ManCos (53.8%) and UCITS ManCos (56.0%) do not significantly diverge. The maximum reported consumption of non-renewable energy among investee companies was in

None of the 585 ManCos achieved a grade of A, and only 3 (0.5%) obtained a grade of B, with the highest numerical score among the ManCos that published a PAI Statement being 82.

375 (64.1%) of the 585 ManCos obtained a grade of C or D. The remaining 56 ManCos (9.6%) obtained a grade of E.

Of the 434 PAI Statements analysed, **only 91 (21.0%) were in line with the regulatory requirements where the PAI Statement is required to be published on the website of the ManCo, in a clearly defined and easily accessible section titled "Statement on principal adverse impacts of investment decisions on sustainability factors in a website section titled." "sustainability-related disclosures."** The majority (290; 66.8%) of assessed PAI Statements were included in other sustainable or ESG-related reports, legal documentation, or other regulatory materials, while 53 (12.2%) could only be identified through advanced search techniques.

95 (21.9%) of the published PAI Statements followed completely the requirements of the template provided by SFDR Level II including the additional requirements embedded in Articles 4 – 10 of SFDR Level II. The remaining ManCos (339, 78.1%) deviated from these requirements, leading to a proliferation of divergent statements and further complicating efforts to compare disclosure content.

AIFMs, standing at 100.0%, whereas the maximum reported figures for Super ManCos and UCITS ManCos stood at 86.5% and 84.1% respectively.

On average, regarding PAI 12 (unadjusted gender pay gap), **UCITS ManCos had the highest average gap in their investee companies, standing at 14.0%, compared to the averages of 12.6% and 10.6% for Super ManCos and AIFMs respectively.** UCITS ManCos showed the maximum gender pay gap in investee companies, standing for one UCITS ManCo at 75.2%.

As for board gender diversity (PAI 13), our findings closely parallel the findings of the European Institute for Gender Equality (EIGE) which found that, on average, women make up 33.2% of board members in the largest listed companies in the EU.⁴ Indeed, **our study found that the investee companies of the three ManCo categories have between 29.8% and 32.6% of women board members on average.**

In order to be compliant and well-equipped for future PAIs disclosures, ManCos should (i) be specific, complete and transparent in their PAI Statements, (ii) conscious about PAI results and potential business implications, (iii) look ahead and incorporate changes visible on the horizon, and (iv) scale up data management capabilities and technology.

3. The scores are converted into a letter grade which is based on the following point distribution: A (100 - 90 points), B (90 - 80 points), C (80 - 60 points), D (60 - 40 points), E (40 - 20 points), and F (20 - 0 points).

4. Please consider that the ManCos are not reporting breakdown's per PAI which contributions to the individual PAI results can be attributed to which country/region, i.e. the EIGE alignment is to be considered in that light.



Challenges with the PAI Template

Aside the difficulty in achieving a comprehensive data coverage due to missing source data, the official EU reporting template as per SFDR Level II is setting challenges on several levels for the market as well as for interested stakeholders trying to gain actionable business intelligence. Whereas the reporting template provides in principle for a standardised structure which is welcomed, we have made the following observations:

- The template is not published in an electronic (machine readable) reporting format (unlike the Corporate Sustainability Reporting Directive) and therefore all analytical efforts are by design limited;
- The template per se is not complete as some sections in the template refer to the main body of SFDR Level II. The ManCos are therefore granted additional degrees of freedom (e.g. positioning of certain disclosure elements as well as completely omitting disclosures) and disclosures clearly deviate in those areas;
- The template is neither requiring any disclosures on assets under management (see below overall) considered in the PAI Statement nor at PAI level which limits the comparability of the quantitative PAI results materially;
- The PAI Statement content does not allow for differentiation between different investment strategies (e.g. stock-exchange listed investments and alternative investments) and further breakdowns within investment strategies (e.g. Fund of Fund, Infrastructure, Private Equity, Private Debt) or geographical or sectoral exposure which may jeopardise comparability and transparency of output data;
- The PAIs that are subject to active management at product level (Article 8 or Article 9 compliant funds) are consolidated with PAIs that are non-managed (Article 6 products). This puts into question the traceability of remediation actions on a year-to-year basis;

- No full alignment between the PAI requirements under the European Sustainability Reporting Standards and SFDR Level II.

Most (403, 92.9%) ManCos are not providing details on which proportion of assets under management are considered in the PAI Statement. Nevertheless, slightly more than half (234, 53.9%) of PAI reporting ManCos are providing data coverage at the individual PAI level. *The following illustrative example provides more clarity in that respect: a ManCo could be managing EUR 100 billion that are subject to a PAI Statement. The ManCo is currently not required to disclose what proportion of the assets under management are considered in the PAI Statement and what the coverage per PAI is. This means the ManCo could report 4,500 tCO₂eq/EURmn under PAI 2 (Carbon Footprint), but it is in general not possible to understand what share of assets under management have been considered for this PAI (e.g. EUR 100 billion (100%) or EUR 1 billion (1%)) nor for how much of the considered proportion effectively information was available.*

ManCos are in general neither providing details with respect to their data sources per PAI nor implementing data quality management controls (e.g. PCAF scores or other data quality scores). The quality of the underlying data that is used for the preparation and calculation of the PAIs cannot therefore be independently assessed across the PAI Statements.⁵

From a level playing field perspective, the market would benefit from a more consistent and transparent PAI template distinguishing non comparable PAI information data and approaches. Additionally, further enhancement of the ESMA database to disclose which entities consider or do not consider PAIs could be beneficial to asset owners.



Data quality and availability

The availability of data has proven to be, as expected, a systematic challenge for FMPs. The PAI Statement itself does not fully disclose those challenges, but based on our analysis, the challenges can be summarised as follows:

- Sustainability related information disclosed by investments is in general not audited;
- For listed investments, data providers are allowing for a structured way of sourcing the available sustainability related information. The availability and results provided may differ per investment from data provider to data provider;
- For non-listed investments (e.g. Real Estate, Infrastructure, Private Equity, Private Debt) the process of sourcing and collecting information poses significant different challenges

and operational burdens, including the absence of data providers, or the lack of legal obligation for un-listed investee companies to prepare PAI reporting;

- This means that the quantitative results disclosed in the PAI Statements cannot be easily assessed, and neither can the quality nor relevance of the reported PAI metrics. With these structural issues in mind, PwC has assessed the disclosed approaches adopted by UCITS ManCos, AIFMs and Super ManCos to source data from their published PAI Statements but not the disclosed results, i.e. PAI metrics.

Across all three ManCo categories, our analysis found that the challenge regarding data quality and availability for PAI Statements was recurrent. As a result, it was not uncommon to find ManCos opting for qualitative information and not divulging sources, coverage or established data quality controls.

5. Final Report on draft Regulatory Technical Standards regarding SFDR Level II (JC 2023 55) published on 4 December 2023 proposed that ManCos shall disclose going forward in the column "Explanation" of the PAI Statement the proportion of the calculation that is based on (i) information directly obtained from the investee company, sovereign/supernational or real estate asset, (ii) the proportion that was estimated or subject to reasonable assumptions and (iii) the proportion that was assessed as on-material by investee companies in accordance with CSRD respective the European Sustainability Reporting Standards.



Weaknesses and Best Practices

Disclosure compliance

- FMPs did not include the PAI Statement on its website homepage nor in any dedicated section on sustainability-related disclosures. Instead, the statement can only be accessed via advanced web-search functions.
- The PAI Statement is integrated in other reports rather than being presented as a standalone report.
- The PAI Statement cannot be accessed as it is password-protected.



Best Practices

- PAI Statements are disclosed on the ManCo's website under the section of sustainability-related disclosures and structured/named in line with the requirements of SFDR Level II.
- The PAI Statements have a 2-pager summary that provides an overview of the results and is available in multiple languages, including English.
- The template used for the PAI Statement is in a format that is machine searchable.

Disclosure transparency

- The statement does not have an adequate disclosure for Article 6 funds (coverage or limitations).
- The scope of the statement is incomplete, and results for each PAI have only been partially disclosed.
- Explanations of PAIs are repeated with boiler plate text that does not address results or provide any meaningful information.
- No information pertaining to the actions taken, the actions planned, and the targets set is presented.
- The document is poorly referenced, and the references or sources presented are difficult to understand.



Best Practices

- The statement's scope is comprehensive (i.e., it includes information on the proportion of total assets under management (AuM), the funds/ investments/investment strategies, the scope of the PAIs considered at the product-level).
- Specific statement regarding Article 6 funds coverage or limitations.
- Information on the total investments, the coverage, the data sources, the data estimates and the formulas applied is presented.
- Explanation based on double materiality for opt-in PAIs is presented.
- A section on the best efforts to explain data sourcing, data limitations and data proxies is added.

Disclosure completeness

- Little-to-no-reference to the stakeholder engagement processes.
- References to consolidated entities are missing.
- Lack of self-imposed thresholds at the PAI-level.



Best Practices

- The PAI Statement includes coverage in terms of percentage of total AuM.
- The PAI Statement includes clear sections and descriptions on the actions taken, the actions planned, and the targets set.
- All PAIs are correctly disclosed as indicated in SFDR Annex I.

Our "PwC PAI Transparency Score" allows the possibility of individualised report cards and benchmarking of each UCITS ManCo, AIFM and Super ManCo considering the overall quality of the PAI Statement from a regulatory and transparency perspective. As such, the score provides a metric with regards to the compliance in terms of transparency. PwC has not evaluated the completeness, accuracy (e.g. correctness of calculation) or science-based relevance of the PAI metrics.

We have outlined a template of an Individual Scoring Report in Appendix 3. PwC will provide such Individual Scoring Reports upon the request of the respective ManCo and to the ManCo only. Individual benchmarking against a relevant peer group is possible appreciating the limitations for the PAI metrics.



Time to Act

If PAI Statements are to reach their full potential and play a pivotal role in not only better informing stakeholders about investments' adverse impacts on sustainability, but also give sustainable investments a strong push forward, much work needs to be done.

Recommendations for ManCos

Be specific, complete and transparent in your PAI Statement

- Disclose the coverage of the PAI Statement in general differentiating between the AuM proportion that is managed in accordance with a PAI strategy ("**Managed PAIs**") and the proportion that is not ("**Unmanaged PAIs**");
- Disclose the coverage per PAI indicator and detailing the proportion of AuMs that is eligible/relevant for the respective PAI, the data sources used, and controls employed;
- Differentiate in the actions taken, actions planned, and targets set between the Managed PAIs and the Unmanaged PAIs per PAI indicator;
- Embrace the changes presented by the Final Report on draft Regulatory Technical Standards regarding SFDR Level II (JC 2023 55) published on 4 December 2023 and specifically regarding the PAI statement and using XHTML format including markups using XBRL and
- Set specific and well-defined targets and objectives which outline the desired results, quantities or benchmarks to be achieved.

Be conscious about PAI results and required business implications and engagement actions

Non-financial information reported and disclosed via the PAI Statement is in the public domain and informs the views and beliefs of decision makers. Reported results are not allocation decisions, request for proposals (RfPs) and public perception in general. Additionally, the actions taken and planned as well as the targets are important, and how stakeholders analyse and use this information further cannot be underestimated. The bevy of non-financial information available now allows these stakeholders to systematically benchmark, monitor, and engage on the sustainability performance disclosed.

Corporate Sustainability Reporting is looming, look ahead and incorporate changes already visible on the horizon

We recommend considering changes that are already visible today for the preparation of your next PAI Statement, specifically with respect to more differentiated information required for the reporting in line with the Corporate Sustainability Reporting Directive (CSRD) and the underlying European Sustainability Reporting Standards (ESRS). Information required for PAIs under ESRS is not fully aligned with PAIs under SFDR Level II. This may be relevant in case the entity itself is or will be in the scope of CSRD, or if investors are in scope and may require look-through information that is more detailed than required under SFDR Level II.

Scale up data management and technological capabilities

As non-financial information will be required to reach the high standards of financial information, data management and technological capabilities are rapidly becoming business imperatives.

Substantial resources have been deployed for the first year of reporting. Whereas the UCITS ManCos and Super ManCos (for the liquid part of their managed assets) were able to rely on external ESG data providers, AIFMs and Super ManCos (for the illiquid part of their managed assets) were forced to find alternative ways to source information from their investments. Different avenues to source information were observable on the market with the default option for the illiquid assets being individualised questionnaires using Excel and being sent out and collected via e-mail. The assessment of the results (e.g. via benchmarking), quality controls (e.g. completeness, relevance and consistency of data) as well as the challenging calculations at individual PAI level and then further to aggregate at entity level were also too often Excel-dependent – if existent at all.

In the market, clients are more actively engaging in data management and technological solutions to establish scalable and sustainable solutions, and simultaneously be prepared for the further growth in data points required to be managed per investment (e.g., EU Taxonomy Reporting) and investor expectations. The mission statement is "**One Click Solution for Competitive Advantage,**" as non-financial information and the results reported are expected to (further) impact investment allocation decisions, RfPs and the public's perception.

Recommendations for policymakers and regulators concerning the PAI Statement design and setup

Provide a complete PAI Statement template with consistent transparency metrics

Building on the recommendations provided above, the market would benefit from a PAI Statement template that includes all requirements of SFDR Level II and further provides more transparency. Entities should have the option to provide results for Managed and Unmanaged PAIs (i.e. Article 8/9 PAIs vs. Article 6 PAIs) in separate sections of the PAI Statement to provide readers with more clarity. Further breakdowns within investment strategies and geographical as well as sectoral contributions (as an option) would be welcomed. In addition, details regarding data quality management as well as involved personnel, technology, and resulted cost implications for the ManCos may provide significant further business intelligence to stakeholders.

Extend the ESMA database to detail which entities consider or do not consider PAIs

The inclusion of an additional data field in the ESMA database allowing to identify which entities are considering PAIs at entity level, including the link to the position in the entity's website, would be helpful to provide a clear overview at a glance.



Looking forward

Published in the Official Journal of the European Union in December 2022, the CSRD will lead to more detailed disclosure requirements and establish mandatory ESRS, alongside other actions.

The CSRD is expected to tackle some of the data issues raised by the SFDR, as it will govern a larger number of companies and consequently impose more extensive reporting and auditing duties. According to Commission estimates, more than 50,000 companies will be subject to the CSRD, compared to the 11,700 companies required to submit reports under the Non-Financial Reporting Directive. Although the actual implementation dates will vary according to specific criteria, ManCos should already be preparing for future reporting obligations.

The reporting requirements of the three major EU regulations (SFDR, CSRD, Taxonomy) are intertwined and overlap in terms of their substance – and reporting on PAIs is only the first piece of the overarching sustainability transparency framework (cf. Exhibit 10). Companies subject to the SFDR will rely on the EU Taxonomy metrics from the CSRD⁶ to report on their investments to fulfil their reporting obligations.

In April 2023, the three main supervisory bodies in the EU (European Banking Authority, European Insurance and Occupational Pensions Authority and European Securities Market authority) – together referred to as the ESAs – published a consultation paper proposing amendments to the SFDR Level II (cf. Appendix 4).

The proposed revisions mainly aim to expand the existing disclosure framework, address technical complexities related to sustainability indicators, and suggest changes to the Regulatory Technical Standards on product disclosures. The consultation period opened on 12 April 2023 and closed on 4 July 2023, with the final report expected to be published in late 2023.

Regardless of how existing sustainability regulations evolve and what future regulations come into force, the momentum is not slowing down – particularly as climate change shows no signs of abating. Adequately complying with the PAIs-related stipulations of the SFDR is a crucial part of ManCos' journey to demonstrate their sustainability credentials and their commitment to ESG principles.

There is no time to waste!

6. The European Commission has proposed changes to CSRD with respect to the scoping of entities in October 2023 which may lead to an increase in thresholds for the different company sizes.

Introduction



The deadline to achieve the UN Sustainable Development Goals (SDGs) is looming large on the near horizon, and “a cascade of crises has now set back progress” to achieve them, as per a recent speech by president of the European Commission Ursula von der Leyen.⁷ The same is true for the Paris Agreement. While it “has driven near-universal climate action” and “has inspired significant progress in global mitigation and adaptation action and support,” “the world is not on track to meet the long-term goals of the Paris Agreement” and “much more is needed now on all fronts.”⁸

One of the main dimensions of action is the avoidance or reduction of adverse impacts of our economic and human activities. These adverse impacts are more visible than ever. Since January 2023, almost 260,000 hectares of land in the European Union have been burnt, as wildfires spread across the Mediterranean basin amidst scorching temperatures and increasingly frequent and worsening heatwaves.⁹ Thousands had to be evacuated as local authorities fought hard to contain the fires and limit the already-exhaustive damage. Businesses across industries and sectors are all feeling the deleterious direct and indirect impacts of climate change.

But the picture does not have to be bleak. Through the Corporate Sustainability Reporting Directive (CSRD),¹⁰ which will be phased-in from 2024 onwards, financial market participants (FMPs)¹¹ will soon have access to a large swath of sustainability-related data from over 50,000 companies active in the EU. Per intended design of the CSRD, this will provide more and more relevant sustainability-related information relevant for decision-making at different levels of the investment chain.

The financial sector has a preponderant role to play in achieving global sustainability objectives. With the implementation of the Sustainable Finance Disclosure Regulation (EU/2019/2088), FMPs are subject to major disclosure requirements regarding the adverse impacts of their investments. These principal adverse impacts (PAIs) are to be considered at entity level based on a comply or explain principle. Adequately reporting on and acting to limit or improve the principal adverse impacts (PAIs) of investment decisions on sustainability factors is one of the core means through which FMPs can meaningfully help bring about a sustainable transition of the global economy and achieve the UN SDGs and the objectives of the Paris Agreement that are the cornerstone of the EU Climate Law setting interim targets for 2030 (reducing net greenhouse gas emissions by at least 55%, compared to 1990 levels) and the objective for Europe’s economy and society to become climate-neutral by 2050.

PAI Statements are supposed to be published by June 30 of each year for the reference period running from January 1 to December 31 of the previous year. The next period will run from January 1 to December 31, 2023, on which FMPs that consider PAIs will have to report by 30 June 2024 (cf. Exhibit 1).

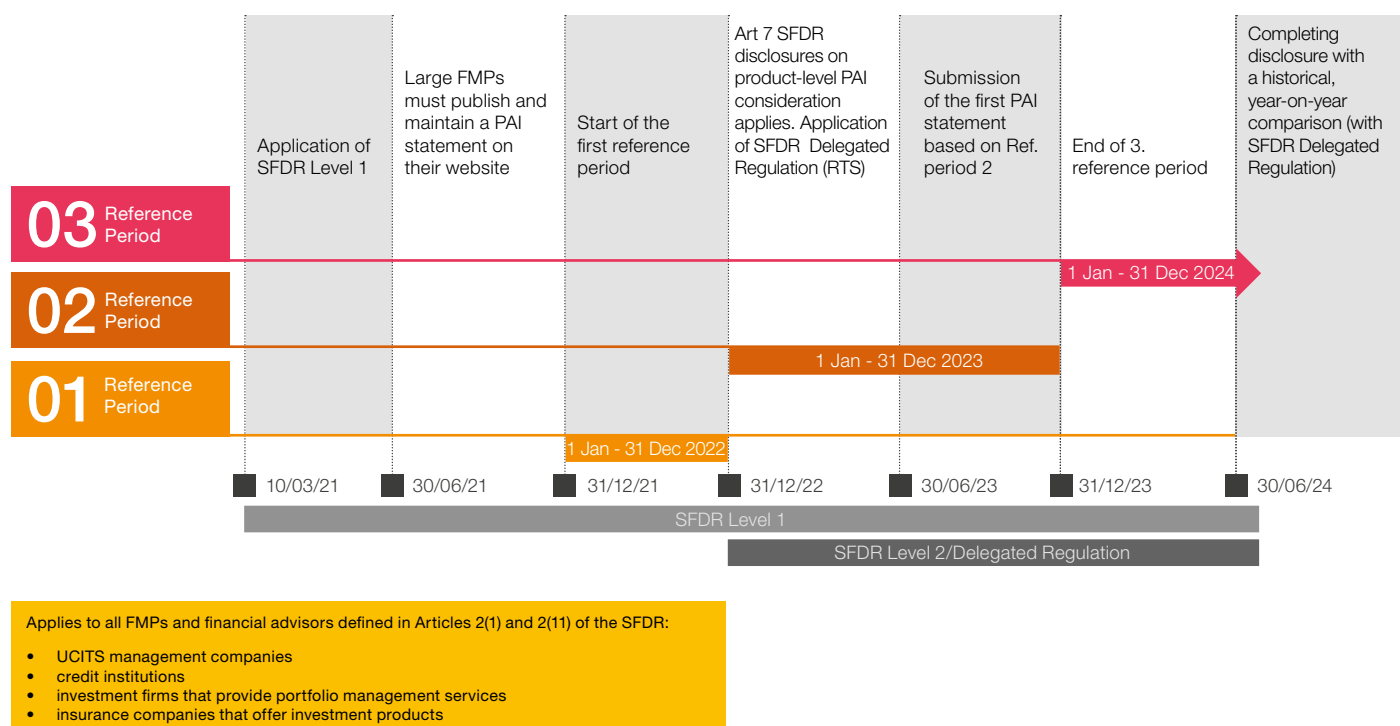
In other words, the deadline to publish the second round of PAI Statements is fast approaching, and FMPs should take note, particularly given that regulators are increasingly focusing on sustainable finance-related regulations and clamping down on FMPs who fail to abide by them.

The significance of PAI Statements cannot be overstated, as they are a pivotal element of the SFDR and could, if properly presented and disclosed, provide significant actionable business intelligence for FMPs as well as investors and policy makers. However, given the fact that

the first period of PAI reporting ended relatively recently and that the SFDR is in a state of flux, there is currently a dearth and scarcity of detailed studies and reports on the subject.

Our report seeks to break the stasis and fill a critical knowledge gap in the sustainable finance landscape, providing a thorough overview of the status of PAI disclosures across the European asset and wealth management industry. Ultimately, by shedding light on the existing gaps and best practices, and providing pointers towards the future, this report seeks to contribute to a better understanding of the current state of play regarding PAI Statements and provide insights to the most relevant stakeholders – from investors and asset managers to policymakers and regulators alike – in their quest to advance sustainable finance practices in Europe.

Exhibit 1. Timeline of the SFDR Article 4 requirements



Source: PwC Global AWM & ESG Market Research Centre, European Commission

7. European Commission (2023). 'Statement by President von der Leyen at the 2023 Sustainable Development Goals Summit,' September 18, 2023
 8. UNFCCC (2023). 'Technical dialogue of the first global stocktake: Synthesis report by the co-facilitators on the technical dialogue,' September 8, 2023
 9. European Commission (2023). 'Wildfires in the Mediterranean: monitoring the impact, helping the response,' EU Science Hub, July 28, 2023
 10. Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting
 11. As per Article 2, Paragraph 1 of the SFDR, a 'financial market participant' is defined as (a) an insurance undertaking that makes available an insurance-based investment product, (b) an investment firm offering portfolio management services, (c) an institution for occupational retirement provision, (d) a manufacturer of a pension product, (e) an alternative investment fund manager, (f) a pan-European personal pension product, (g) a venture capital fund, (h) a social entrepreneurship fund, (i) a management company of an undertaking for collective investment in transferable securities (UCITS), or (j) a credit institution offering portfolio management.

PAI Statements – comply or explain principle

In March 2018, the European Commission published its action plan on sustainable finance which, in a nutshell, seeks to transform “Europe’s economy into a greener, more resilient and circular system” and “address existing inequalities” while reducing the continent’s environmental footprint.¹²

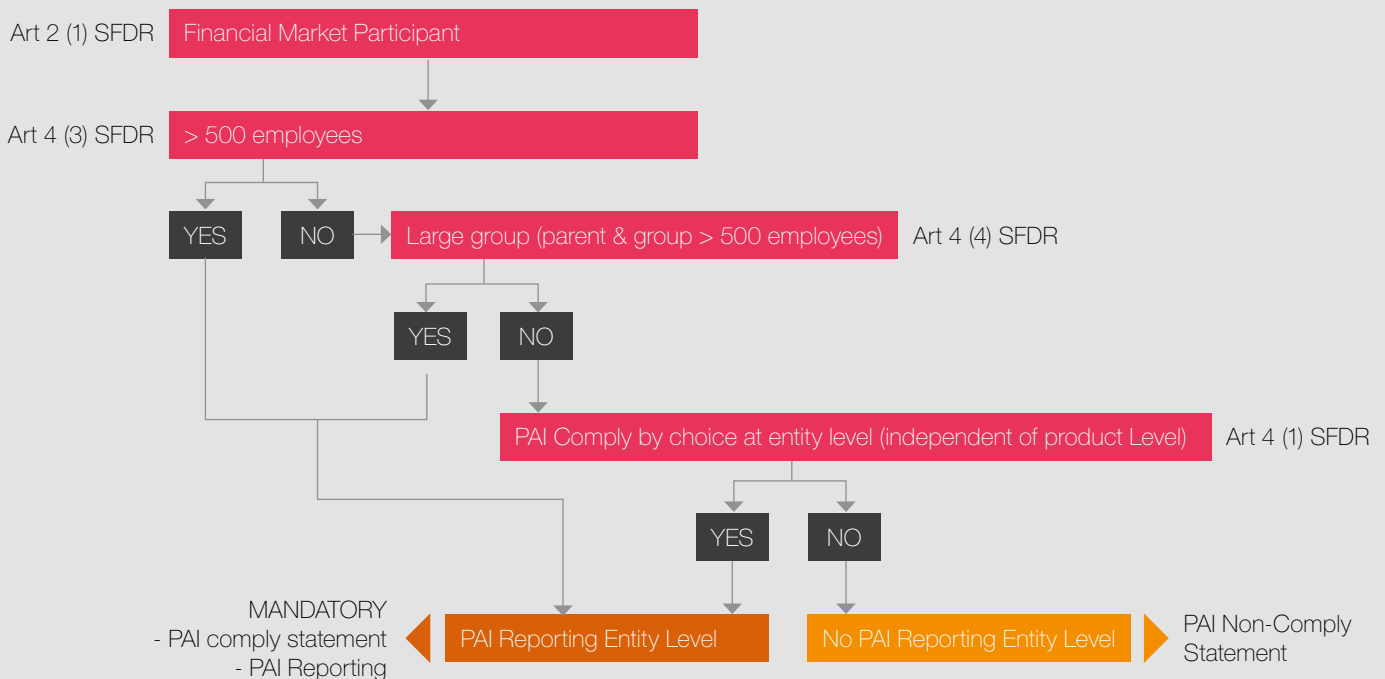
Over a year later, in November 2019, the Sustainable Finance Disclosure Regulation (SFDR) was published in the Official Journal of the European Union, marking a watershed in the global development of sustainable finance. The SFDR introduces strict minimum sustainability disclosure obligations for FMPs and financial advisers¹³ at entity and product level. Asset managers whose financial products “promote, among other characteristics, environmental

or social characteristics” (Article 8) or have “sustainable investment as their objective” (Article 9) are required to disclose substantial sustainability-related information.¹⁴

The SFDR has introduced disclosure requirements on how sustainability risks are considered in ManCos’ overall investment process, as well as on how they consider investment decisions that may result in negative impacts on sustainability factors. These impacts are referred to as the PAIs, which “should be understood as those impacts of investment decisions and financial advice that result in negative impacts on sustainability factors.”¹⁵

More specifically, Article 4 of the SFDR requires every ManCo to prepare and disclose a statement on its website pertaining to whether PAIs are considered or not (cf. Exhibit 2).

Exhibit 2. Scope and obligations of entity-level PAI statements



Source: PwC Global AWM & ESG Research Centre; European Commission

12. European Commission (2018). ‘Action Plan: Financing Sustainable Growth,’ March 8, 2018

13. As per Article 2, Paragraph 11 of the SFDR, a ‘financial adviser’ is defined as (a) an insurance intermediary or an insurance undertaking providing insurance advice with regards to insurance-based investment products, or (b) a credit institution, an investment firm, an alternative investment fund manager, or a UCITS company providing investment advice.

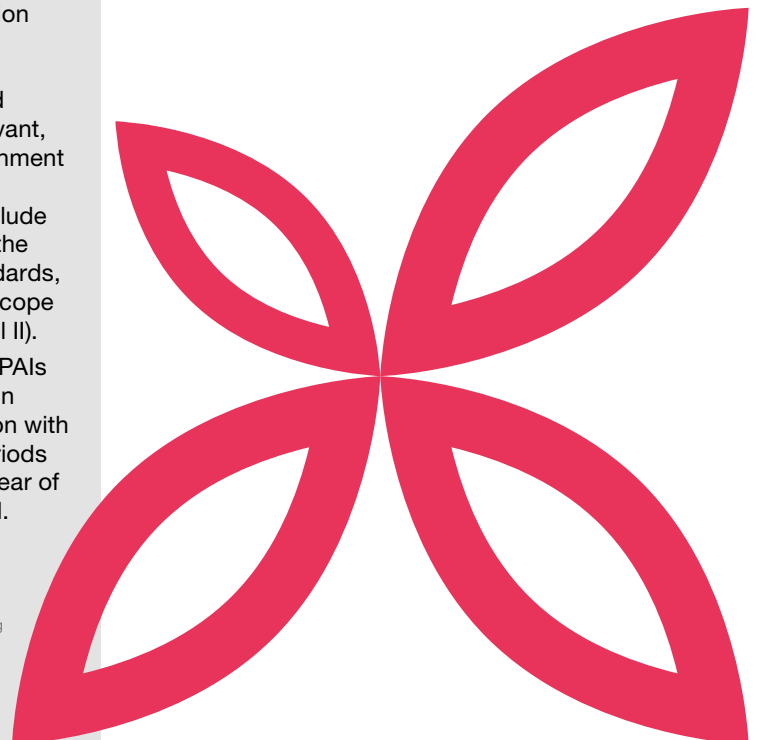
14. Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector (hereinafter, SFDR)

15. SFDR.

Since the SFDR Regulatory Technical Standards (SFDR Level II) came into force in January 2023,¹⁶ mandatory reporting templates and methodologies became applicable, and FMPs that consider PAIs must provide the following information:

- The published PAI Statement shall as required under Article 4 SFDR Level II adhere to the template provided in Table 1, Annex I of SFDR Level II, which is structured into different parts (summary; description of the PAIs on sustainability factors; description of policies to identify and prioritise PAIs on sustainability factors (Article 6 SFDR Level II); engagement policies; references to international standards; historical comparisons).
- Description of PAIs – namely the PAI results as well as actions taken during the reference period and the actions planned or targets set for the next reference period to avoid or reduce the PAIs identified (Article 6 SFDR Level II).
- Description of policies – namely the methodologies used to select the indicators, to identify and assess the PAIs, and how these methodologies consider the probability of occurrence and severity of the PAIs, including those that are potentially irremediable with respect to the identified additional voluntary PAIs (Article 7 SFDR Level II).
- Description of engagement policies – namely summaries of the engagement policies established by the FMP to reduce PAIs, the PAIs considered, and how these policies will be adapted if no reduction of the PAIs has taken place over more than one reporting period (Article 8 SFDR Level II).
- References to international standards – in a section dealing with international standards, FMPs shall describe whether and to what extent they abide by internationally-recognised conduct codes and standards on due diligence and reporting. If relevant, they should also disclose the degree of their alignment with the objectives of the Paris Agreement. The information presented should, among others, include the methodology and the data used to measure the adherence or alignment to the international standards, as well as a description of the coverage and its scope and the sources of the data (Article 9 SFDR Level II).
- Historical comparisons – after reporting on their PAIs for the first time, FMPs are required to follow up in subsequent reporting with a historical comparison with previous reporting periods, up to the last five periods (Article 10 SFDR Level II). As 2022 was the first year of reporting, no historical comparisons are required.

16. Commission Delegated Regulation (EU) 2022/1288 of 6 April 2022 supplementing Regulation (EU) 2019/2088



PwC's PAI Transparency Score

Reporting on PAIs is still in its infancy and in light of the existing and available data in the market as well as the number of PAIs to be reported on, a very challenging and time-consuming task. Out of a total of 3,212 management companies ('ManCos') registered with ESMA, our report analysed 2,012 ManCos domiciled in France, Germany, Spain, Italy, Luxembourg, Sweden, Ireland, Liechtenstein and the Netherlands.

Among the 2,012 ManCos in our sample, 193 (9.6%) are either liquidated, acquired or merged. Further, 447 (22.2%) have issued neither a declaration on whether they consider PAIs, nor any PAI Statement, while 787 (39.1%) have declared that they do not consider PAIs. In addition to not meeting the condition of surpassing the 500 employees thresholds, we observed that the most frequently reported reasons for not considering PAIs were the insufficient availability of satisfactory and pertinent non-financial data, as well as uncertainties regarding the data collection methods and required PAI Statement details.

The rest – 585 ManCos (29.1%) – have committed to disclose the PAIs of their investment decisions on sustainability factors (cf. Exhibit 3).

Our proprietary assessment model, the "PwC PAI Transparency Score," evaluates PAI declarations and disclosures of these 585 entities. In reviewing these 585 entities, the score considers the following three dimensions of Disclosure Compliance, Disclosure Completeness, and Disclosure Transparency:

(Website) Disclosure Compliance



This dimension is focusing on several elements such as if the statement is publicly available, how easily the statement can be retrieved from the website and the location of the statement on the website.

Disclosure Transparency



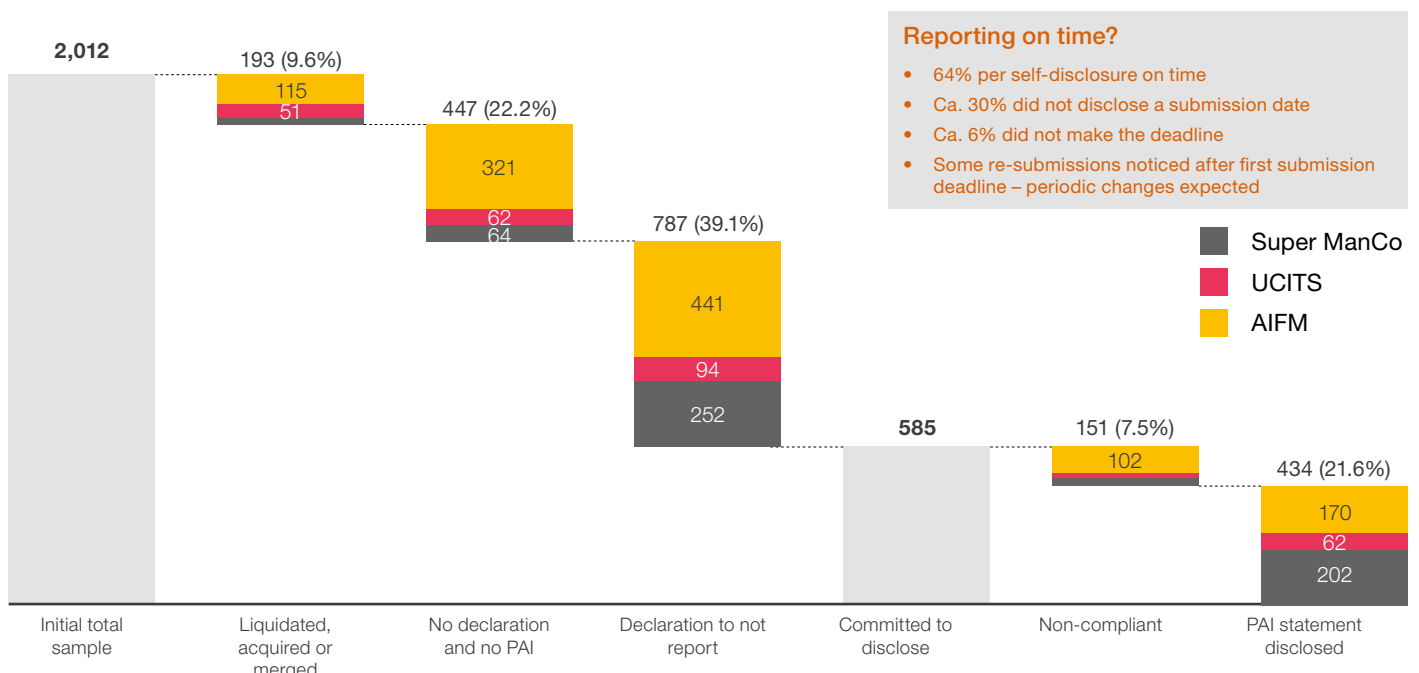
In this dimension we are considering various assessment criteria that allow the reader to understand inter alia the scope of AUM that is covered by the statement, the scope of AUM that is reported per PAI and if double materiality concept is considered for the optional PAIs.

Disclosure Completeness



The dimension "Disclosure Completeness" is focusing on the aspects of addressing all regulatory requirements in the PAI statement and is also including the adherence to the format requirements of SFDR Level 2, Annex I.

Exhibit 3. Breakdown by licenses on reporting classification



To ensure a comprehensive analysis, the three-dimensional model takes multiple criteria, into account including:

1. Accessibility and location on website
2. Clear disclosure for which reporting entities the PAI Statement is prepared
3. Complete reporting and compliance in line with the SFDR Level II template
4. Qualitative analysis of explanations (e.g. actions taken, targets set and actions planned)
5. Coverage disclosure (AuM) in general and per PAI
6. Timeliness of the report (submitted on or before the specified 30 June 2023 deadline)
7. Language requirements of the document (i.e. translation of the summary section of the PAI Statement)
8. Allocation of responsibility for the implementation of policies to identify and prioritise PAIs within organisational strategies and procedures
9. Date of approval by designated authorities (e.g. Board of Directors, Chief Sustainability Officer)
10. Integration and disclosure with respect to Double Materiality and Margin of Error

PwC regulatory experts have assigned weights to both core dimensions and underlying criteria, considering evolving regulators' expectations and the significance of transparent reporting for investors.

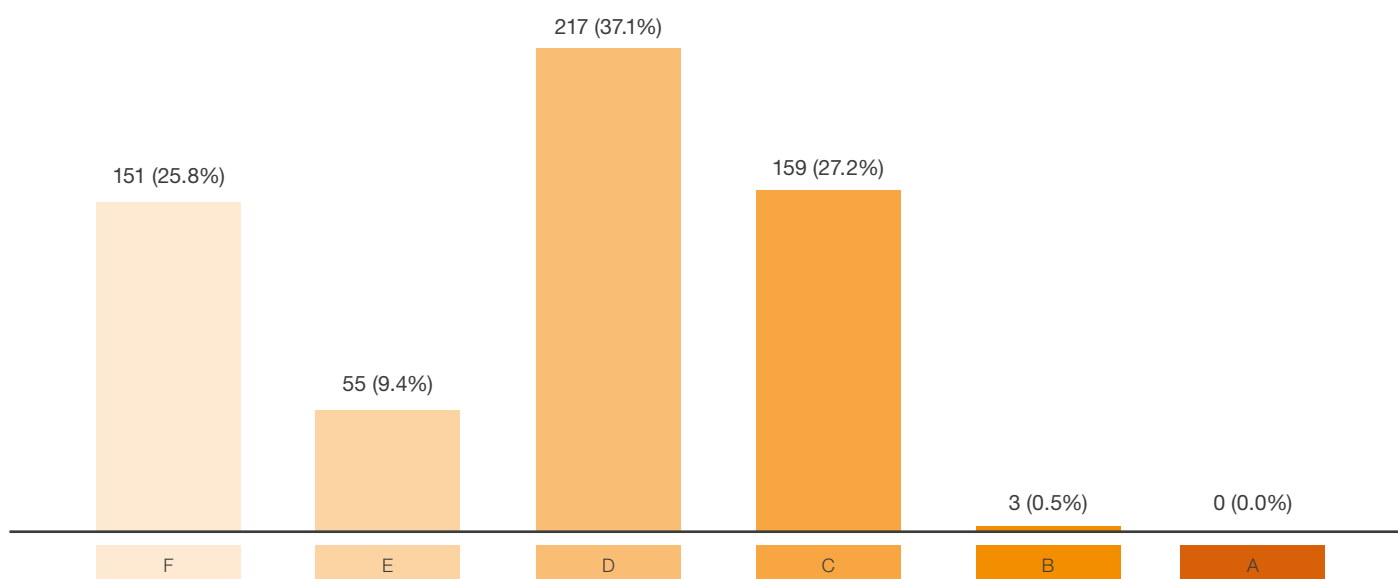
Based on these weightings, we have developed a score ranging from 0 to 100, with the higher the score achieved, the better the entity is performing when it comes to complying with the PAI-related transparency provisions of the SFDR. Through these scores, we have developed a grading system ranging from A (representing the best-complying entities) to F (entities that are supposed to publish a PAI Statement but have not done so or provided very poor statements). The score does not consider the PAI metrics of the respective FMPs.

Grade	Lower score	Upper score
A	90	100
B	80	89
C	60	79
D	40	59
E	20	39
F	0	19

As they stand, the results show room for improvement. None of the ManCos achieved a grade of A, while only 0.5% (3 ManCos) obtained a grade of B. The bulk (64.3%; 376 ManCos) obtained a grade of C or D, while one in ten (55 ManCos) obtained a score of E.

The remaining ManCos (25.8%) obtained a score of F: 151 had not published a PAI Statement, had an encrypted PAI Statement, or had only a product-level PAI Statement, while 1 had published an entity-level PAI Statement that was not able to meet most minimum requirements (cf. Exhibit 4).

Exhibit 4. PwC Transparency Grade as to number and percentage of all types of ManCos



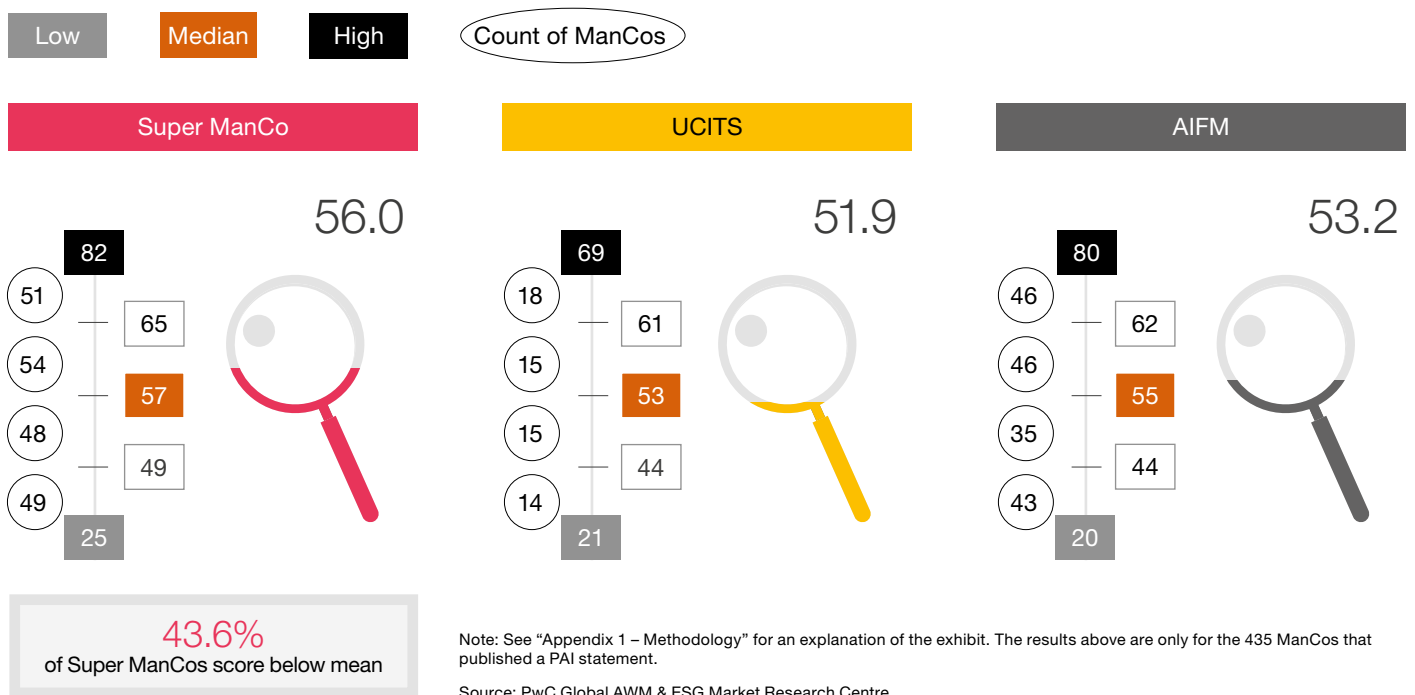
Note. Includes all licenses (Super ManCos, UCITS ManCos, and AIFMs). F denotes a 'Fail' grade, while A denotes an 'Excellent' grade. Consolidated entities inherited grade of their group-level disclosure.

Source: PwC Global AWM & ESG Market Research Centre

Diving into the 434 ManCos that did issue a publicly-accessible PAI Statement, some relatively minor divergences emerge in their scores between the three different types of ManCos. The average transparency score of Super ManCos stood at 56.0 (corresponding to a score of D), while for UCITS ManCos and AIFMs, the average scores stood at 51.9 and 53.2 (both corresponding to a score of D), respectively. However, we notice some divergences in terms of the highest scores achieved. Indeed, the highest score achieved by a UCITS ManCo in our sample was 68, while the highest score achieved by AIFMs and Super ManCos was 80 and 82, respectively (cf. Exhibit 5).

Based on the “PwC PAI Transparency Score,” we have developed a template for individualised report cards that highlight the performance of each UCITS ManCo, AIFM and Super ManCo on their PAI-related disclosures. The template can be found in Appendix 3. PwC will provide Individual Scoring Reports upon request of the respective FMP and to the FMP only. Individual benchmarking against a relevant peer group is possible appreciating the limitations for the PAI metrics.

Exhibit 5. PwC Transparency Score – Results (Numerical Scores)





Qualitative Deep Dive: Limited Compliance with SFDR Level II

Format, completeness, accessibility, and language barriers

Article 2 (1) of SFDR Level II stipulates that PAIs-related information shall be “free of charge” and provided “in a manner that is easily accessible, non-discriminatory, prominent, simple, concise, comprehensible, fair, clear and not misleading.”¹⁷ However, among the 434 ManCos in our sample that issued a PAI Statement, our analysis found that this is frequently not the case.

Only 91 (21.0%) of the 434 ManCos issued a PAI Statement in a clearly defined and easily accessible section dedicated to sustainability-related disclosures on their website. In contrast, a substantial 290 (66.8%) placed their PAI Statements in other sustainability or ESG related reports, legal documentation, or regulatory materials. The remaining 53 (12.2%) could only be identified through advanced search techniques.

While three in four ManCos (315; 72.6%) managed to publish a complete PAI Statement, these were not necessarily quantitatively rich in other words struggle in disclosing quantifiable figures on the individual PAIs. The remaining PAI Statements (119; 27.4%) were either incomplete or quasi-blank declarations, highlighting how difficult and multifaceted the process of filling out a PAI Statement is.

In addition, our results showed that only 95 (21.9%) of the published PAI Statements followed the template provided by SFDR Level II, including the additional requirements embedded in Article 4 (10) SFDR Level II. The remaining ManCos (339, 78.1%) deviated from these requirements, leading to a proliferation of divergent statements, and further complicating efforts to compare disclosure.

As per Article 5 of SFDR Level II, the summary section has to be published in “one of the official languages of the home Member State of the [FMP] and, where different, in an additional language customary in the sphere of international finance.”¹⁸ In our sample, 108 (24.9%) of the published PAI Statements provided their summary section in English and at least one other language, while 158 (36.4%) had a summary section only in English. 168 (38.7%) out of 434 published PAI Statements provided a summary section only in a local language other than English, making it difficult for international stakeholders to get an accurate and readily available overview of the ManCo’s PAI reporting.

Regulatory interpretation

The SFDR and SFDR Level II leave room for interpretation. On one side of the equation, 74 (17.1%) of the analysed 434 PAI Statements presented very vague or no explanations of the ManCos’ own interpretations of measures. On the other end, only 19 (4.4%) ManCos provided thorough comments and clarifications in their PAI Statements. In between, the majority provided PAI Statements that were not able to provide meaningful insights to investors and other stakeholders.

On its own, the template provided in SFDR Level II does not allow complete compliance with the requirements of the regulation, as more detailed requirements (e.g., those pertaining to the summary Statement section and the qualitative disclosures on the policies used) are only available in the main body of SFDR Level II. ManCos are thus required to move back and forth between the template in the Annex and the main body of SFDR Level II to ensure their PAI Statement is complete.

This limits the comparability between statements, as the information presented may be incomplete, provided differently, or not at all – and the template does not prescribe minimum standards for those disclosures.

In addition, the fact that ManCos are managing numerous financial products (e.g., Article 6, Article 8, and Article 9 funds), considering whether PAIs are improving over time at the entity level may not always be possible depending on the individual investment funds managed – yet, they are required to manage the results of the different PAI indicators. This is because the contractual relationship with the investor at fund level may not foresee and therefore does not allow such limitations or improvements. The SFDR currently does not provide any solution to such a conundrum and leaves ManCos with difficult disclosure choices which are currently not catered for by the existing PAI Statement.

17. SFDR Level II

18. SFDR Level II

Coverage of assets under management in the PAI Statement mostly unclear

The PAI template provided by SFDR Level II which ManCos are required to use for the publication of their PAI Statements does not stipulate that ManCos must disclose (1) what proportion of the AuM are considered in the PAI Statement or (2) what the AuM coverage per PAI actually is. Therefore it is not possible to assess (i) how much of the AuM for the reporting ManCos are covered through these PAI Statements, and (ii) how much coverage per individual PAI of the covered AuM proportion is available, as these details are not required to be disclosed within the current version of the PAI Statement.

Further, in Super ManCos' statements, it is unclear what proportion assets managed (i.e., liquid investments (UCITS) or illiquid investments (AIFs)) are contributing to the results at the individual PAI level. This information, and potentially further disaggregated information, would be beneficial for stakeholders allowing a differentiated view with respect to PAI result drivers and the required responses, i.e. possible actions taken, actions planned, and targets set can be very different depending on a multitude of factors such as for example type of investment, ownership or sophistication of engagement processes.

Challenges with the PAI Template

In this light and aside from the difficulty in achieving comprehensive data coverage due to missing source data, the official EU reporting template as per SFDR Level II is setting challenges on several levels for the market as well as for interested stakeholders trying to gain actionable business intelligence. Although the reporting template does provide in principle a standardised structure, our analysis has identified several issues.

For starters, unlike the case for CSRD reporting, the template is sometimes not published in an electronic (machine-readable) reporting format, which renders all analytical efforts by design limited. In addition, the template itself is not complete as some sections in the refer to the main body of SFDR Level II. ManCos thus have additional degrees of freedom positioning of certain disclosure elements as well as completely omitting disclosures) and the disclosures clearly deviate in those areas.

Another issue identified is that the template neither requires any disclosures on assets under management considered in the PAI Statement nor at the PAI level, which limits the comparability of the quantitative PAI results materially. The content of the PAI Statements does not allow for differentiation between different investment strategies – such as stock-exchange listed

investments and alternative investments – nor for further breakdowns within investment strategies (e.g. Fund of Fund, Infrastructure, Private Equity, Private Debt) or geographical or sectoral exposure. These issues may jeopardise the comparability and transparency of output data.

The PAIs that are subject to active management at the product level (Article 8 or Article 9 compliant funds) are consolidated with PAIs that are non-managed (Article 6 products). This puts into question the traceability of remediation actions on a year-to-year basis. Lastly, there is no full alignment between the PAI requirements under the ESRS and SFDR Level II.

Most (403, 92.9%) ManCos do not provide details on which proportion of assets under management are considered in the PAI Statement. Nevertheless, slightly more than half (234, 53.9%) of PAI reporting ManCos are providing data coverage at the individual PAI level. The following illustrative example provides more clarity in that respect: a ManCo could be managing EUR 100 billion that are subject to a PAI Statement. The ManCo is currently not required to disclose what proportion of the assets under management are considered in the PAI Statement and what the coverage per PAI is. This means the ManCo could report 4,500 tCO₂eq/EURmn under PAI 2 (Carbon Footprint), but it is in general not possible to understand what share of assets under management have been considered for this PAI (e.g. EUR 100 billion (100%) or EUR 1 billion (1%)) nor for how much of the considered proportion effectively information was available.

ManCos are in general neither providing details with respect to their data sources per PAI nor implementing data quality management controls (e.g. PCAF scores or other data quality scores). The quality of the underlying data that is used for the preparation and calculation of the PAIs is therefore not possible to independently assess across the PAI Statements.

From a level playing field perspective, the market would benefit from a more consistent and transparent PAI template distinguishing non-comparable PAI information data and approaches. Additionally, further enhancement of the ESMA database to disclose which entities consider or do not consider PAIs could be beneficial to asset owners.

Data quality and availability

The availability of data has proven to be, as expected, a systematic challenge for FMPs. The PAI Statement itself does not fully disclose those challenges, but from observations in the market, the challenges can be summarized as follows:

- Sustainability-related information disclosed by investments is in general not audited;
- For listed investments, data providers are allowing for a structured way of sourcing the available sustainability-related information. The availability and results provided may differ provider per investment from data provider to data;
- For non-listed investments (e.g. Real Estate, Infrastructure, Private Equity, Private Debt) the process of sourcing and collecting information poses significantly different challenges. The absence of data providers, in comparison to listed investments, as well as the fact that the underlying investments are in general not required to prepare any sustainability-related information, pose a significant challenge and operational burden for FMPs invested in these areas;
- Investee companies (including Real Estate) are currently under no legal obligation to prepare PAI reporting, only FMPs are required to prepare PAI reporting.

This means that the quantitative results disclosed in the PAI Statements cannot be easily assessed, and neither

can the quality nor relevance of the reported PAI metrics. With these structural issues in mind, PwC has assessed the disclosed approaches adopted by UCITS ManCos, AIFMs, and Super ManCos to source data from their published PAI Statements but not the disclosed results, i.e. PAI metrics.

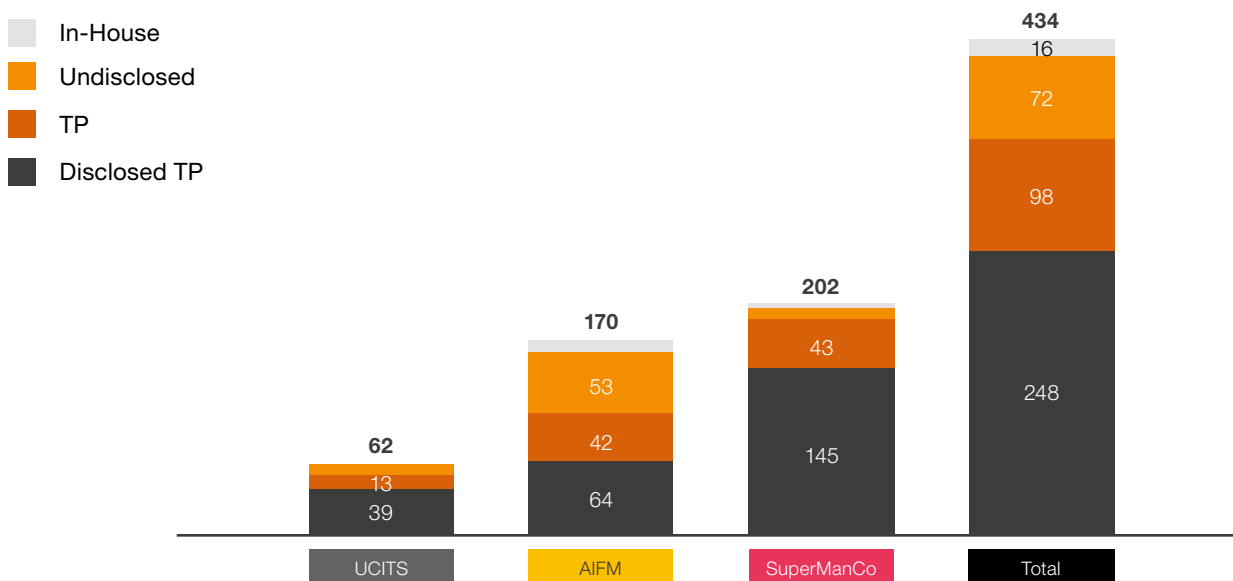
When it comes to data in the PAI space, our analysis shows that the majority (346; 79.7%) rely on third-party data providers and that only 16 (3.7%) carry out pure in-house data collection.

However, among those who rely on third-party providers, 98 (28.3% of the 346) did not openly reference their external data sources, while 72 (16.6% of the 434) did not specify how the data was collected in other words did not clarify if the data is collected in-house or provided by third parties, (cf. Exhibit 6). Also the differentiation of data sources per PAI is in general not disclosed.

Across all three ManCo categories, our analysis found that the challenge regarding data quality and availability for PAI Statements was recurrent. As a result, it was not uncommon to find ManCos opting for qualitative information and not divulging sources, coverage, or in-place data quality controls.

On the flipside, our analysis also found ManCos that are driving best practices in the industry managing to disclose meaningful, accessible, and comprehensive information, defining targets, and providing transparent coverage figures and sourcing information.

Exhibit 6. Third-party (TP) service providers per license*



Note: *Only includes entities, which classify as "Declaration and PAI" according to our methodology. TP stands for Third Party.

Source: PwC Global AWM & ESG Market Research Centre



Quantitative Analysis

For our quantitative analysis, we excluded the 55 group-level PAI Statements from the total number of PAI Statements reviewed (434) and focused instead only on the 379 entity-level PAI Statements. This is because group-level PAI Statements include data for the whole consolidated financial institutions – which potentially includes other divisions such as retail and investment banking or management of insurance products, rather than concentrate on the management company division – the focal point of our report.

Limitations to the quantitative analysis

As highlighted above, the current template of the PAI template as required under SFDR Level II is providing by design limitations to any quantitative analysis and potential business intelligence used for decision making deduced from that, as

- The PAI Statement does not require the ManCos to disclose what proportion of their managed AuMs are considered;
- The PAI Statement does not require the ManCos to disclose per PAI metric, what proportion of their managed AuM (overall) is required to be reported for the respective PAI (eligibility) and effectively what AuM percentage is considered in the calculation of the results of the individual PAI metrics;
- The PAI Statement is an aggregated statement and does not provide room for disaggregation to differentiate between relevant factors and contributors to the PAI results such as investment strategy (e.g. Private Equity, Private Debt, Infrastructure, listed investments), geographical or sectoral exposure;
- The PAI Statement does not foresee any specific statements explaining the underlying data quality (e.g. use of estimates, stale data).

The below detailed insights are to be seen considering the above limitations.

Within Environmental-related PAIs: Super ManCos have the largest carbon footprint

Given that mandatory and voluntary environment-related PAIs make up the bulk of all PAIs (13 out of the 18 Mandatory PAIs, and 22 out of the 46 voluntary PAIs), our analysis zoomed in on them. Please consider that the ManCos are not reporting breakdown's per PAI which contributions to the individual PAI results can be attributed to which country/region investment strategy, or the portion of AuM is considered in the reported data point, i.e. this makes a direct comparison and an assessment of quality of the reported data impossible.

To explain the following illustrations, let us consider Exhibit 7.1. The PAIs are broken down by license categories, with Super ManCos on the left, UCITS ManCos in the middle, and AIFMs on the right. The bold large number above the icons indicates the average score of the entire sample, excluding potential outliers. The lower end of the axis to the right indicates the minimum, while the upper end displays the maximum from the reported data. The distribution of ManCos is delineated on the left of the axis, while on the right, quartile borders are presented, with the red-marked box indicating the Median of the sample.

PAI 1.4 refers to the total GHG emissions of investee companies and is expressed in tonnes of CO₂ equivalent (tCO₂eq). It encompasses the sum of the scope 1, 2 and 3 GHG emissions of a ManCo's investee companies.¹⁹

According to Our World in Data, in 2021 Europe's total GHG emissions stood at 3.4bn tCO₂eq in 2021, which accounts for 6.2% of the Global Total of 54.6bn tCO₂eq.²⁰ Looking at the ManCos PAI disclosures regarding total GHG emissions of their investee companies, Exhibit 7.1 shows, Super ManCos' investments generate the highest average GHG emissions – 13.1 mn tCO₂eq compared to only 0.8 mn tCO₂eq for AIFMs and 1.2mn tCO₂eq for UCITS ManCos. However, it is worth bearing in mind that the GHG emissions of ManCos' investments span a broad spectrum, and Super ManCos report the highest GHG emissions for a single entity's portfolio companies with 89.9 mn tCO₂eq. Conversely, AIFMs showcase the least GHG emissions at just 29.0 tCO₂eq, emphasising the wide range of emissions within the investment portfolios managed by ManCos. Total GHG Emissions are an absolute value and do not establish a relation between the Total GHG Emissions financed and the value of investments. By design – all things being equal – the more AuMs are considered in a PAI Statement respectively managed by the ManCo, SuperManCo or AIFM, the higher the Total GHG Emissions will be.

In contrast to PAI 1.4, which reports on GHG emissions directly, PAI 2 (Carbon Footprint) provides a more contextual view by putting investee companies' emissions in relation to the value of the ManCos' investments. It is measured in tonnes per EUR million invested (t/EURmn) Consequently, this PAI allows for a comparison of investee companies' GHG emissions between ManCos irrespective of AuM. (cf. Exhibit 7.2)

19. As defined by Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emissions reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013

20. Our World in Data (2023). 'Greenhouse gas emissions'

Exhibit 7.1. PAI 1.4 – Total GHG Emissions (in Millions tCO2eq.)

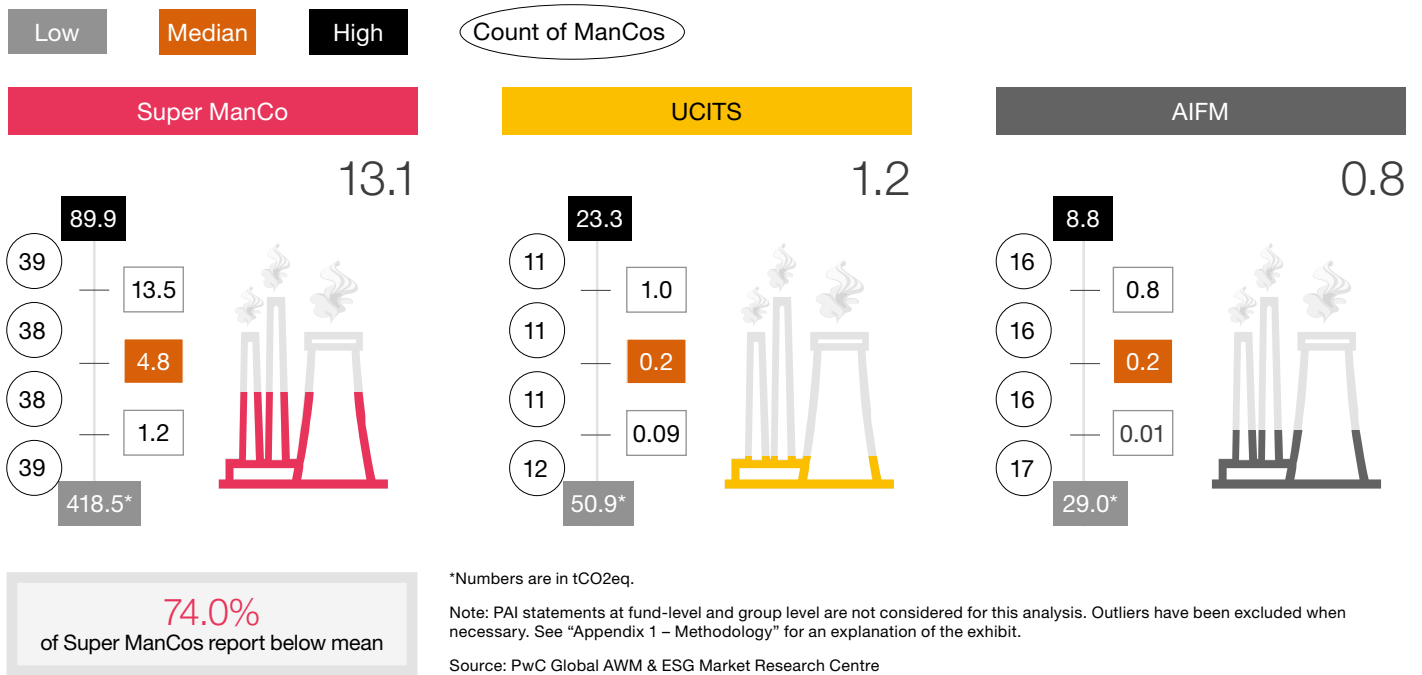
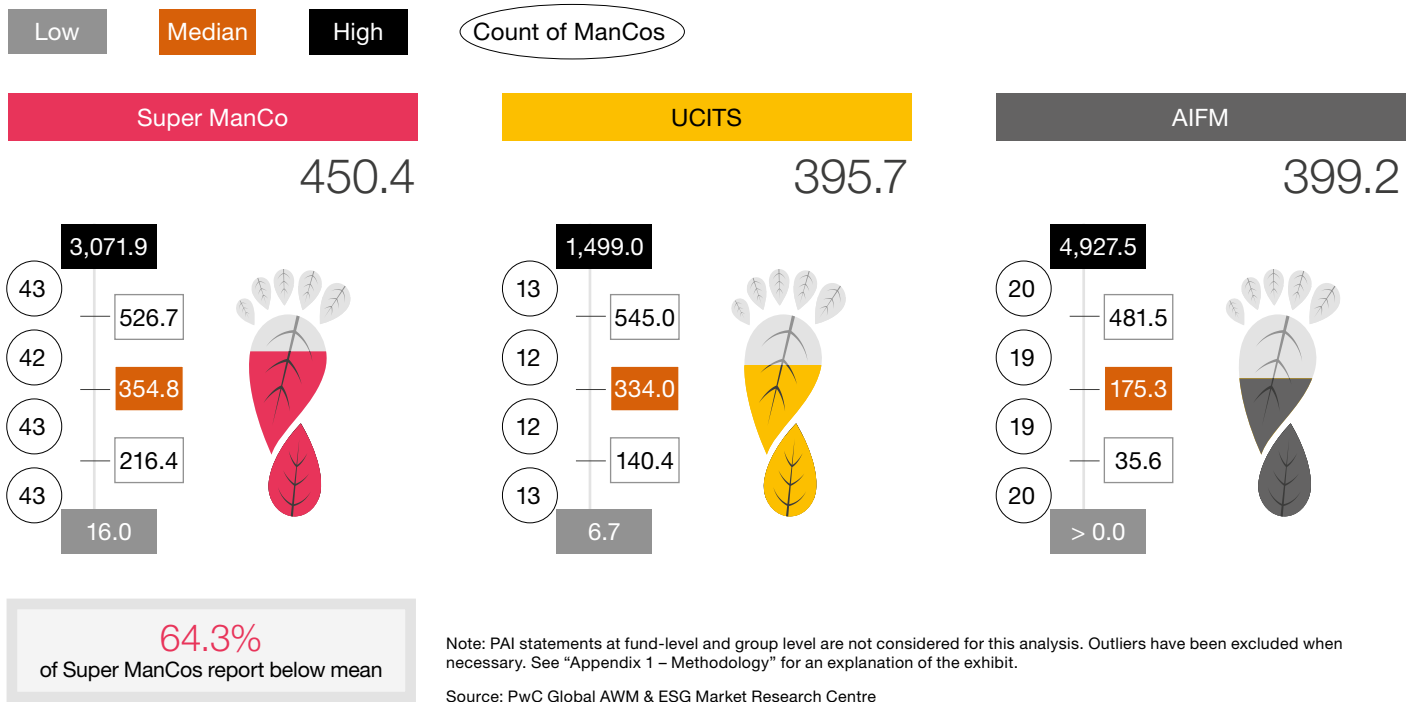


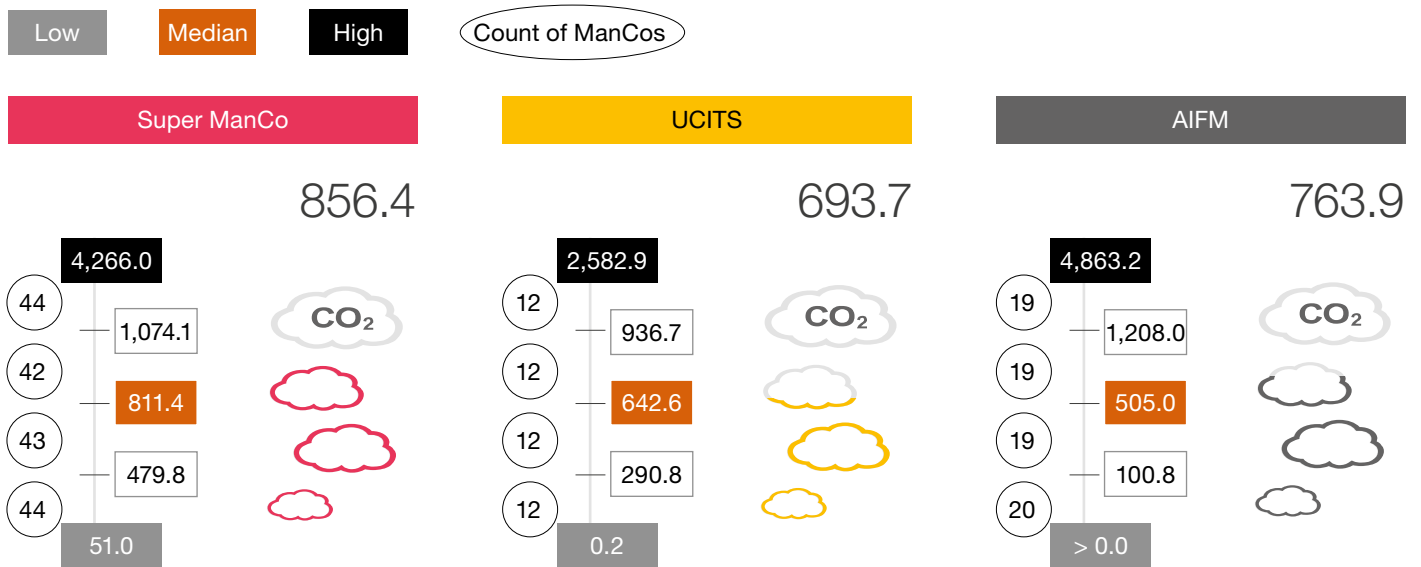
Exhibit 7.2. PAI 2 – Carbon Footprint (in t/EURmn invested)



Whereas PAI 2 considers the valuation of the investee company to derive the Carbon Footprint, PAI 3 (GHG intensity of investee companies) considers the revenue as the relevant denominator to allow for a better understanding of how carbon-intensive the goods

produced, or services provided at the investee company level are. This is done by assessing how much GHG emissions are generated per EUR mn of investee companies' revenue. (cf. Exhibit 7.3).

Exhibit 7.3. PAI 3 – GHG Intensity of ManCos' Investee Companies (in tCO₂eq/EURmn revenue)



54.6%
of Super ManCos report below mean

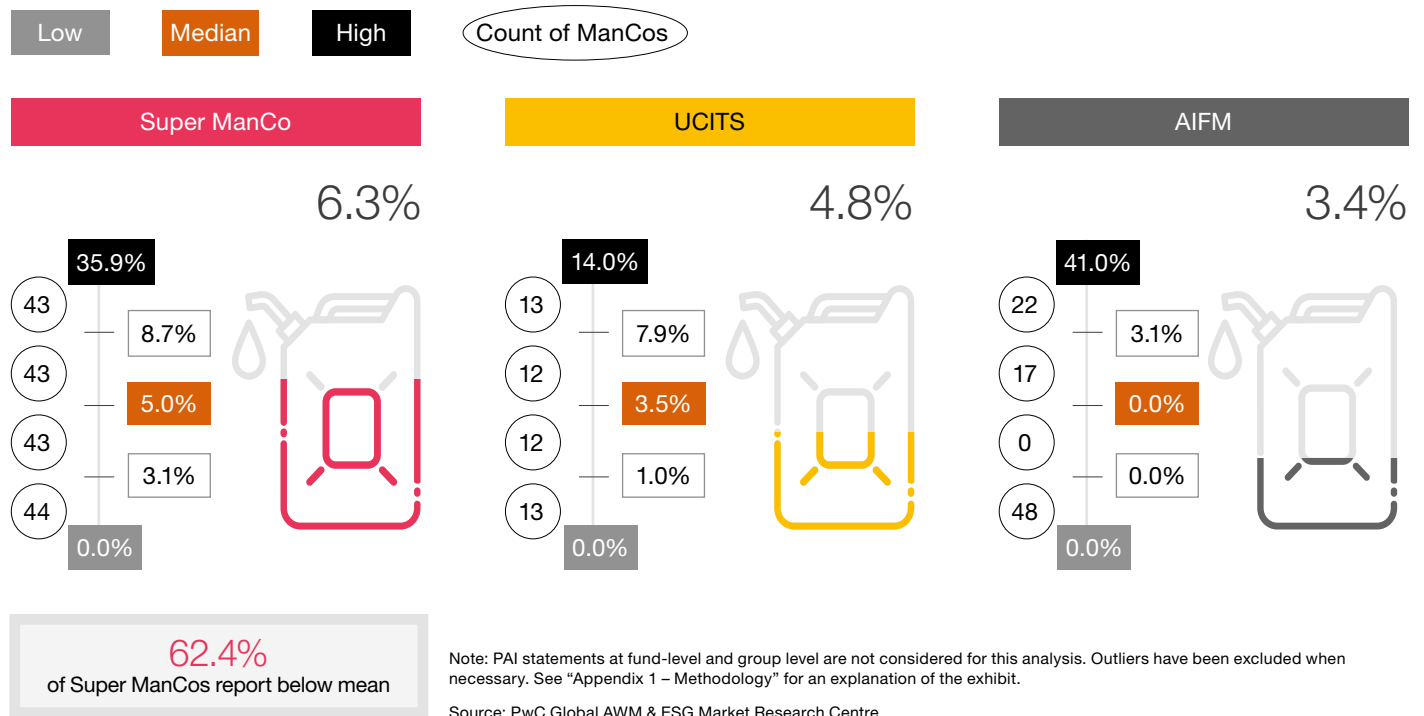
Note: PAI statements at fund-level and group level are not considered for this analysis. Outliers have been excluded when necessary. See "Appendix 1 – Methodology" for an explanation of the exhibit.

Source: PwC Global AWM & ESG Market Research Centre

Companies active in the fossil fuel sector – which, as per SFDR Level II, refers to those «that derive any revenues from exploration, mining, extraction, production, processing, storage, refining or distribution, including transportation, storage and trade, of fossil fuels» – have a significant role to play in the fight against climate change,

as the decarbonisation of their operations and supply chains will significantly reduce GHG emissions. In the SFDR, these companies fall under PAI 4, which refers to the “share of investments in companies active in the fossil fuel sector.”²¹ (cf. Exhibit 7.4).

Exhibit 7.4. PAI 4 – Exposure to the fossil fuel sector



PAI 5 (share of non-renewable energy consumption and production) refers to the amount of non-renewable energy produced and consumed by investee companies “from non-renewable energy sources compared to renewable energy sources, expressed as a percentage of total energy sources.”²² Given the double-sided nature of this PAI, we divided it into two separate graphs (cf. Exhibits

7.5 and 7.6). Further, we found that just 134 out of the 305 entities (42.9%) reporting on PAI 5 provided the split in consumption and production of non-renewable energy. Hence for our analysis we only considered the disclosed split to correctly allocate the shares to consumption and production.

Exhibit 7.5. PAI 5.1 – Consumption of non-renewable energy

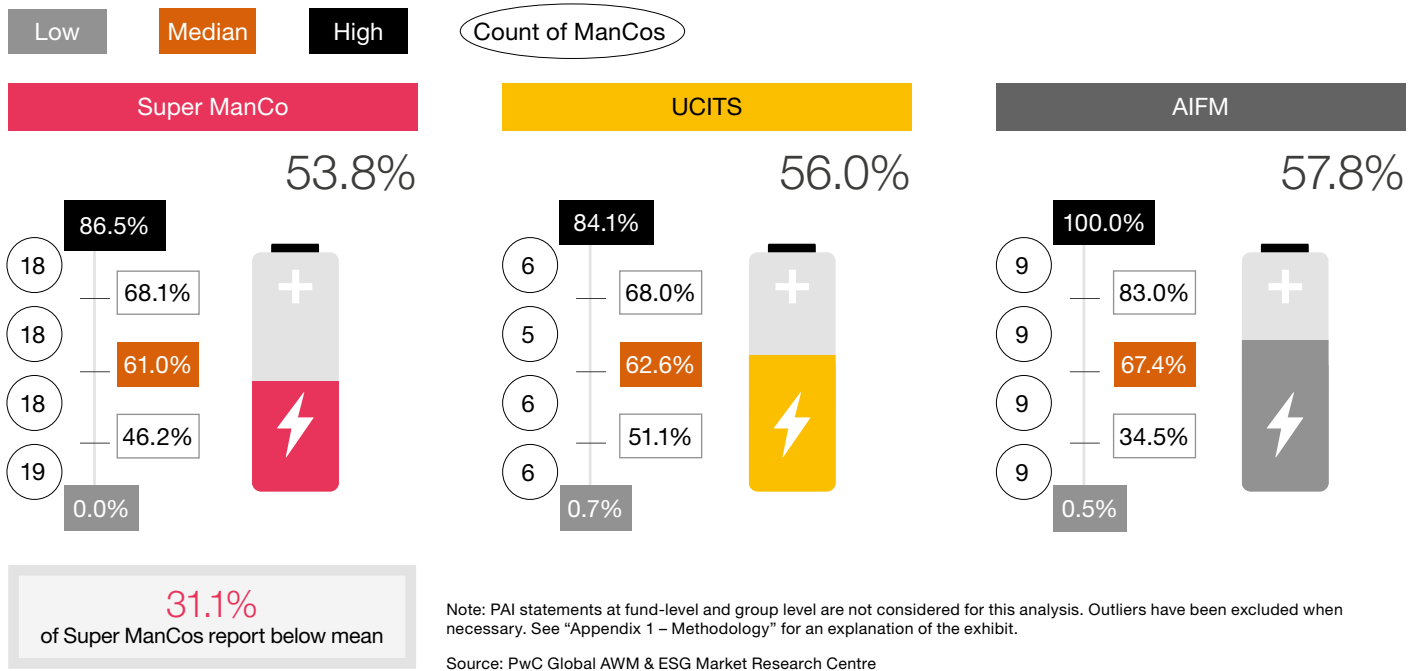
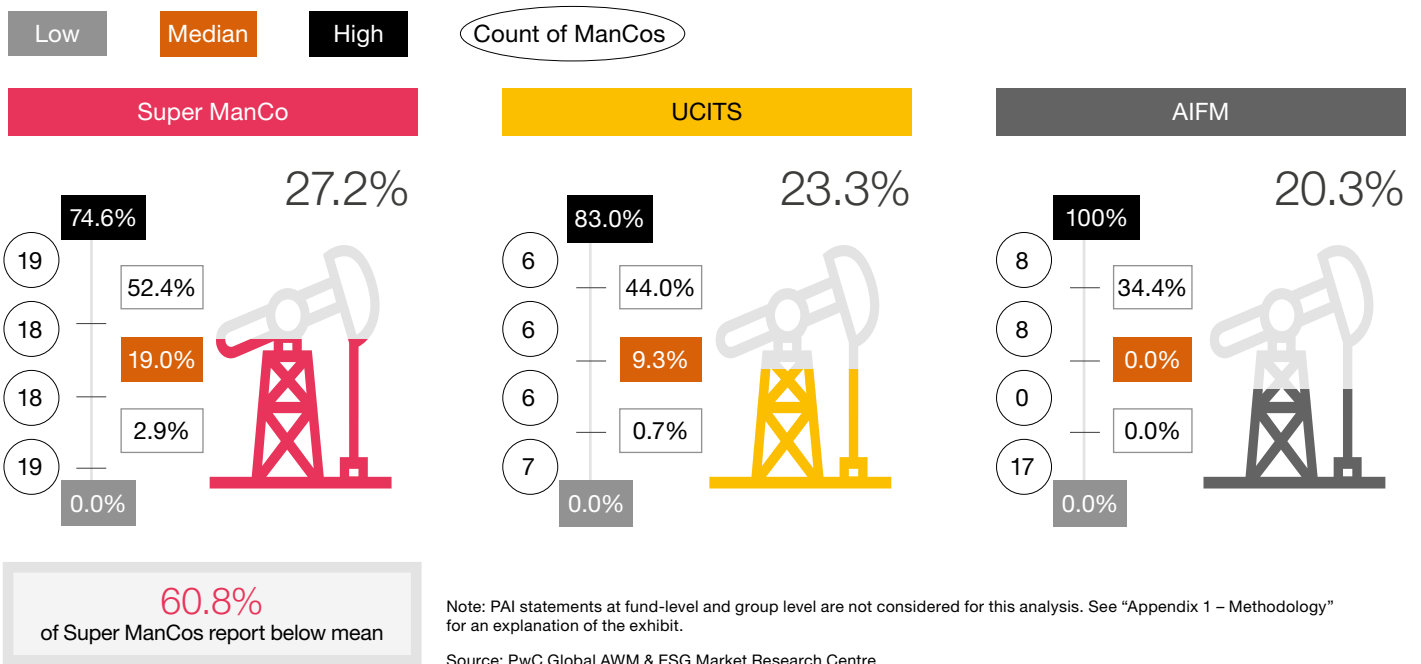


Exhibit 7.6. PAI 5.2 – Production of non-renewable energy



Our analysis excluded PAI 6²³, the energy consumption intensity per high impact climate sector, measured “in GWh per million EUR of revenue of investee companies, per high impact climate sector.”²⁴ Although disclosures on PAI 6 have to be carried out following the European NACE classification of economic activities, 116 (30.9%) out of the 376 – total entities subject to PAI 6 – reporting ManCos in our sample only provided the overall number, rather than the required figures split among the different economic activities. Among the remaining ManCos, 229 (52.8%) disclosed quantitative figures on each of the NACE categories, while 31 (8.2%) did not disclose on PAI 6.

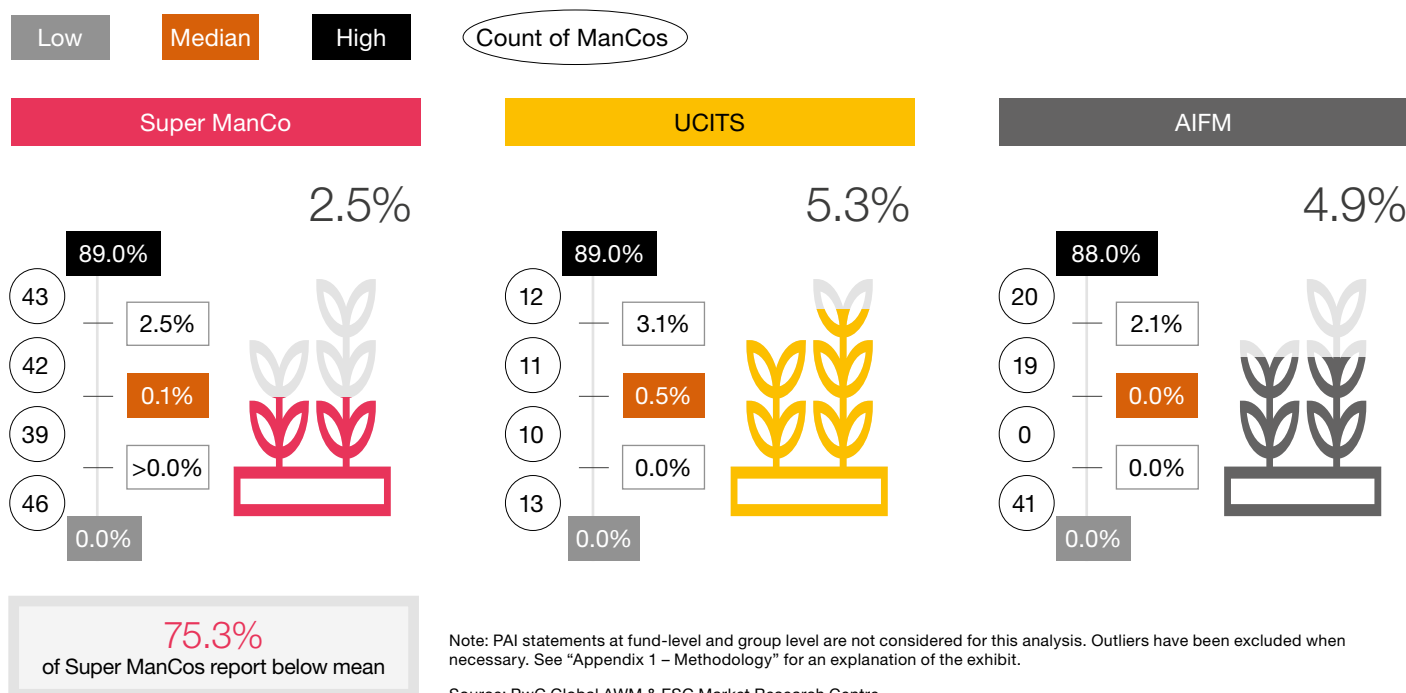
Between 1970 and 2018, the world witnessed “an average 69% decline in the relative abundance of monitored wildlife populations,”²⁵ and according to a recent study by the Finance for Biodiversity Foundation, “a list of top 250 high-impact companies based on the MSCI World Index is potentially responsible for 73% of the biodiversity impact of the entire index.”²⁶

With these figures in mind, it is no surprise that biodiversity, and the role that FMPs have to play in preserving and restoring it, is increasingly becoming an important component of the sustainable finance landscape.²⁷ As a matter of fact, the Taskforce on Nature-related Financial Disclosures (TNFD) – established in 2021 to complement the Taskforce on Climate-related

Financial Disclosures (TCFD) – has recently published in recommendations on nature-related disclosures that financial institutions and companies can adopt to track their biodiversity footprints.²⁸

In this regard, PAI 7 – which refers to the “activities negatively affecting biodiversity-sensitive areas” – comes into play. It is calculated as the “share of investments in investee companies” which have sites or operations “in or near to biodiversity-sensitive areas” and whose activities “negatively affect those areas.”²⁹ (cf. Exhibit 7.7).

Exhibit 7.7. PAI 7 – Activities negatively affecting biodiversity-sensitive areas



23. Due to the complexity, we have decided to exclude PAI 6 in the analysis but would be able to access upon request.

24. SFDR Level II

25. WWF (2022). ‘Living Planet Report 2022 – Building a nature-positive society,’ October 2022

26. Finance for Biodiversity Foundation (2023). ‘Unveiling Biodiversity-Impact Sectors’, April 2023.

27. F. Vonner (2023). ‘Biodiversity: The missing link,’ Environmental Finance, September 4, 2023

28. TNFD (2023). ‘Final TNFD Recommendations on nature related issues published and corporates and financial institutions begin adopting,’ September 18, 2023

29. SFDR Level II

The next two environment related PAIs are closely tied to biodiversity.

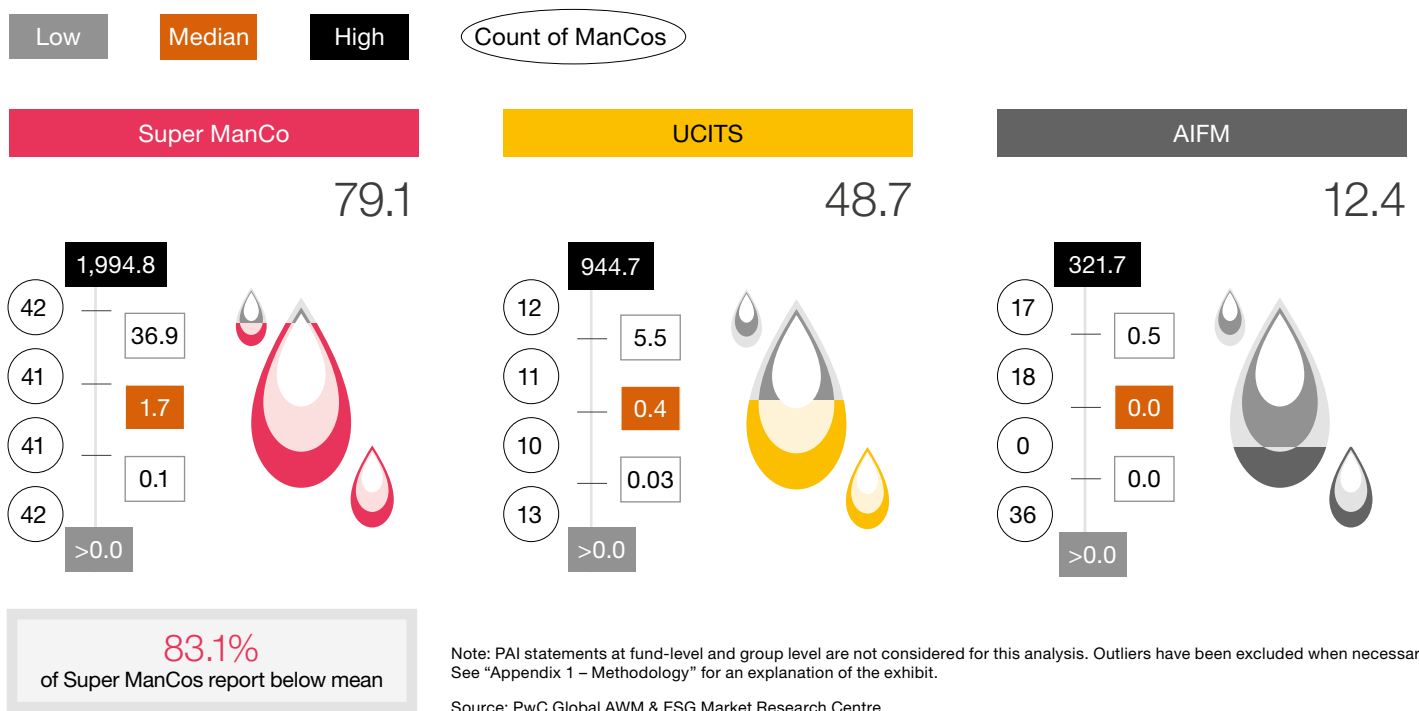
PAI 8 refers to the emissions to water – which are the priority hazardous substances as defined by Directive 2000/60/EC of the European Parliament and of the Council, alongside chemical substances such as nitrates, phosphates and pesticides. It is calculated as the “tonnes of emissions to water generated by investee companies per million EUR invested” (t/EURmn) and is “expressed as a weighted average.”³⁰

Highlighting the significance of PAI 8, a World Bank report from 2019 highlights the profound influence that water quality has on future earnings. As a matter of fact, while

“an additional kilogram per hectare of fertilizer increases yields by 4 to 5 percent,” the “release of nitrates in the waterways can impair human health” which leads to long-term economic impacts. As a matter of fact, the report found that “every additional milligram per liter of nitrate that enters the water increases stunting of children younger than 5 years by 100 to 19 percent and decreases adult earnings by 1 to 2 percent.” This reduction is attributed to the adverse effects on health and brain development during early childhood.³¹

In other words, polluted water can have severe adverse impacts on socioeconomic development and the overall health of populations. (cf. Exhibit 7.8).

Exhibit 7.8. PAI 8 – Emissions to water (in t/EURmn invested)



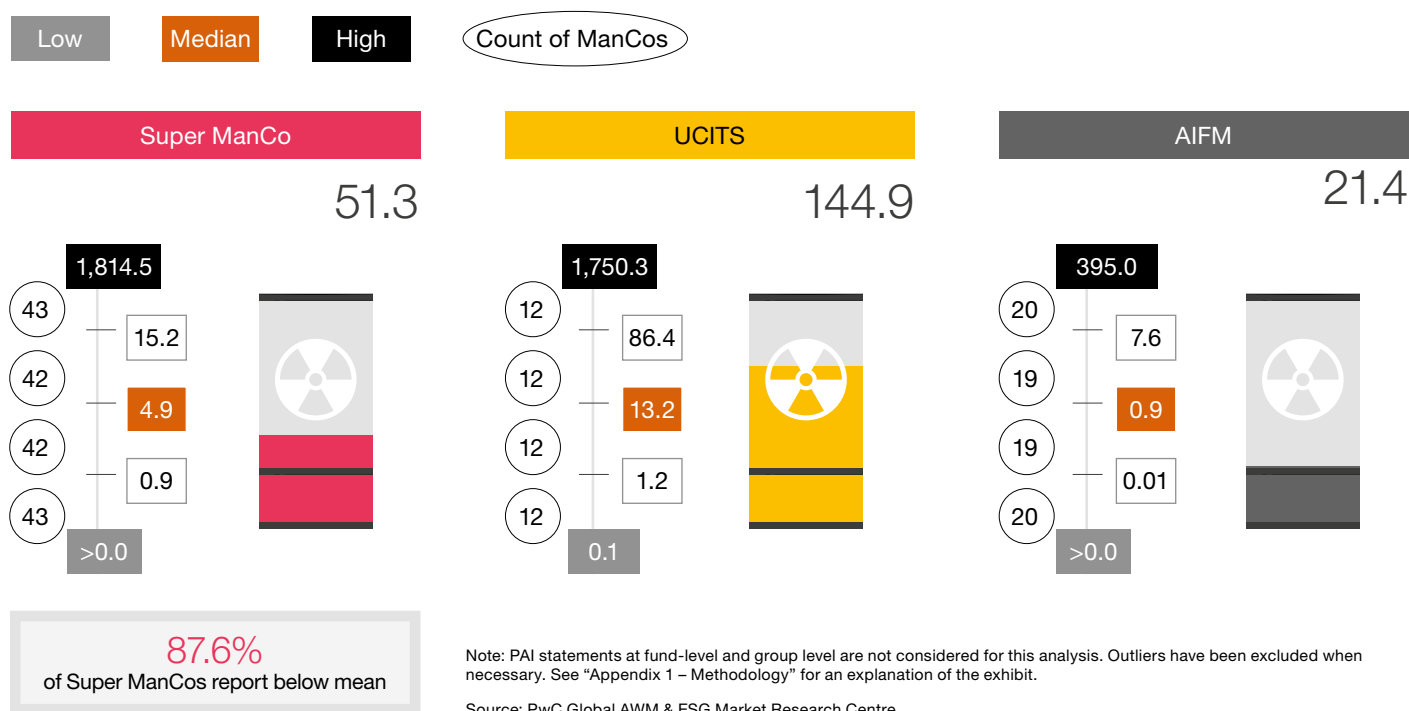
30. SFDR Level II

31. The World Bank (2019). ‘Quality Unknown: The invisible Water Crisis’ August 20, 2019

PAI 9 discusses the hazardous and radioactive waste as ratio to a ManCo’s investments and is calculated in tonnes “generated by investee companies per million EUR invested, expressed as a weighted average”³² (t/ EURmn). If not managed and disposed safely, hazardous waste can “pose an elevated risk to human health and to the environment” – and in the EU, around 95.5mn tonnes, or 4.4% of total waste generated, was classified as hazardous in 2020, up from 90.8mn tonnes in 2010.³³ A recent review by the European Court of Auditors found that over 50% of the hazardous waste generated in the EU is disposed of rather than recycled or used for energy recovery.³⁴

In this vein, it is interesting to note that the three different categories of ManCos obtained significantly diverging averages for PAI 9 (cf. Exhibit 7.9).

Exhibit 7.9. PAI 9 – Hazardous waste and radioactive waste ratio (in t/EURmn invested)



32. SFDR Level II

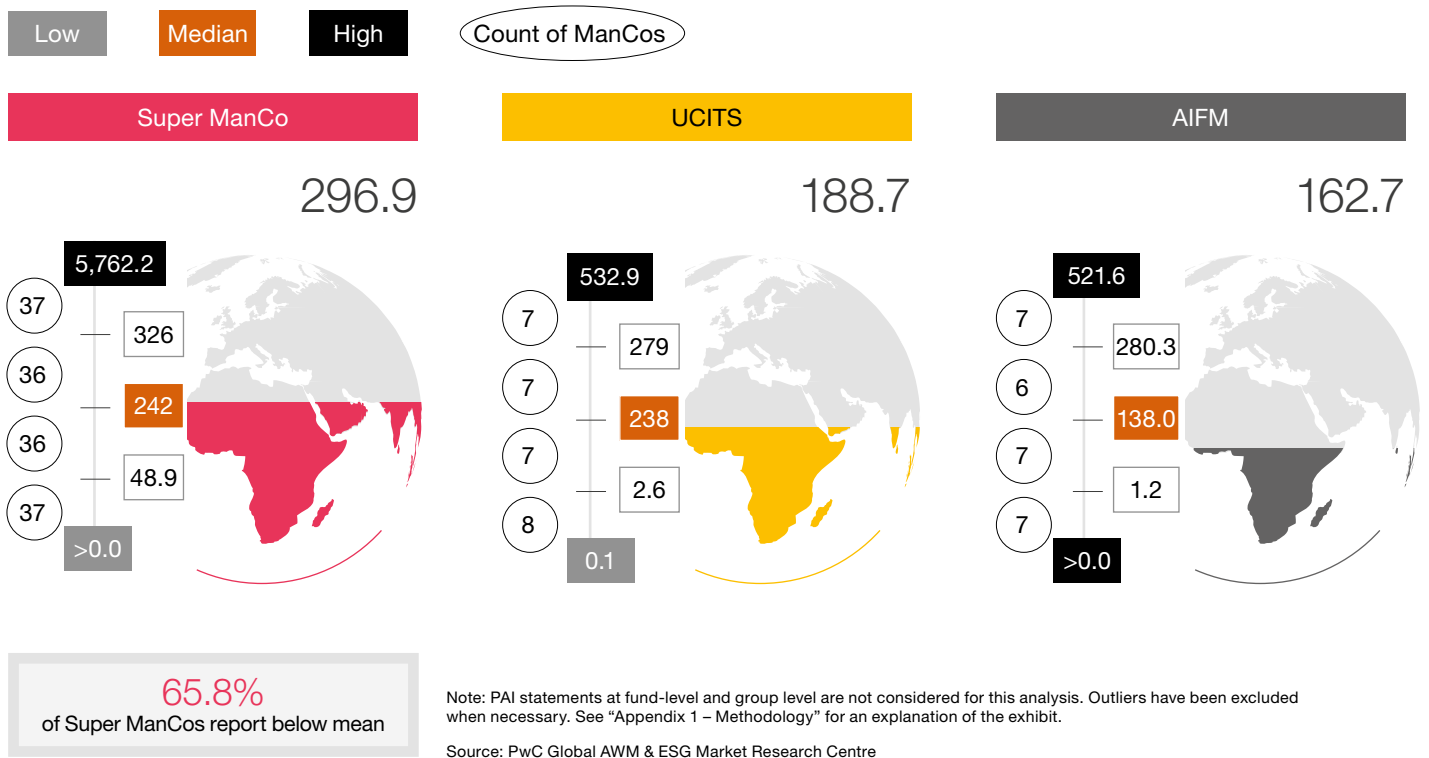
33. Eurostat (2023), ‘Waste statistics’

34. European Court of Auditors (2023). ‘The amount of hazardous waste in the EU still increases,’ January 16, 2023

Whereas PAI 3 refers to investee companies' GHG intensity, PAI 15 refers to the GHG intensity of investee countries, and it is assessed by the amount of GHG emissions generated per EUR mn of a country's gross domestic product (GDP). In other words, for every EUR 1mn generated in GDP by a ManCo's investee country, a specific amount of tCO₂eq is emitted.

Across Europe the average for GHG intensity stood at 245.0 (tCO₂eq/EURmn GDP) in 2021.³⁵ Among the three ManCo licenses, Super ManCos (296.9) were the only ones exceeding the European average.

Exhibit 7.10. PAI 15 – GHG intensity of investee countries (in tCO₂eq/EURmn GDP)

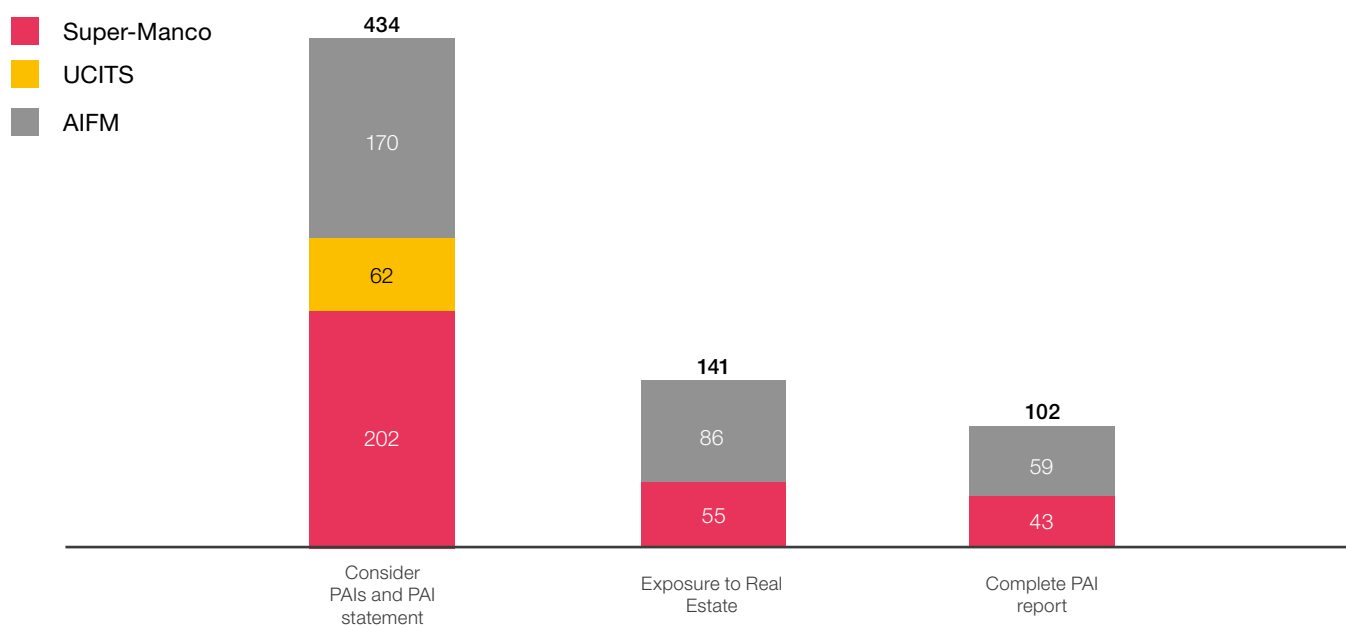


35. European Environment Agency (2023). 'EEA greenhouse gases – data viewer'

The real estate sector is estimated to account for roughly “38% of energy consumption and 29% of all GHG emissions in the EU,” which is why decarbonising the sector is crucial to reach the objectives of the Paris Agreement and the EU’s transition goals.³⁶

Among the 434 ManCos in our sample which considered PAIs and issued a PAI Statement, 141 (32.5%) had exposure to real estate (cf. Exhibit 8.1).

Exhibit 8.1. Entities with Real Estate Exposure and Complete PAI reports



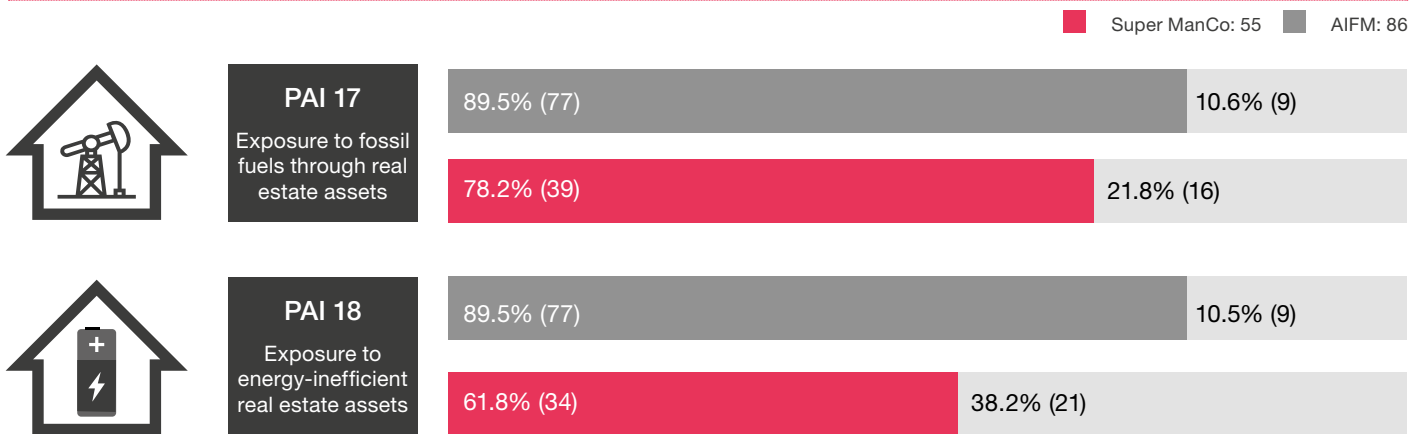
Note: This classification includes disclosures at entity, or group level.

Source: PwC Global AWM & ESG Market Research Centre

For PAI 17 (exposure to fossil fuels through real estate assets) and PAI 18 (exposure to energy-inefficient real estate assets), we excluded UCITS ManCos as, unlike the

other two license categories, they are not authorised to invest in alternative assets such as real estate, and hence have no exposure to these two PAIs.

Exhibit 8.2. Real Estate-related PAIs (PAIs 17 and 18)



Note: PAI statements at fund-level and group level are not considered for this analysis. Outliers have been excluded when necessary. See "Appendix 1 – Methodology" for an explanation of the exhibit.

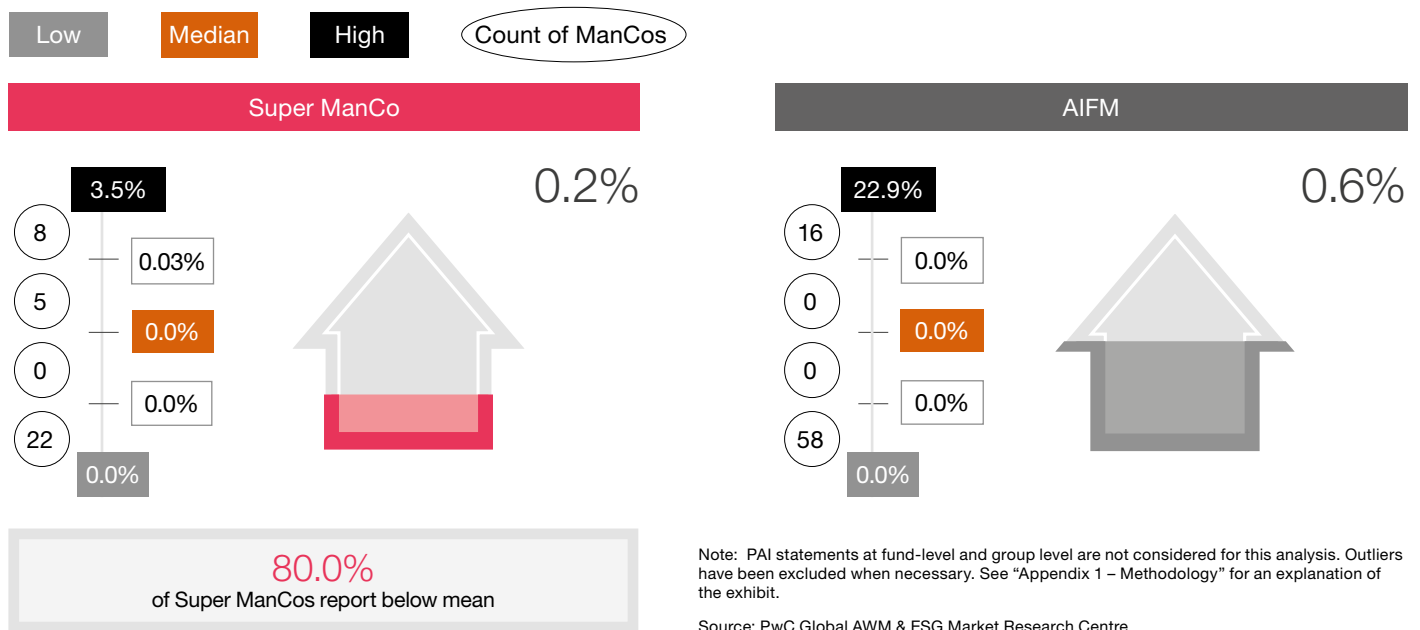
Source: PwC Global AWM & ESG Market Research Centre



In terms of PAI 17, a notable 89.5% of the 86 AIFMs with real estate exposure exhibit tangible quantitative measures. Shifting to PAI 18 (exposure to energy-inefficient real estate

assets), the discrepancy in quantitative disclosures widens significantly between AIFMs (89.5%) and Super ManCos (61.8%) (cf. Exhibit 8.2).

Exhibit 8.3. PAI 17 – Exposure to fossil fuels through real estate assets

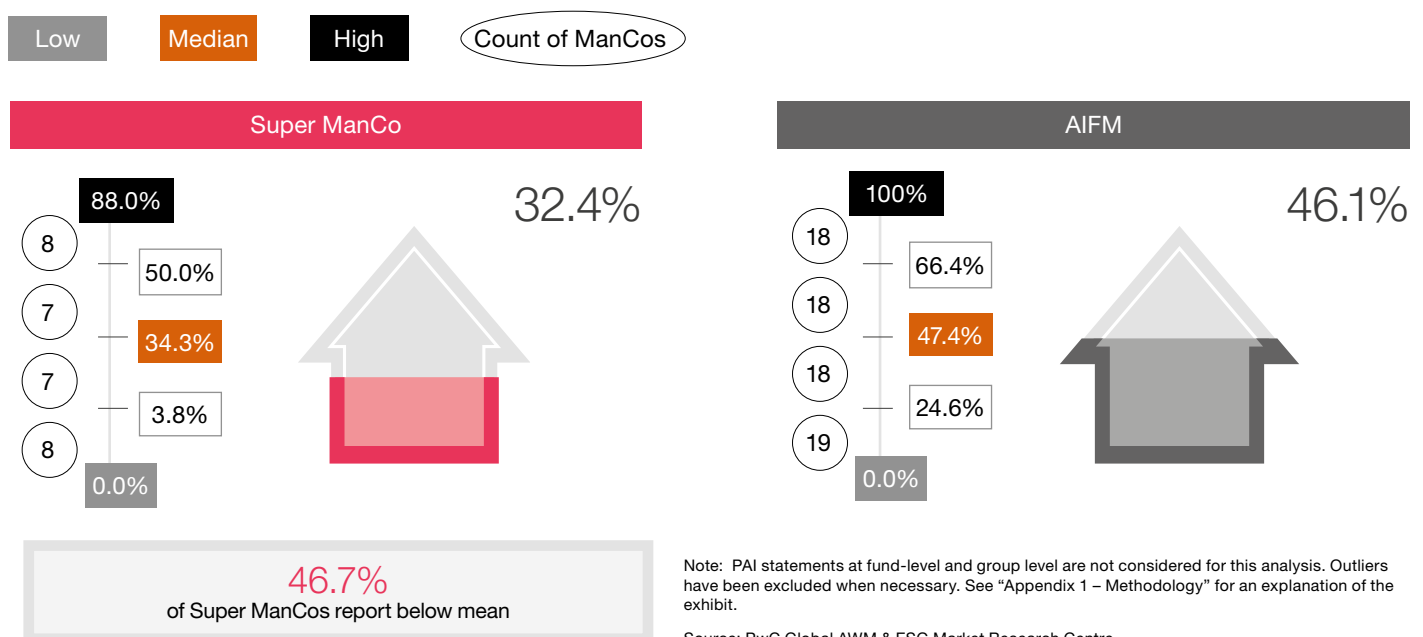


As for PAI 18, understanding how exposed ManCos are to energy-inefficient real estate is crucial, particularly given that approximately 75% of the EU's building stock is believed to be energy-inefficient, according to the European Commission. This results in substantial energy use, particularly given that renovating existing buildings

could lead to a decrease of energy consumption and CO2 emissions by up to 6% and 5%, respectively.³⁷

Taking a closer look at the actual PAI 18 disclosures, a large disparity is observed (cf. Exhibit 8.4).

Exhibit 8.4. PAI 18 – Exposure to energy-inefficient real estate assets



37. European Commission (2020). 'In focus : Energy efficiency in buildings

Social-related PAIs: More efforts needed on the gender pay gap and board diversity fronts

In addition to the environment-focused PAIs, our analysis also honed in on the PAIs that have a social dimension, namely PAI 10 (violations against UN Global Compact Principles [GCP]), PAI 11 (lack of processes and compliance mechanisms to monitor compliance with UN GCP and OECD Guidelines for Multinational Enterprises), PAI 12 (unadjusted gender pay gap), PAI 13 (board gender diversity) and PAI 14 (exposure to controversial weapons, such as antipersonnel mines, cluster munitions, chemical and biological weapons).

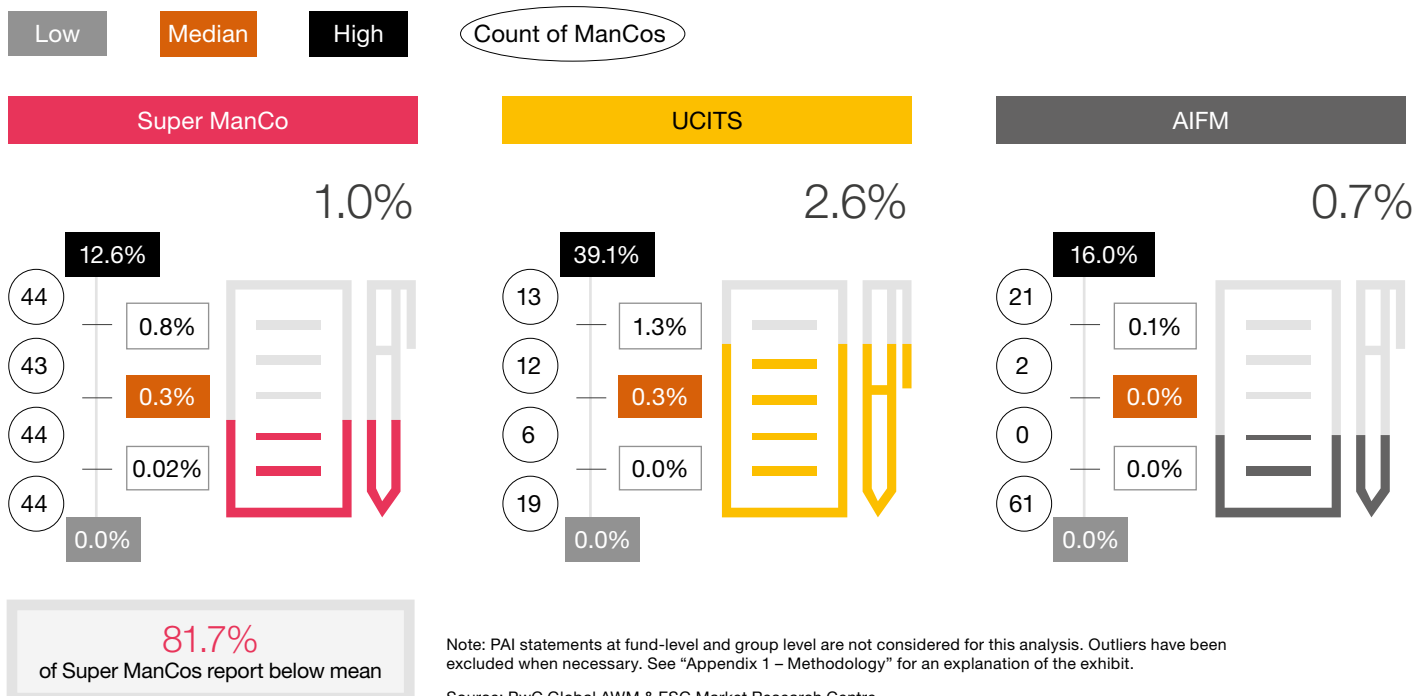
Launched in 2000 as a non-binding voluntary initiative for businesses to adopt sustainable practices and operations, the UN Global Compact is considered to

be “the single, global normative authority and reference point for action and leadership within a growing global corporate sustainability movement.”³⁸ However, despite witnessing substantial growth in its membership since its launch, progress on the UN GCP has not been entirely clear-cut. For instance, despite 90% of participants in the Global Compact having human rights policies in place, “only 18% report conducting human rights impact assessments.”³⁹

Nonetheless, initiatives such as the UN GCP have played a role in promoting sustainability and can help ESG-minded investors and asset managers alike discern companies that act on their sustainability credentials from those that do not.

Overall, the exposure of ManCos to companies involved in violations of the UN Global Compact Principles (PAI 10) is relatively low (cf. Exhibit 9.1).

Exhibit 9.1. PAI 10 – Violations Against UN Global Compact Principles

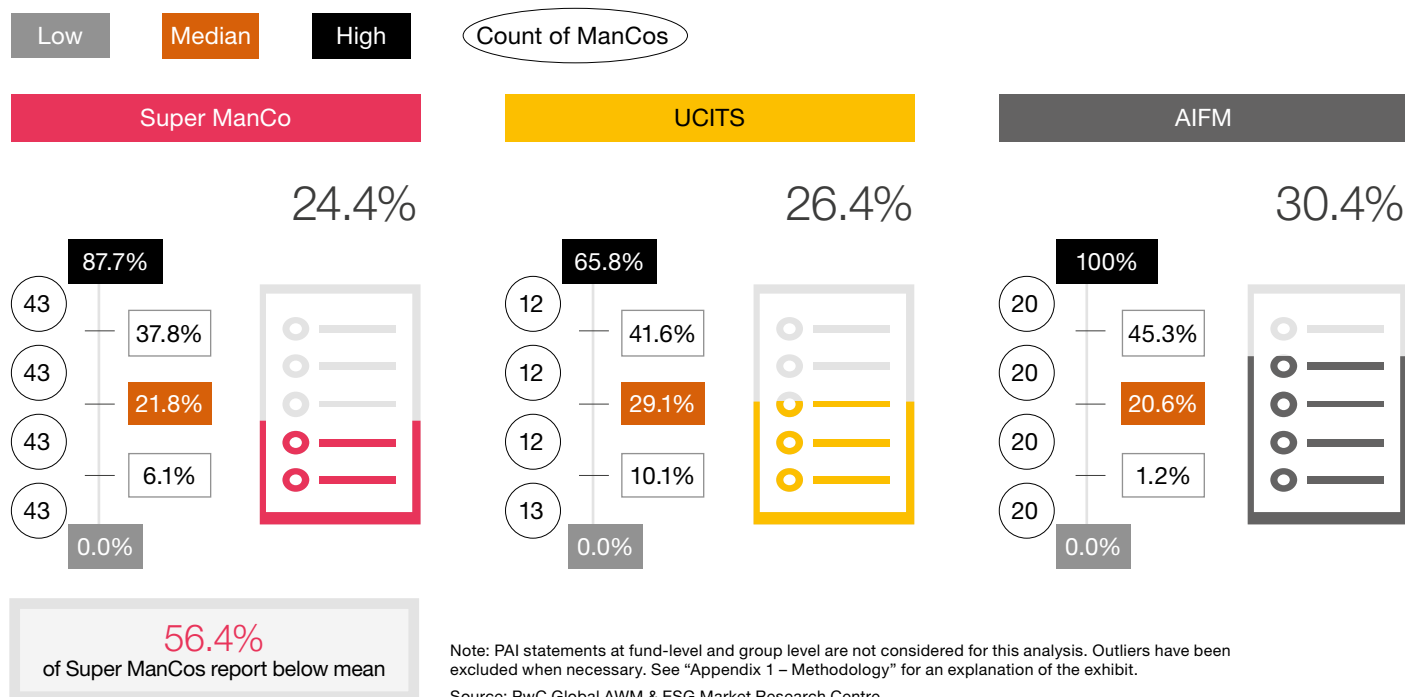


38. United Nations Global Compact (2023). ‘UN Global Compact 2022 Annual Report’
 39. United Nations Global Compact (n.d.). ‘Respect the Dignity and Equality of All Human Beings’

As for PAI 11, unlike PAI 10, the share of investments that ManCos have made in companies that do not have policies to monitor compliance or report grievances pertaining to the UNGCP and the OECD GEM is not very

low. The averages stand at 30.4% for AIFMs, 26.4% for UCITS ManCos, and 24.4% for Super ManCos. (cf. Exhibit 9.2).

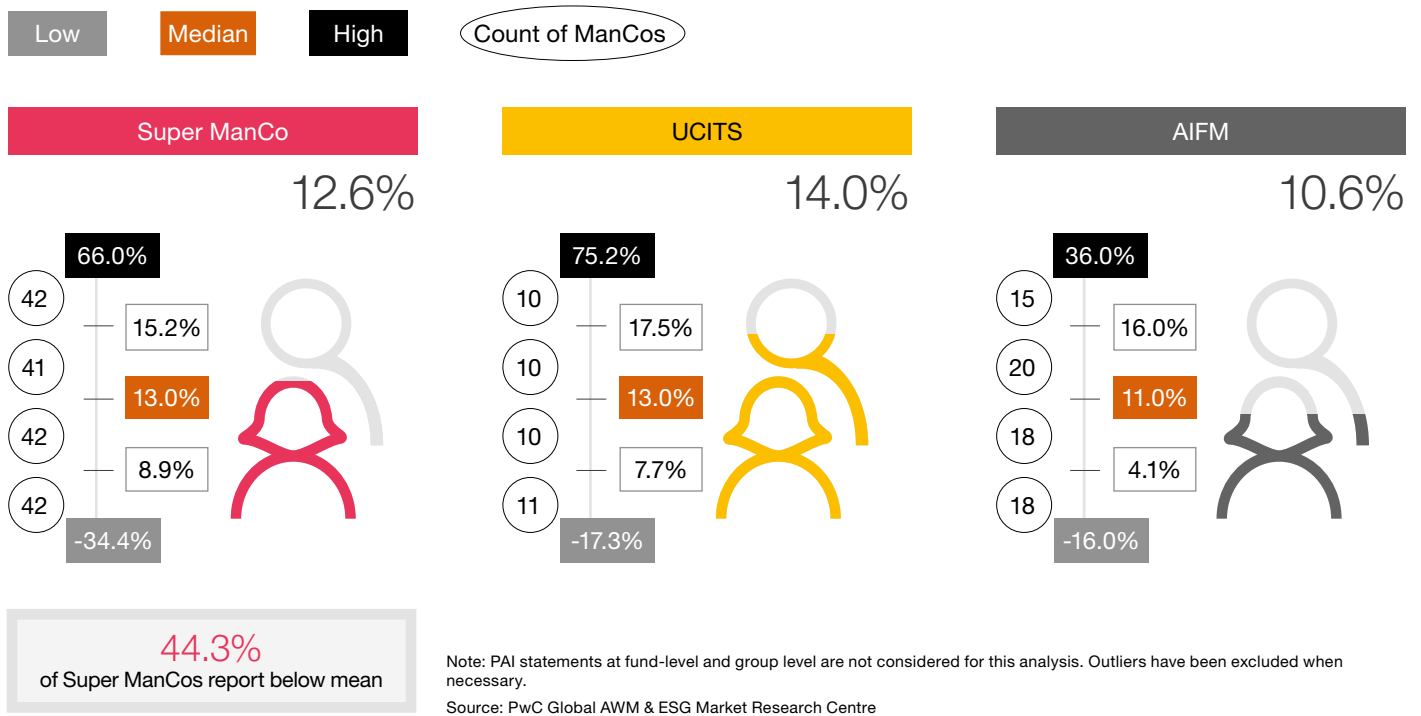
Exhibit 9.2. PAI 11 – Lack of processes and compliance mechanisms to monitor compliance with UN GCP and OECD Guidelines for Multinational Enterprises



According to the European Commission, the gender pay gap in the EU stood at 12.7% in 2021 – which means that on average, women earn 13.0% less per hour than men.⁴⁰ Our analysis of PAI 12, which measures “the average unadjusted gender pay gap of investee companies,⁴¹” presents findings close to this average. Considering that it is not possible to assess how much of the investments are located in the EU

and in other regions of the world, it is not possible to align the statement from the European Commission and the findings under PAI 12. (cf. Exhibit 9.3).

Exhibit 9.3. PAI 12 – Unadjusted gender pay gap

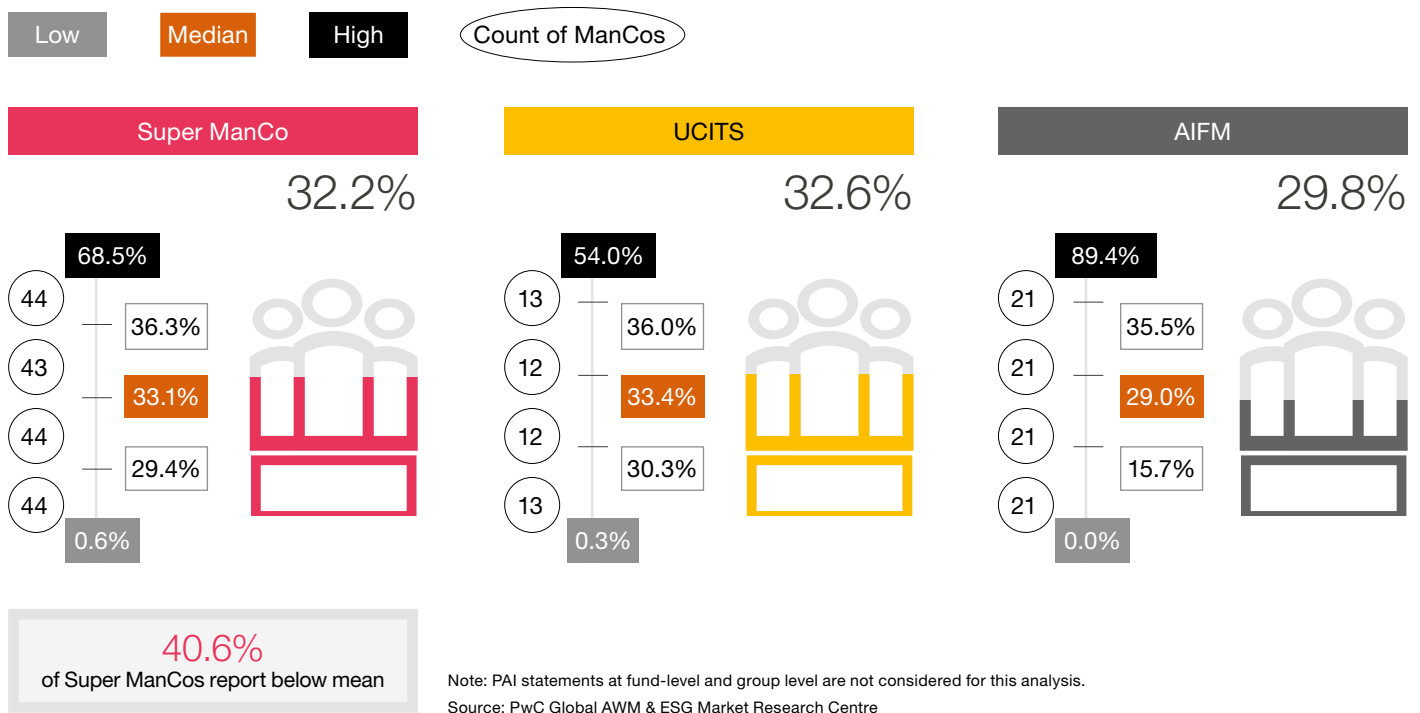


40. European Commission (2022). 'Equal Pay? Time to close the gap!' November 2022
 41. SFDR Level II

As for board gender diversity (PAI 13), which is measured as the “average ratio of female to male board members in investee companies” and is “expressed as a percentage of all board members,” the European Institute for Gender Equality (EIGE) found that women make up 33.2% of board members in the largest listed companies in the EU, with just 8% holding the position of president.⁴² Please consider that the ManCos are not reporting breakdown’s

per PAI which contributions to the individual PAI results can be attributed to which country/region, i.e. the EIGE alignment is to be considered in that light. (cf. Exhibit 9.4).

Exhibit 9.4. PAI 13 Board gender diversity

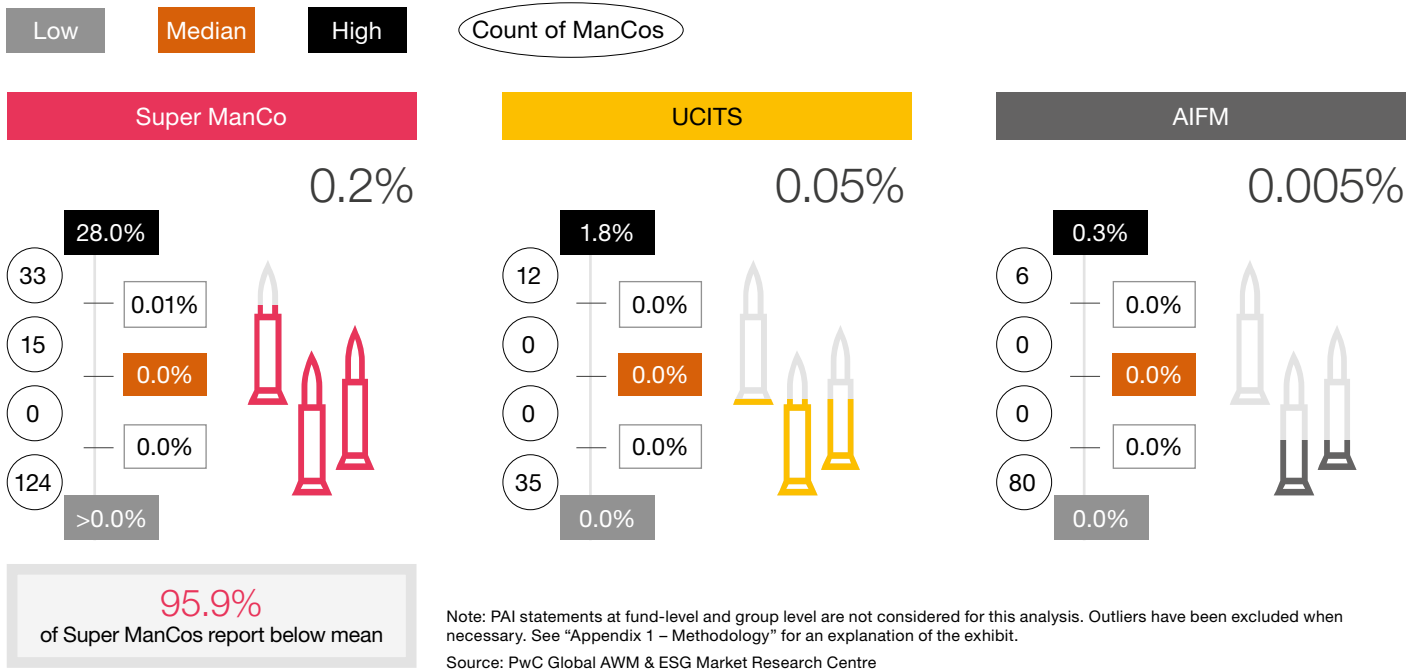


42. EIGE (2023). 'Largest listed companies: presidents, board members and employee representatives', October 25, 2023

Similar to PAI 10, among all three licenses, our analysis found very little exposure to PAI 14 – i.e., exposure to controversial

weapons, which looks at investments in companies involved in manufacturing and selling such weapons (cf. Exhibit 9.5).

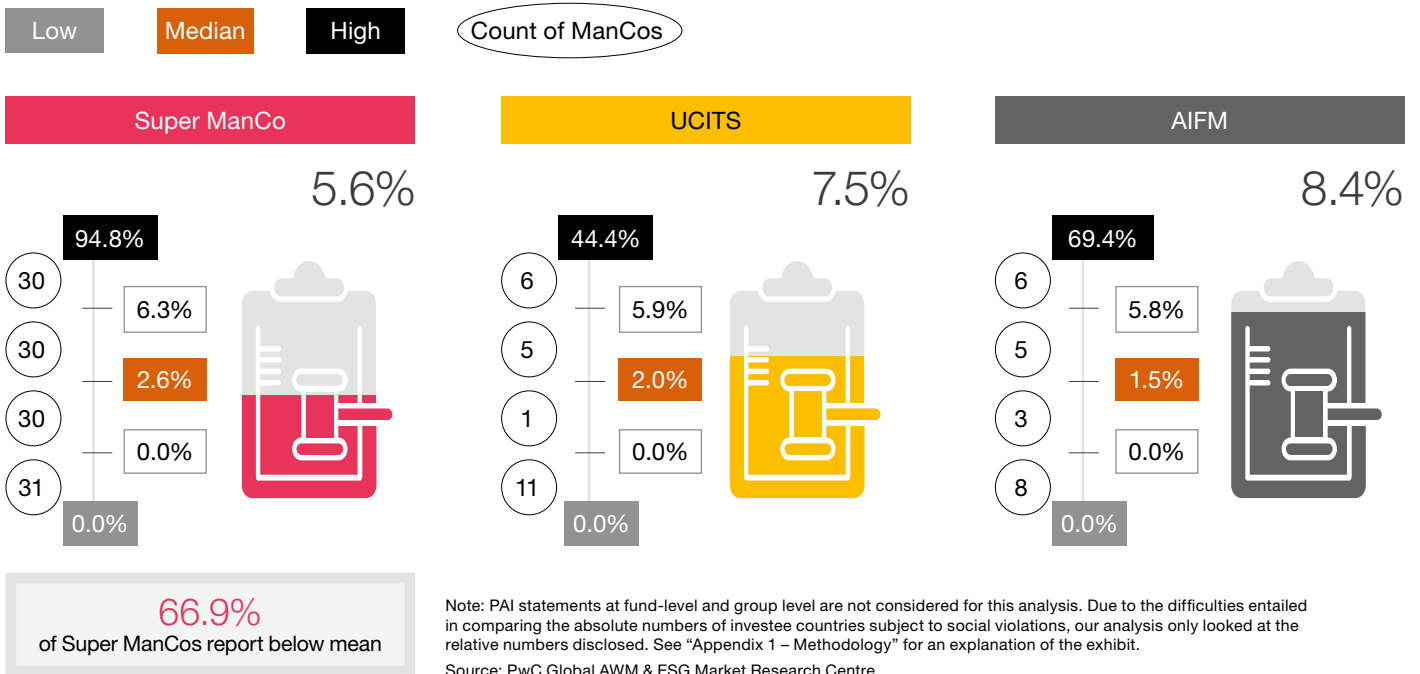
Exhibit 9.5. PAI 14 – Exposure to controversial weapons



As with PAI 10 and PAI 14, the ManCos in our sample had generally low levels of investee companies harming the international treaties as well as the UN principles or

domestic laws regarding human rights (PAI 16 – investee countries subject to social violations). (cf. Exhibit 9.6).

Exhibit 9.6. PAI 16 – Investee countries subject to social violations



Weaknesses and Best Practices

Disclosure compliance

- The ManCo did not include the PAI statement on its website homepage nor in any dedicated section on sustainability-related disclosures. Instead, the statement can only be accessed via advanced web-search functions.
- The PAI statement is integrated in other reports rather than being presented as a standalone report.
- The PAI statement cannot be accessed as it is password-protected.



Best Practices

- PAI statements are disclosed on the ManCo's website under the section of sustainability-related disclosures.
- The PAI statements have a summary that provides an overview of the disclosure and is available in multiple languages, especially English.
- The template used for the PAI statement is in a format that is easily searchable.

Disclosure transparency

- The scope of the statement is incomplete, and results for each PAI have only been partially disclosed.
- Explanations of PAIs are repeated with boiler plate text that does not address results or provide any meaningful information.
- No information pertaining to the actions taken, the actions planned, and the targets set is presented.
- The document is poorly referenced, and the references or sources presented are difficult to understand



Best Practices

- The statement's scope is comprehensive (i.e., it includes information on the proportion of total assets under management (AuM), the funds/ investments/investment strategies, the scope of the PAIs considered at the product-level).
- Information on the total investments, the coverage, the data sources, the data estimates and the formulas applied is presented.
- Explanation based on double materiality for opt-in PAIs is presented.
- A section on the best efforts to explain data sourcing is added.

Disclosure completeness

- The statement does not have an adequate disclosure for Article 6 funds.
- There are no disclosures on the coverage of total AuM in the statement.
- Little-to-no-reference to the stakeholder engagement processes.
- References to consolidated entities are missing.
- Lack of self-imposed thresholds at the PAI-level.



Best Practices

- The PAI statement includes coverage in terms of percentage of total AuM.
- The PAI statement includes clear sections on the actions taken, the actions planned, and the targets set.
- All PAIs are correctly disclosed as indicated in the regulation.

Time to Act

If PAI Statements are to reach their full potential and play a pivotal role in not only better informing stakeholders about investments' adverse impacts on sustainability, but also give sustainable investments a strong push forward, much work needs to be done.

Recommendations for ManCos

Be specific, complete and transparent in your PAI Statement

We recommend ManCos to:

- Disclose the coverage of the PAI Statement in general differentiating between the AuM proportion that is managed in accordance with a PAI strategy ("**Managed PAIs**") and the proportion that is not ("**Unmanaged PAIs**");
- Disclose the coverage per PAI indicator and detailing the proportion of AuMs that is eligible/relevant for the respective PAI, the data sources used, and controls employed;
- Differentiate in the actions taken, actions planned, and targets set between the Managed PAIs and the Unmanaged PAIs per PAI indicator; and
- Set specific and well-defined targets and objectives which outline the desired results, quantities or benchmarks to be achieved.

Be conscious about PAI results and required business implications and engagement actions

Non-financial information reported and disclosed via the PAI Statement is in the public domain and informs the views and beliefs of decision makers. Reported results are expected to (further) impact investment allocation decisions, request for proposals (RfPs) and public perception in general. Additionally, the actions taken and planned as well as the targets are important, and how stakeholders analyse and use this information further cannot be underestimated. The bevy of non-financial information available now allows these stakeholders to systematically benchmark, monitor, and engage on the sustainability performance disclosed.

Corporate Sustainability Reporting is looming, look ahead and incorporate changes already visible on the horizon

We recommend considering changes that are already visible today for the preparation of your next PAI Statement, specifically with respect to more differentiated information required for the reporting in line with the CSRD and the underlying European Sustainability Reporting Standards (ESRS). Information required for PAIs under ESRS is not fully aligned with PAIs under SFDR Level II. This may be relevant in case the entity itself is or will be in the scope of CSRD, or if investors are in scope and may require look-through information that is more detailed than required under SFDR Level II.

Scale up data management and technological capabilities

As non-financial information will be required to reach the high standards of financial information, data management and technological capabilities are rapidly becoming business imperatives.

Substantial resources have been deployed for the first year of reporting. Whereas the UCITS ManCos and Super ManCos for the liquid part of their managed assets were able to rely on external ESG data providers, AIFMs and Super ManCos (for the illiquid part of their managed assets) were forced to find alternative ways to source information from their investments. Different avenues to source information were observable on the market with the default option for the illiquid assets being individualised questionnaires using Excel and being sent out and collected via e-mail. The assessment of the results (e.g. via benchmarking), quality controls (e.g. completeness, relevance and consistency of data) as well as the challenging calculations at individual PAI level and then further to aggregate at entity level were also too often Excel-dependent – if existent at all.

In the market, clients are more actively engaging in data management and technological solutions to establish scalable and sustainable solutions, and simultaneously be prepared for the further growth in data points required to be managed per investment (e.g. EU Taxonomy Reporting) and investor expectations. The mission statement is "**One Click Solution for Competitive Advantage**," as non-financial information and the results reported are expected to (further) impact investment allocation decisions, RfPs and the public's perception.

Recommendations for policymakers and regulators

Provide a complete PAI Statement template with consistent transparency metrics

Building on the recommendations provided above, the market would benefit from a PAI Statement template that includes all requirements of SFDR Level II and further provides more transparency. Entities should have the option to provide results for Managed and Unmanaged PAIs (i.e. Art. 8/9 PAIs vs. Art. 6 PAIs) in separate sections of the PAI Statement so as to provide more clarity to the readers of the PAI Statement. Further breakdowns within investment strategies and geographical as well as sectoral contributions (as an option) would be welcomed. In addition details regarding data quality management as well as involved personnel, technology and resulted cost implications for the ManCos may provide significant further business intelligence to stakeholders.

Extend the ESMA database to detail which entities consider or do not consider PAIs

The inclusion of an additional data field in the ESMA database allowing to identify which entities are considering PAIs at entity-level, including the link to the position in the entity's website, would be helpful to provide a clear overview at a glance.



Looking forward

Published in the Official Journal of the European Union in December 2022, the CSRD will lead to more detailed disclosure requirements and establish mandatory ESRS, alongside other actions.

The CSRD is expected to tackle some of the data issues raised by the SFDR, as it will govern a larger number of companies and consequently impose more extensive reporting and auditing duties. According to Commission estimates, more than 50,000 companies will be subject to the CSRD, compared to the 11,700 companies required to submit reports under the Non-Financial Reporting Directive. Although the actual implementation dates

will vary according to specific criteria, ManCos should already be preparing for future reporting obligations.

The reporting requirements of the three major EU regulations (SFDR, CSRD, Taxonomy) are intertwined and overlap in terms of their substance – and reporting on PAIs is only the first piece of the overarching sustainability transparency framework (cf. Exhibit 10). Companies subject to the SFDR will rely on the EU Taxonomy metrics from the CSRD⁴³ to report on their investments to fulfil their reporting obligations.

Exhibit 10. Sustainable finance regulatory framework in the EU



In April 2023, the three main supervisory bodies in the EU (European Banking Authority, European Insurance and Occupational Pensions Authority and European Securities Market authority) – together referred to as the ESAs – published a consultation paper proposing amendments to the SFDR Level II (cf. Appendix 4).

The proposed revisions mainly aim to expand the existing disclosure framework, address technical complexities related to sustainability indicators, and suggest changes to the Regulatory Technical Standards on product disclosures. The consultation period opened on 12 April 2023 and closed on 4 July 2023, with the final report expected to be published in late 2023.

Regardless of how existing sustainability regulations evolve and what future regulations come into force, the momentum is not slowing down – particularly as climate change shows no signs of abating. Adequately complying with the PAIs-related stipulations of the SFDR is a crucial part of ManCos’ journey to demonstrate their sustainability credentials and their commitment to ESG principles.

There is no time to waste!

43. In October 2023, the European Commission proposed to change the threshold for entities in scope of CSRD.



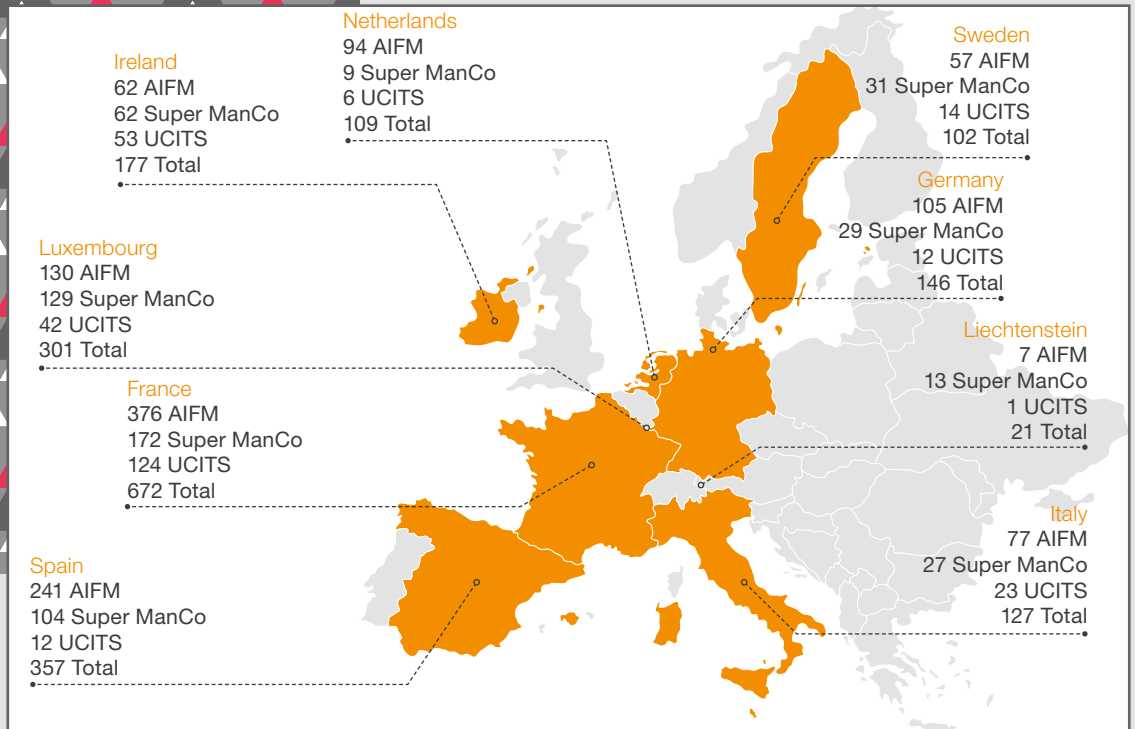
Appendix 1

Methodology

Scope of the Report

This report focuses on disclosures required for FMPs as defined in Article 2 (1) of the SFDR, more specifically on the PAI entity-level disclosures of (i) UCITS Management Companies (UCITS ManCo), (ii) Alternative Investment Fund Managers (AIFM) and (iii) entities that hold both licenses (Super ManCo)⁴⁴.

We have systematically reviewed over 2,012 websites of ManCos across 9 European jurisdictions. Of this total, 193 ManCos were either liquidated, acquired, or merged.



Key Facts and Figures

Entities reviewed	2,012
Liquidated, merged or acquired ManCos	193
UCITS ManCos	287
Super ManCos	576
AIFMs	1,149
Entity-level PAI Statements reviewed	379
Group-level PAI statements reviewed	55
Total PAI Statements reviewed	434

44. As per the Association of the Luxembourg Fund Industry, the term "super ManCo" is not legally defined. It refers to UCITS management companies which are appointed as AIFMs of at least one AIF (Part II funds, SIFs, SICARs, RAIFs, limited partnerships, SOPARFIs).

Data Collection and Compilation

Since the SFDR came into effect in March 2021, FMPs and financial advisers have been expected to disclose, on an annual basis no later than June 2023, the PAIs of investment decisions on sustainability factors at entity-level or to provide an explanation on why PAIs are not considered at the entity-level. The template defined in Annex 1 of SFDR Level 2 served as the benchmark against which PAI Statements retrieved from the websites of ManCos analysed. This formed the primary dataset for this report.

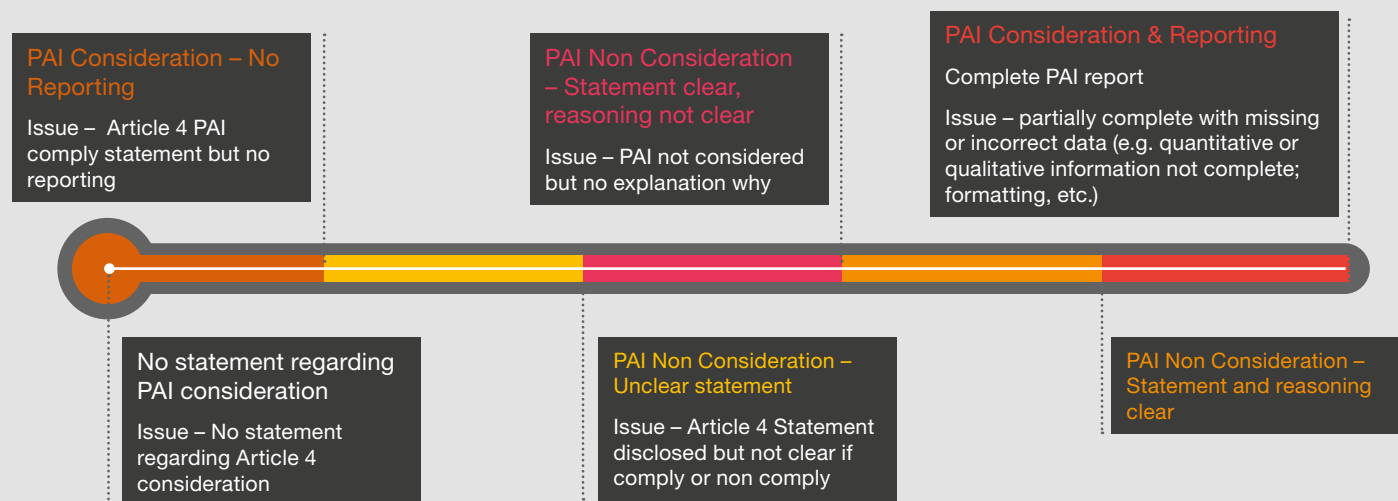
The compilation referenced disclosures within the 2022 calendar year of entities with registered headquarters across 9 European jurisdictions (France, Luxembourg, Germany, Italy, Ireland, Liechtenstein, Spain, Sweden, and the Netherlands). This multi-jurisdictional approach was adopted because asset managers in Luxembourg predominantly operate on a cross-border basis, and it provides a holistic view of the European landscape. More

importantly, it provides a representative sample for the first non-financial disclosure.

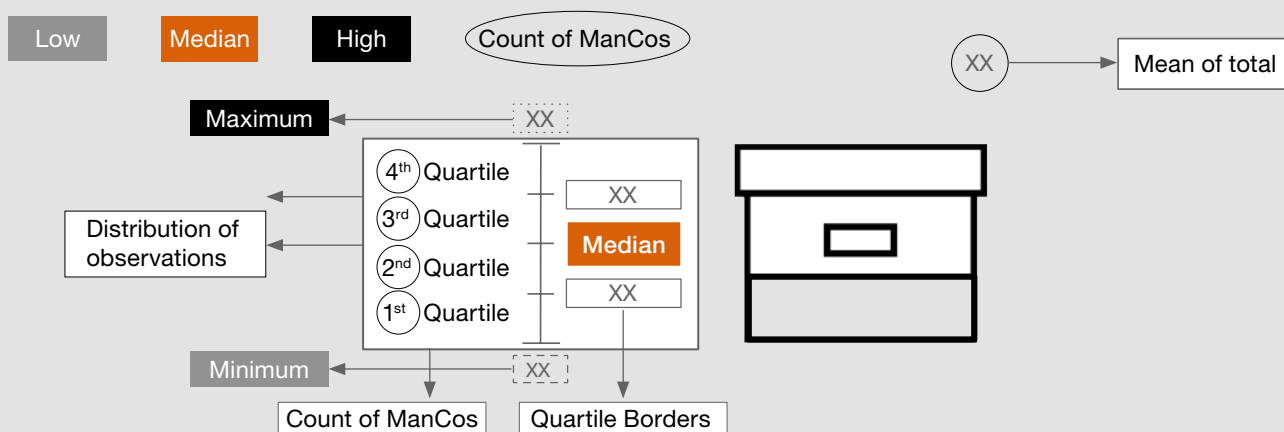
The employed methodology encompassed a manual gathering of pertinent details regarding PAI disclosures. This information was extracted from the entities' websites and categorized manually using a predefined categorisation method.

Within these broad categories, the analysis phase included only entities that issued a declaration for reporting and consistently followed through with reporting on PAIs, classifying them under «Declaration and PAI» at the fund, group, or entity level. However, the benchmarking exercise, only considered publicly available PAI Statements at the entity level due to equivalence of data.

Exhibit 11. Classification of the entities



Explainer for Exhibits 5, 7, 8 and 9



Appendix 2

Mandatory and Voluntary PAIs

The current list of PAIs is made up of 18 mandatory key indicators and 46 additional environmental and social indicators, including indicators specific to investments in sovereign and supranational entities as well as real estate assets.

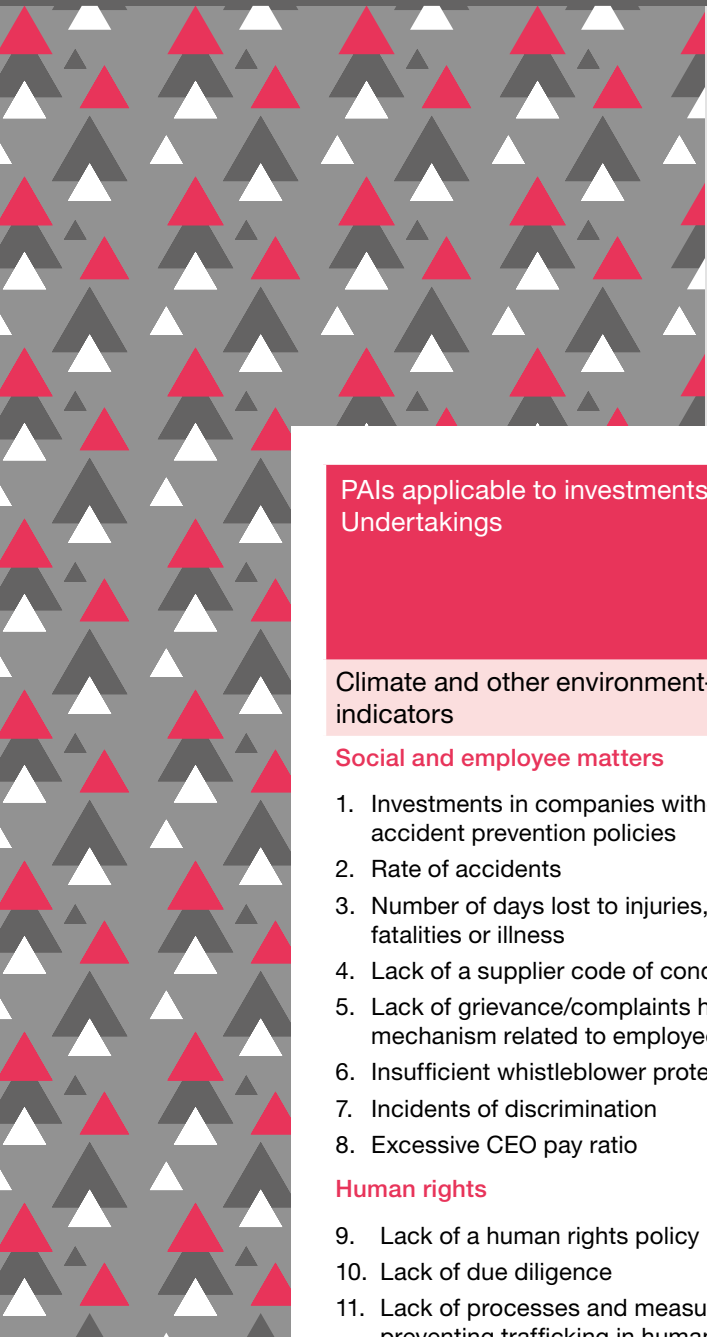
The mandatory PAIs are the following:⁴⁵

PAIs applicable to investments in Undertakings		PAIs applicable to investments in Sovereigns/Supranationals	PAIs applicable to investments in Real Estate Assets
Climate and other environment-related indicators	Social- and governance-related indicators	Environmental and social indicators	Climate and other environment-related indicators
<p>Greenhouse Gas Emissions</p> <ol style="list-style-type: none"> GHG (scope 1, 2, 3, total) Carbon Footprint GHG intensity of investee undertaking Exposure to undertakings active in the fossil fuel sector Share of non-renewable energy consumption and production Energy consumption intensity per high impact climate sector <p>Biodiversity</p> <ol style="list-style-type: none"> Activities negatively affecting biodiversity-sensitive areas <p>Water</p> <ol style="list-style-type: none"> Emissions to water <p>Waste</p> <ol style="list-style-type: none"> Hazardous waste and radioactive waste ratio 	<p>Social and employee matters</p> <ol style="list-style-type: none"> Violations of UN Global Compact principles and OECD Guidelines for Multinational Enterprises Lack of processes and compliance mechanisms to monitor compliance with UN Global Compact principles and OECD Guidelines for Multinational Enterprises Unadjusted gender pay gap Board gender diversity Exposure to controversial weapons (antipersonnel mines, cluster munitions, chemical and biological weapons) 	<p>Environmental</p> <ol style="list-style-type: none"> GHG intensity of investee companies <p>Social</p> <ol style="list-style-type: none"> Investee countries subject to social violations 	<p>Fossil fuels</p> <ol style="list-style-type: none"> Exposure to fossil fuels through real estate assets <p>Energy efficiency</p> <ol style="list-style-type: none"> Exposure to energy-inefficient real estate assets

45. SFDR Level II

The additional (voluntary) PAIs applicable are the following:

PAIs applicable to investments in Undertakings	PAIs applicable to investments in Sovereigns/ Supranationals	PAIs applicable to investments in Real Estate Assets
Climate and other environment-related indicators		
<p>Emissions</p> <ol style="list-style-type: none"> 1. Emissions of inorganic pollutants 2. Emissions of air pollutants 3. Emissions of ozone-depleting substances 4. Investments in companies without carbon emissions reduction initiatives <p>Energy performance</p> <ol style="list-style-type: none"> 5. Breakdown of energy consumption by type of non-renewable sources of energy <p>Water, waste and material emissions</p> <ol style="list-style-type: none"> 6. Water usage and recycling 7. Investments in companies without water management policies 8. Exposure to areas of high water stress 9. Investments in companies producing chemicals 10. Land degradation, desertification, soil sealing 11. Investments in companies without sustainable land/agriculture practices 12. Investments in companies without sustainable oceans/seas practices 13. Non-recycled waste ratio 14. Natural species and protected areas 15. Deforestation <p>Green securities</p> <ol style="list-style-type: none"> 16. Share of securities not issued under EU legislation on environmentally sustainable bonds 	<p>Green securities</p> <ol style="list-style-type: none"> 17. Share of bonds not issued under EU legislation on environmentally sustainable bonds 	<p>Greenhouse gas emissions</p> <ol style="list-style-type: none"> 18. GHG emissions (scope 1, 2, 3, total) <p>Energy consumption</p> <ol style="list-style-type: none"> 19. Energy consumption intensity <p>Waste</p> <ol style="list-style-type: none"> 20. Waste production in operations <p>Resource consumption</p> <ol style="list-style-type: none"> 21. Raw materials consumption for new construction and major renovations <p>Biodiversity</p> <ol style="list-style-type: none"> 22. Land artificialisation



PAIs applicable to investments in Undertakings

Climate and other environment-related indicators

Social and employee matters

1. Investments in companies without workplace accident prevention policies
2. Rate of accidents
3. Number of days lost to injuries, accidents, fatalities or illness
4. Lack of a supplier code of conduct
5. Lack of grievance/complaints handling mechanism related to employee matters
6. Insufficient whistleblower protection
7. Incidents of discrimination
8. Excessive CEO pay ratio

Human rights

9. Lack of a human rights policy
10. Lack of due diligence
11. Lack of processes and measures for preventing trafficking in human beings
12. Operations and suppliers at significant risk of incidents of child labour
13. Operations and suppliers at significant risk of incidents of forced or compulsory labour
14. Number of identified cases of severe human rights issues and incidents

Anti-corruption and anti-bribery

15. Lack of anti-corruption and anti-bribery policies
16. Cases of insufficient action taken to address breaches of standards of anti-corruption and anti-bribery
17. Number of convictions and amount of fines for violation of anti-corruption and anti-bribery laws

PAIs applicable to investments in Sovereigns/Supranationals

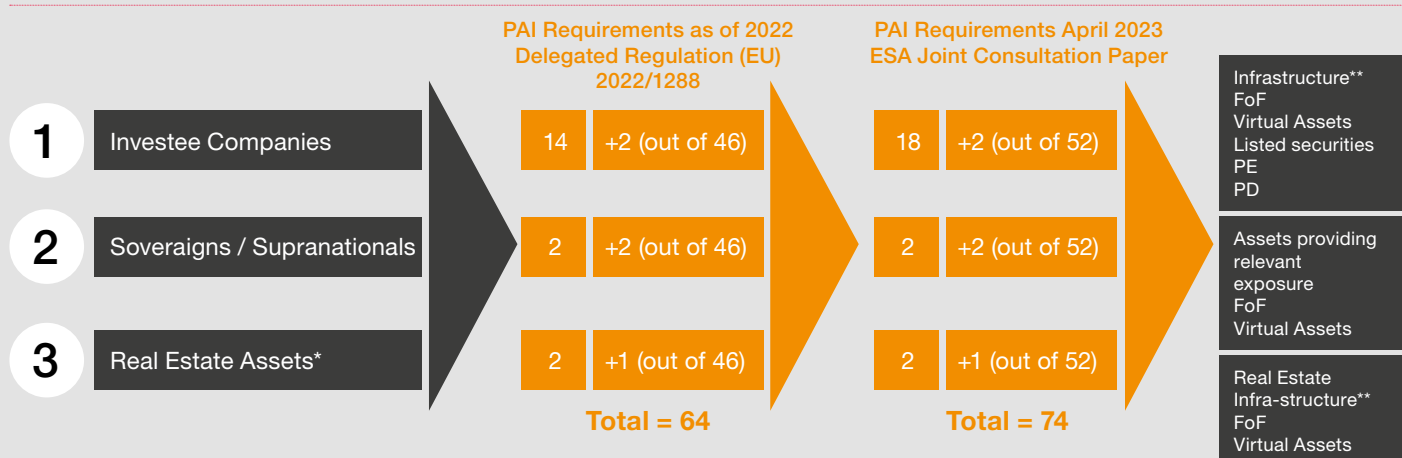
Social and employee, respect for human rights and governance

Social

18. Average income inequality score
19. Average freedom of expression score
20. Average human rights performance
21. Average corruption score
22. Non-cooperative tax jurisdictions
23. Average political stability score
24. Average rule of law score

FMPs considering PAIs must report on the mandatory indicators and at least one supplementary environmental and one social indicator per managed asset class, although there are certain exceptions (cf. Exhibit 12). Due to their inherent structural distinctions, disclosure requirements differ between asset classes as defined by SFDR Level II.

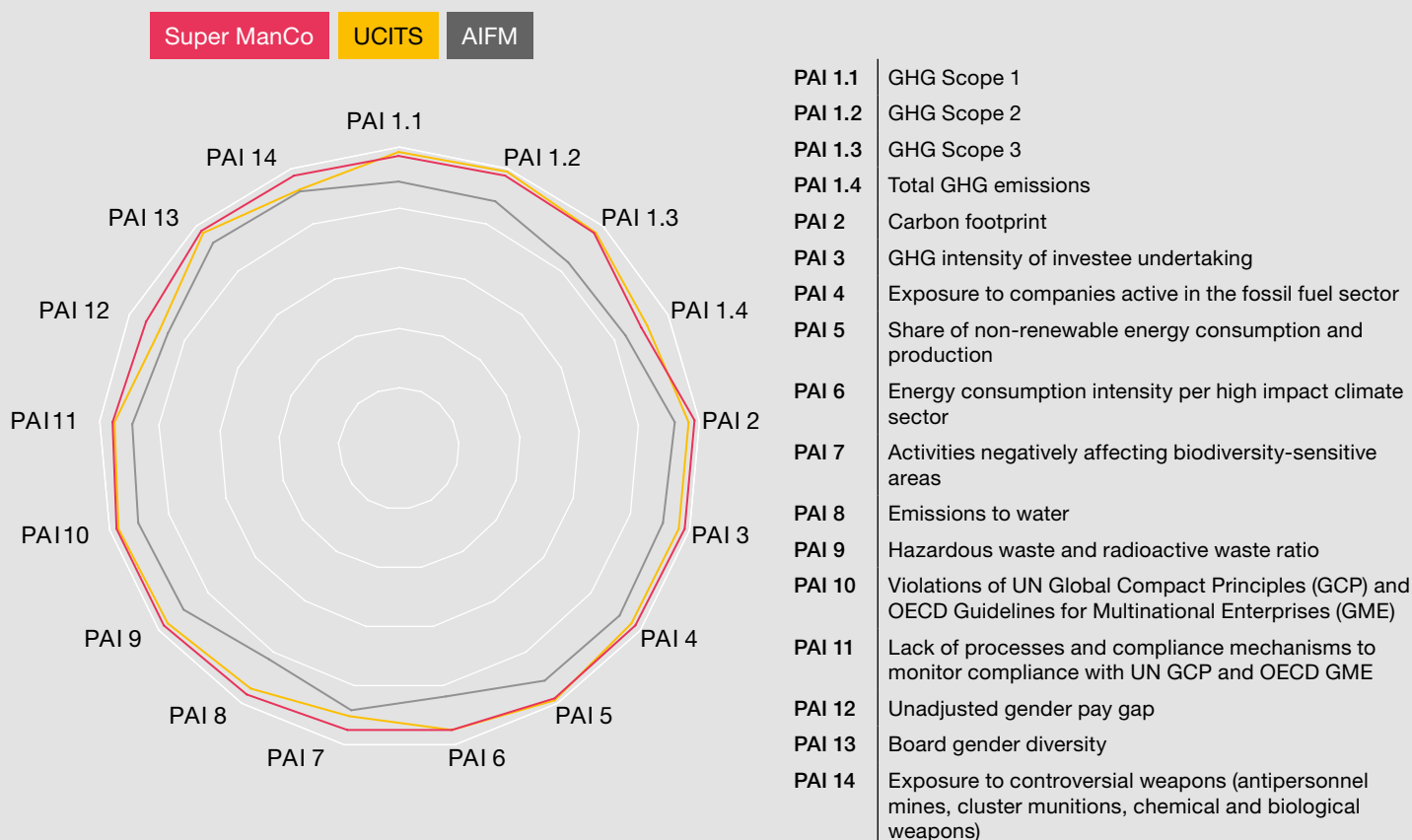
Exhibit 12. Different mandatory PAIs are required for different types of asset classes



Note: *The term 'Real Estate Assets' is not defined in the SFDR Level 2. **For Infrastructure Assets, SFDR Level II does not foresee a stand-alone categorisation.

Source: PwC Global AWM & ESG Research Centre; European Commission

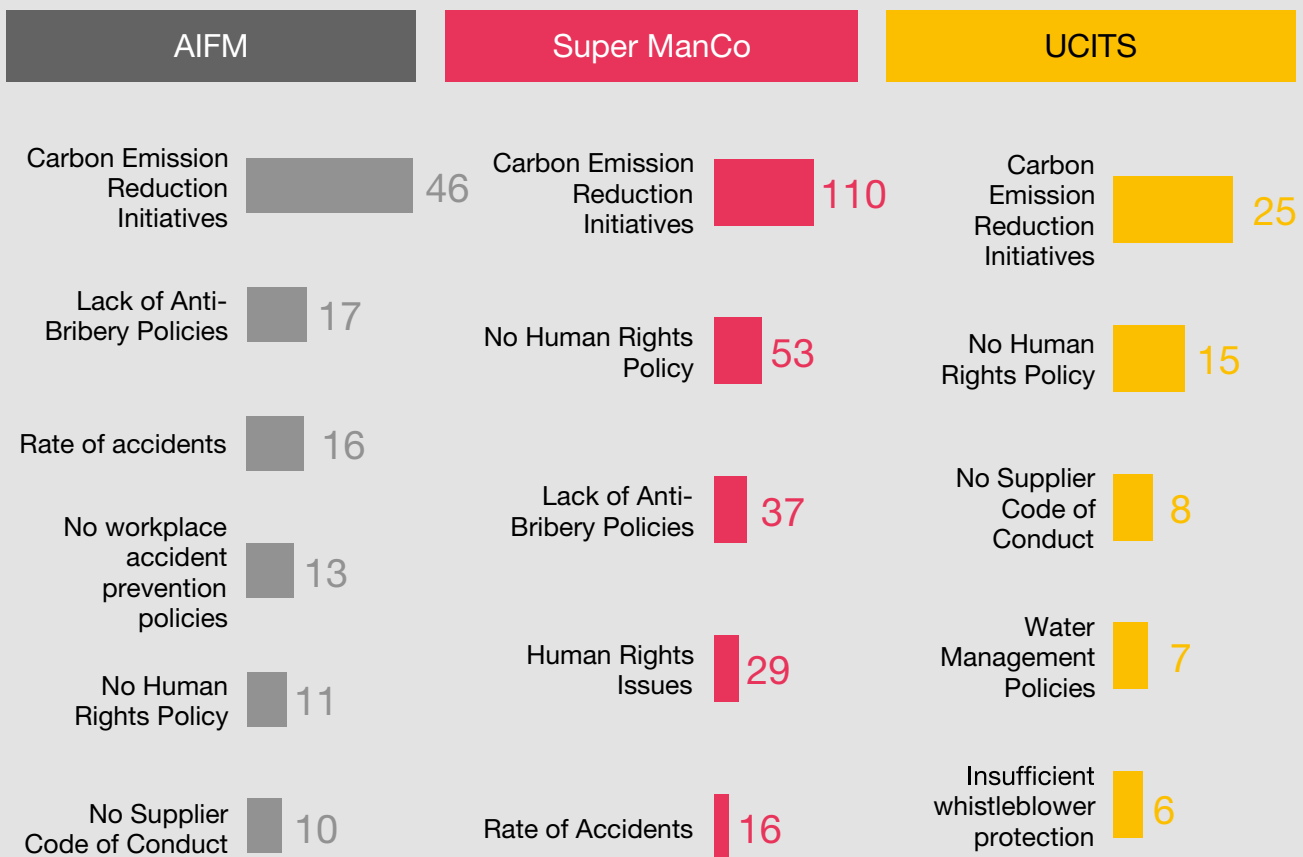
Actual quantitative reporting on mandatory PAIs by UCITS ManCos, Super ManCos and AIFMs in the sample:



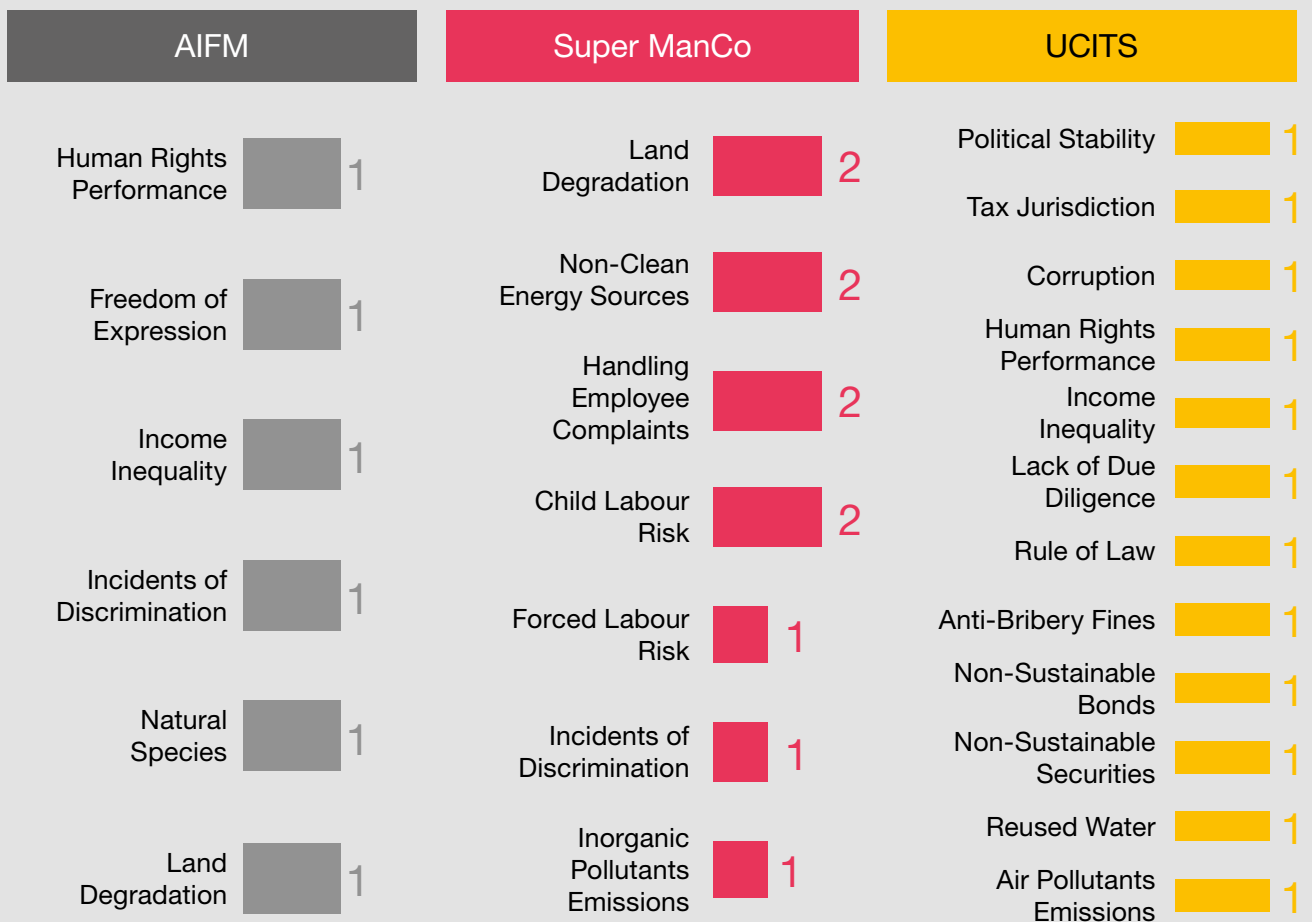


As for the reporting on optional PAIs, the following tables highlight the ones that had the most and the least reporting:

Most Reported Optional PAI (# of ManCo)



Less Reported Optional PAI (# of ManCo)



Appendix 3

PwC's PAI Transparency Score Card

Carbon Footprint

[Entity Name]

License: [Country Licence]
Country: [Country Name]
Date: [Date of Issuance]

B

PAI Score

F E D C B A



Best Practice



- Good observation 1
- Good observation 2
- Good observation 3

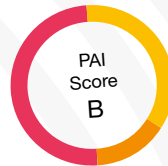
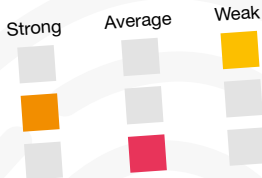
Areas for improvement



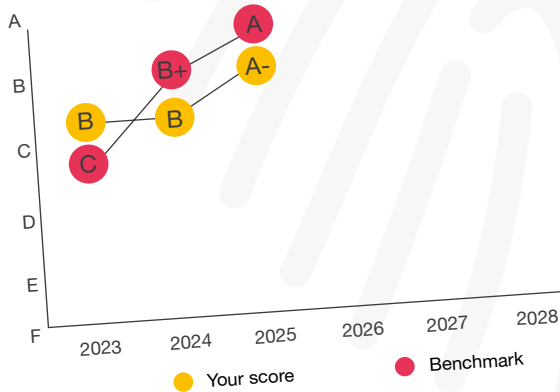
- Areas for improvement 1
- Areas for improvement 2
- Areas for improvement 3

Your Transparency Score

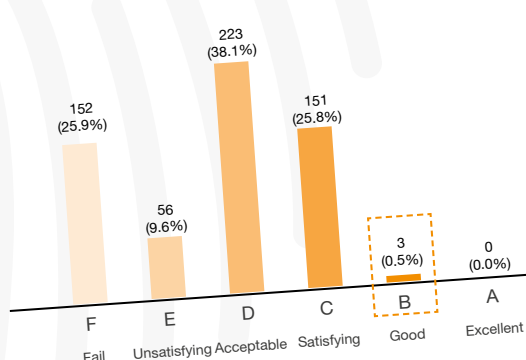
- (Website) Disclosure Compliance
- Disclosure Completeness
- Disclosure Transparency



Your PAI Rating Evolution



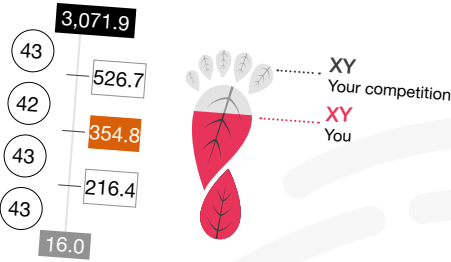
Overall PAI Rating Distribution



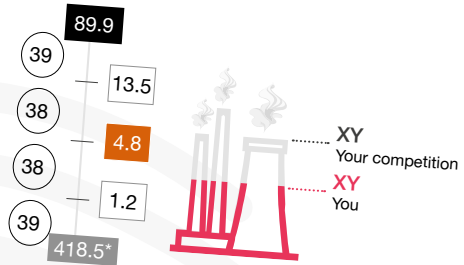
...the sample.
...Coopers, Société coopérative.

Choose your benchmark on PAI Indicators

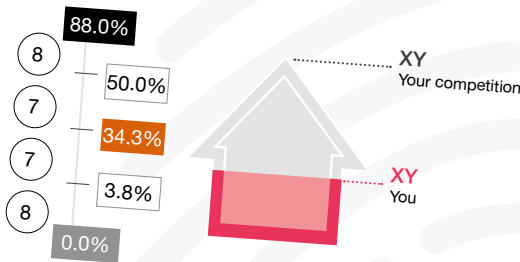
Carbon Footprint



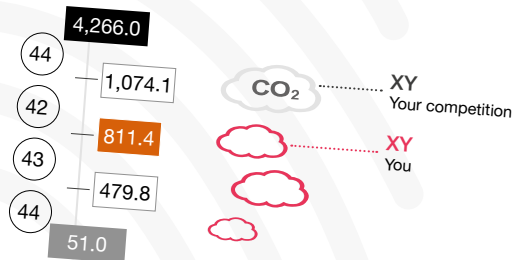
Total GHG Emissions



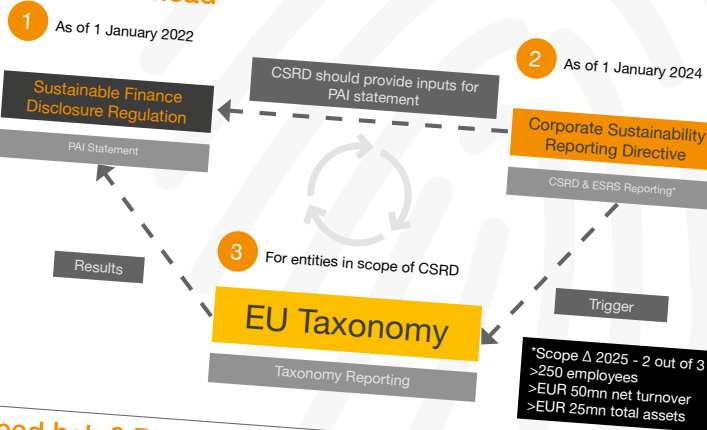
Energy-inefficient RE



GHG Intensity



What lies ahead



Over the coming years, numerous other reporting requirements will arise. Reporting on PAI under the SFDR is only the first reporting requirement, with the CSRD and taxonomy reporting just around the corner.

The CSRD supersedes the existing NFRD and substantially broadens the scope of reporting obligations using its own reporting standard, the ESRS. Not only will the number of companies affected increase significantly, but the scope of data and reporting requirements will also increase.

Need help? Please reach out for your personalised PAI benchmarking report!

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The PwC score provides a metric with regards to the compliance in terms of transparency. PwC has not evaluated the accuracy or science-based relevance of the PAI metrics, other than a relative assessment within the sample.
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Appendix 4

ESAs' Joint Consultation Paper

The main topics, changes, and recommendations addressed by the ESAs' joint consultation paper⁴⁶ entail:

Pre-contractual and Periodic Disclosures

- Introduction of a dedicated dashboard
- Simplified disclosures and narrative description of the nature of the commitment
- Financial market participants should indicate eventual GHG emissions reduction targets
- Introduction of icons for visual effect to distinguish different types of sustainable investments
- Use of simpler language to enhance retail investors' comprehensibility
- Some technical adjustments (e.g. no change of template's colour, extendable electronic display etc.)

Website Disclosures

- Introduction of GHG emission reduction targets option for products
- Cross-referenced in pre-contractual and period disclosures
- Disclosure of more detailed information on investments proportion and asset allocation
- Introduction of specific product disclosures for financial products with underlying investment options

Principal Adverse Impacts

- Introduction of four additional mandatory social PAIs
- Additional social opt-in indicators
- Potential introduction of social PAI for Real Estate Investments (at the FMP- or property manager-level)
- Amendment/specification of existing indicators
- Potential adjustment of the definition of "all investments"

The paper introduces major new propositions related to the technicalities of the PAI framework:

1. New formulas

The paper has introduced more than 60 new formulas (especially for the PAI indicators that have not yet been defined) to make calculating the PAI indicators easier.

2. Clarification of indicators

Certain indicators have been simplified, such as the 'emissions to water' indicator generated by investee companies – it shall only be expressed per EUR million invested and no longer as a weighted average.

3. Information from investee companies

The paper considers it good practice to disclose the share of investments for which information obtained is directly obtained from investee companies. This information should be mentioned in the 'explanation' column of the PAI disclosures.

4. Current value of all investments

The paper considers a split of reporting between types of assets.

5. Investee companies' value chains

Investee companies' value chains shall only be considered into PAIs if the companies are already reporting impacts in their value chain according to the ESRS, except when Scope 3 emissions are needed.

6. Derivatives in the PAI indicators

Derivatives may artificially lower market participants' PAIs, which is why the paper suggests including derivatives with a long net exposure in PAIs, except if they do not result in a physical investment.

About our European Sustainable Finance Series

Since 2020, our European Sustainable Finance Series has been offering survey-backed perspectives on the era-defining opportunity that ESG represents for Asset Managers across Europe's public and private market landscapes.



The growth opportunity of the century

Are you ready for the ESG change? The first in our European Sustainable Finance Series, this report endeavours to highlight the key issues facing all players within the financial services sector when it comes to adopting and implementing ESG principles, both internally and in investment decisions.

Accessible [here](#):



EU Private Markets: ESG Reboot

The second report in our European Sustainable Finance Series, it takes a deep dive into the major trends that are already transforming the ESG wave sweeping across European Private Markets, and which is set to continue in the years ahead.

Accessible [here](#):



ESG Transformation of the Fixed Income Market

This report examines the drivers behind the growth of the European bond market. It highlights how we expect European green, social, and sustainable (GSS) bond issuance is expected to reach between EUR 1.4tn and EUR 1.6tn by 2026 – accounting for close to 50% of total European bond new issuance in a high-growth scenario.

Accessible [here](#):





GPs' Global ESG Strategies: Disclosure Standards, Data Requirements and Strategic Options

The latest publication in our European Sustainable Finance Series, this report dives deep into how regulations are driving the ESG uptake across the EU, UK, US and APAC, looking at the past, present and expected regulatory developments of each region, their perception by LPs and GPs, as well as the challenges created, the opportunities unlocked.

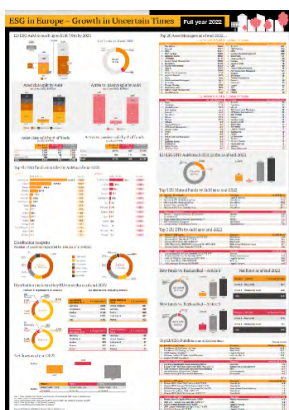
Accessible [here](#):



Sustainable Finance in Luxembourg: An expanded overview

The study presents an analysis of the current status of the sustainable finance universe within the Luxembourg financial industry.

Accessible [here](#):



EU ESG UCITS Poster

Now in its fourth edition, our EU ESG UCITS Poster supplements and updates the data presented in “2022: The growth opportunity of the century,” and aims to help stakeholders in the AWM industry keep track of the latest ESG developments in the European landscape. Each edition of the poster keeps track of, and modifies the figures in accordance with, current and upcoming regulatory developments.

Accessible [here](#):





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