Ca' Foscari University of Venice

Master's Degree programme in Economics and Finance

Final Thesis

The Architecture of European Sustainable Finance

A Critical Analysis of the Interplay between SFDR, the Taxonomy Regulation, and PRIIPs in the Sustainable Financial Market

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To my parents, grandparents, friends, and professors,
who have supported and helped me
in times of need..

Contents

Introduction

As an aspiring professional in economics and finance, it is impossible to ignore the accelerating reality of climate change. For my generation, it is becoming increasingly clear that capital must serve a higher purpose than simple profit maximization. This realization was my primary motivation for this study:
I wanted to understand how Europe is attempting to fundamentally realign its financial system with environmental and social needs.

Under the European Green Deal, the European Union has launched an incredibly ambitious project:
To redirect private capital toward sustainability on a continental scale. To do this, Brussels has rapidly built a massive regulatory architecture. Its goals are straightforward:
Promote market transparency, create a standard definition for what is actually "green", and abolish the widespread risk of greenwashing.

This Master's thesis provides a critical analysis of how three foundational pieces of this puzzle interact within the investment funds sector:
The EU Taxonomy Regulation, the Sustainable Finance Disclosure Regulation (SFDR), and the pre and already existing PRIIPs Regulation (which governs Key Information Documents for retail investors).

My research origins from a simple belief:
For regulation to work, it needs to be both practically useful and internally coherent. The EU Taxonomy provides the scientific checklists to define sustainable activities Chapter 1, and the SFDR forces fund managers to disclose how they handle sustainability risks and negative impacts (Chapter 3).
However, the real test happens when we try to blend these new rules with established investor protection laws like PRIIPs (Chapter 2).

This is where significant friction points appear. While the SFDR has successfully pushed funds to classify themselves as "light green" (Article 8) or "dark green" (Article 9), the credibility of these labels is constantly threatened by a massive corporate data gap (Chapter 4). Furthermore, we face a legitimate academic dilemma:
Does this complex web of rules actually help everyday investors make better choices, or does it simply overwhelm them with confusing paperwork?

Therefore, the central research question guiding this thesis is:

To what extent does the interplay between the SFDR, the Taxonomy Regulation, and PRIIPs create a coherent and effective disclosure regime capable of robustly mitigating greenwashing and successfully redirecting capital towards sustainable investments in the European financial market?

This thesis contributes to the current policy debate by looking past the individual laws to critique how they work, or fail to work, together.
By analyzing the legal texts alongside real world market data, I aim to pinpoint exactly where the system experiences friction (such as the operational data gap) and propose practical refinements for a more streamlined, reliable system that everyday investors can actually trust.

Chapter 1

The Sustainable Finance Framework: From the Green Deal to the Taxonomy

1.1 The Rise of Sustainable Finance: Historical Background and ESG Goals

The emergence of sustainable finance represents one of the most significant shifts in the modern history of capital markets. For decades, the main financial doctrine was fixed in the idea that market efficiency and shareholder primacy were the only important paths to follow for economic growth. However, as the global community began to face the systemic risks posed by climate change and social instability, this traditional view started to appear increasingly inadequate. Sustainable finance, obviously, did not appear overnight; rather, it evolved from the early practices of Socially Responsible Investing (SRI)[1], moving from a simple exclusionary approach, where "sin stocks" like tobacco or weapons were avoided, to a comprehensive integration of Environmental, Social, and Governance (ESG) factors into the core of investment strategies. Although these criteria were once considered non financial and voluntary, they have now been integrated into the core of EU financial regulation as material factors that influence both risk and value creation.

- The Environmental Pillar (E):

The environmental goal is the most developed within the EU framework, mainly driven by the climate targets of the Paris Agreement (in force since 2016). However, the focus is expanding beyond the mitigation of climate change to include biodiversity, water pro-

[1] Also known as social investment, is an investment which is considered socially responsible due to the nature of the business the company conducts.

tection, and the circular economy[2].

The challenge for investors is that while carbon metrics are becoming standardized[3], other environmental goals still suffer from data fragmentation, making it difficult to assess the "greenness" of a portfolio without falling into the trap of superficial reporting[4].

- The Social Pillar (S):

Often put aside by environmental concerns, the "Social" goal is currently undergoing a rapid legal formalization. The EU is indeed avancing an "extension of human rights into "positive law" through regulations like the SFDR[5] and the CSDDD[6].

Social goals are no longer just about generous activities. They include labor rights, gender equality, and rigorous human rights due diligence across global supply chains.

This shift is crucial because, unlike environmental data, social impact is harder to quantify, leading to significant challenges in "Social Taxonomy" development.

- The Economics/Governance Pillar (EC):

Governance remains the structural foundation that ensures the "E" and "S" goals are actually met. It involves board diversity, executive compensation linked to sustainability targets, and tax transparency.

In the context of investor protection, strong governance and economy is the best defense against greenwashing[7]. If the governance goal is neglected, environmental and social claims become, somehow, "cheap talk," by lacking the internal oversight necessary to guaranty their authenticity to the final user.

It is then, more and more clear, how this evolution was driven by the recognition that sustainability issues are, in fact, financial risks[8].

[2] EU Platform on Sustainable Finance. *Advancing Sustainable Finance: Technical Criteria for New Activities & First Review of the Climate Delegated Act.* Report to the European Commission. Mar. 2025.

[3] The CDP Institution firstly started to push firms into sharing their data on carbon emissions in the early 2000s.

[4] Leonardo Boni and Chiara Cremasco. "Is the European Union (EU) Sustainable Finance Disclosure Regulation (SFDR) effective in shaping sustainability objectives? An analysis of investment fund's behaviour". In: *Journal of Sustainable Finance & Investment* (Sept. 29, 2024).

[5] Sustainable Finance Disclosure Regulation.

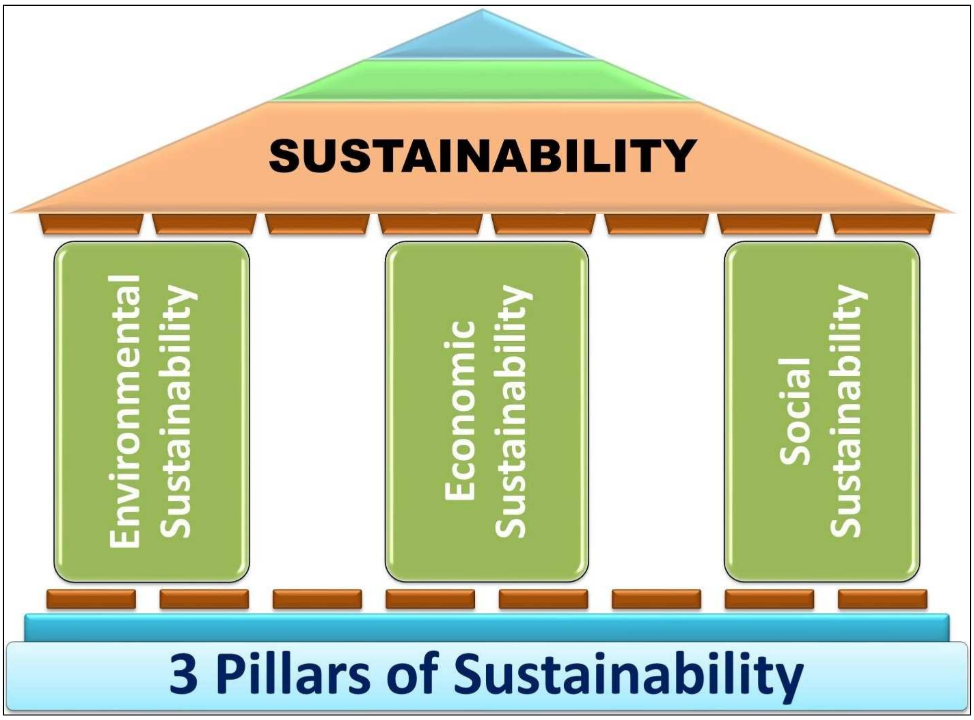
[6] Corporate Sustainability Due Diligence Directive

[7] Filippo Annunziata. *Retail Investment Strategy: How to boost retail investor's participation in financial markets.* Tech. rep. Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, July 7, 2023.

[8] Boni and Cremasco, "Is the European Union (EU) Sustainable Finance Disclosure Regulation (SFDR) effective in shaping sustainability objectives? An analysis of investment fund's behaviour".

The shift was not just about ethics, but about a more sophisticated understanding of value. Indeed, investors began to realize that a company's carbon footprint or its labor practices could directly impact their long term profitability.

Finally, the regulation of sustainable finance has now become a primary tool for "capital reallocation," aimed at steering the economy toward more resilient models[9].



(1.1a) Sustainability 3 Pillars of the EU Framework, Visual Example.

[9] Giorgio Meucci et al. "Sustainable finance regulation, fund's portfolio reallocation and real effects". In: *Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers)* 948 (July 2025).

1.2 The European Green Deal and the Sustainable Finance Action Plan

The regulatory journey toward a sustainable financial market reached a decisive turning point with the launch of the so called European Green Deal in December 2019.This is an ambitious policy which framework aims to make Europe the first climate neutral continent by 2050, separating economic growth from resource use.
However, the Commission quickly recognized that the public sector alone could not cover the massive investment gap required for this transition, estimated by recent reports to be in the range of hundreds of billions of euros annually. This necessity provided the political incentive to mobilize private capital, a mission formally initiated with the Action Plan, named as "Financing Sustainable Growth"[10].
The Green Deal, therefore, acts as the "guiding star" of European policy, but its practical implementation in the financial sector is entirely based on the technical roadmap presented in the 2018 Action Plan.
The 2018 Action Plan is the foundation of the current architecture and is based on three overall pillars:

- The first pillar focuses on reorienting capital flows toward sustainable investment, in order to achieve sustainable and inclusive growth.
- The second aims at managing financial risks resulting from climate change, resource reduction, environmental degradation, and social issues.
- The third pillar seeks to promote transparency and a future oriented thinking in financial and economic activity.

In this context, the Sustainable Finance Disclosure Regulation (SFDR) is considered the "centerpiece" of this strategy, although its effectiveness depends on a delicate and still evolving interaction with other pieces of the puzzle, such as corporate reporting (CSRD) and the Taxonomy.

[10]European Commission. *Action Plan: Financing Sustainable Growth (COM(2018) 97 final).* Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions. 2018.

The Plan was not merely a set of recommendations. Indeed, it represented a fundamental shift from a "soft law" approach based on voluntary disclosures to a "hard law" mandatory regime where transparency is used as a legal tool to change institutional behavior and capital allocation[11].

A crucial aspect of the implementation of the Action Plan involves the standardization of data:

First of all, the Plan identified the lack of a "common language" as the greatest obstacle to sustainable growth. Without clear, scientifically supported definitions of what constitutes a "green" or "sustainable" activity, the risk of market fragmentation and greenwashing remained high. Then apparently, this led to the proposal and subsequent adoption of the Taxonomy Regulation, which serves as the technical anchor for the disclosure obligations found in the SFDR. Recent empirical studies conducted by national central banks point out that the for "portfolio reallocation" (lead indeed by the SFDR) is already producing tangible effects in the real economy:

Fund managers are increasingly forced to justify their sustainability claims against these new rigorous standards, heading to a measurable shift in the valuation of assets with high ESG risks[12].

However, rapid rousing of this framework has not been practical without significant friction. The "interplay" between different regulations often reveals gaps in consistency.

For instance, while the SFDR requires financial market participants to disclose sustainability data, the companies they invest in were not initially required to provide that same data under the old "Non Financial Reporting Directive (NFRD)". This "data gap" has forced financial institutions to rely on third party ESG rating providers, whose methodologies are often opaque and inconsistent.

It is then a heavy consequence how this misalignment risks creates a "disclosure paradox" where more information does not necessarily lead to better informed investors, but rather to increased confusion[13].

[11] Marco Lamandini, David Ramos Muñoz, and Michele Siri. *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).* tech. rep. The paper was requested by the European Parliament's Committee on Economic and Monetary Affairs. University of Genoa EUSFiL Law Research Working Paper Series No. 29, July 31, 2024.

[12] Meucci et al., "Sustainable finance regulation, fund's portfolio reallocation and real effects".

[13] Boni and Cremasco, "Is the European Union (EU) Sustainable Finance Disclosure Regulation (SFDR) effective in shaping sustainability objectives? An analysis of investment fund's behaviour".

Furthermore, the Action Plan recognized that the sustainable transition must be inclusive and protective of the "end user", the retail investor. The complexity of the legislative framework arising from the Green Deal and the SFDR risks alienating smaller investors, if not accompanied by clear and simplified documentation[14].
The role of the European Supervisory Authorities (ESAs) has become central in this regard. The ESAs are tasked with providing the technical standards that translate wide political goals into specific disclosure templates. Yet, as the market matures, there is a growing consensus that the current "disclosure based" approach may not be sufficient. Proposals are currently being discussed to move toward a "label based" system that would make it easier for retail investors to distinguish between products that merely "integrate" ESG factors and those that truly "aim" for a sustainable impact[15].

To briefly summarize, the Green Deal and the 2018 Action Plan have fundamentally transformed the DNA of European financial regulation. They have moved sustainable finance from the periphery of Corporate Social Responsibility into the very heart of fiduciary duty and risk management.
This shift set the stage for the specific regulations that define the current market:
The Taxonomy, which provides the definitions; the SFDR, which governs disclosure; and PRIIPs, which aims to ensure that these complex products remain understandable for the average investor.
The following sections will then analyze how these individual components interact, often revealing a tension between the need for technical precision and the fact that investor protection is not negotiable.

[14]Annunziata, *Retail Investment Strategy: How to boost retail investor's participation in financial markets*.

[15]European Parliament and Council of the European Union. *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR)*. Nov. 27, 2019.

1.3 The EU Taxonomy Regulation (Reg. EU 2020/852)

The EU Taxonomy Regulation is perhaps the most technical and complex component of the European sustainable finance architecture. It was designed to provide a scientific and harmonized classification system, establishing for the first time a "common language" to define which economic activities can truly be considered environmentally sustainable. The primary goal of the Taxonomy is to eliminate "greenwashing" by providing investors and companies with objective criteria, moving away from subjective or purely marketing based definitions of sustainability[16].
The structure of the Taxonomy is based on six environmental objectives (See Also Fig:1.3a):

1. Climate change mitigation,
2. Climate change adaptation,
3. The sustainable use and protection of water and marine resources,
4. The transition to a circular economy,
5. Pollution prevention and control,
6. The protection and restoration of biodiversity and ecosystems.

All that means, that for an activity to be considered "Taxonomy aligned", it must meet three strict conditions, which, more in details:
It must contribute substantially to at least one of these six objectives, it must "do no significant harm" (DNSH) to any of the others, and it must be carried out in compliance with minimum social safeguards (such as human rights and labor standards)[17].

Furthermore, the complexity of the Taxonomy stands in its Technical Screening Criteria (TSC). These criteria, indeed, are not just general ideas, but specific and data driven boundaries. For example, for an energy production activity to be considered sustainable, it must emit less than a certain amount of CO2 per kilowatt-hour. As discussed in the 2025 EU Platform on Sustainable Finance, these criteria are constantly evolving to stay

[16]European Parliament and Council of the European Union. *Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the Establishment of a Framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Taxonomy Regulation).* June 22, 2020.
[17]Ibidem, Article 3

aligned with the latest scientific discoveries[18].

This approach of looking at the nature of the Regulation is one of its strengths, but, possibly, also its greatest weakness for the market. Financial participants often struggle to keep up with these technical updates, leading to a "compliance burden" that is particularly heavy for smaller players.

Environmental objective	Significant harm
Climate change mitigation	Activity leading to significant greenhouse gas emissions
Climate change adaptation	Activity leading to an increased adverse impact of the current climate and the expected future climate, on the activity itself or on people, nature or assets
The sustainable use and protection of water and marine resources	The activity is detrimental to the good status or the good ecological potential of bodies of water, including surface water and groundwater; or to the good environmental status of marine waters
The transition to a circular economy	Activity leading to significant inefficiencies in the use of materials or in the direct or indirect use of natural resources such as non-renewable energy sources, raw materials, water and land at one or more stages of the life cycle of products, including in terms of durability, reparability, upgradability, reusability or recyclability of products Activity leading to a significant increase in the generation, incineration or disposal of waste, with the exception of the incineration of non-recyclable hazardous waste Activity where the long-term disposal of waste may cause significant and long-term harm to the environment
Pollution prevention and control	Activity leading to a significant increase in the emissions of pollutants into air, water or land, as compared with the situation before the activity started
The protection and restoration of biodiversity and ecosystems	The activity is significantly detrimental to the good condition and resilience of ecosystems; or is detrimental to the conservation status of habitats and species, including those of Union interest

(1.3a) Taxonomy's six environmental objectives along with their corresponding potential harm

It is therefore necessary to examine how a significant part of the academic and professional debate centers on the "binary" nature of the Taxonomy:

Currently, an activity is either aligned or not aligned. This has led many experts to suggest that we could need a "Transition Taxonomy" or a more refined grading system. This is because the current strictness of the Taxonomy can sometimes discourage companies that are "almost green" or are in the process of transitioning, as they cannot yet claim any Taxonomy alignment in their disclosures[19]. This is an important point for this analysis: If the goal is to protect the end user, providing a "yes/no" statement is misleading if the progress a company is making toward sustainability is not shown.

[18] EU Platform on Sustainable Finance, *Advancing Sustainable Finance: Technical Criteria for New Activities & First Review of the Climate Delegated Act.*

[19] Meucci et al., "Sustainable finance regulation, fund's portfolio reallocation and real effects".

1.3.1 The Do No Significant Harm (DNSH) Principle

The Do No Significant Harm (DNSH) principle is the most innovative and, at the same time, the most difficult part of the Regulation to actually implement. Let's start by saying that its logic is that complicated:
Basically, an investment cannot be called "sustainable" if it solves one environmental problem while creating another. For example, a large scale hydropower plant might contribute to climate change mitigation by producing renewable energy, but it could simultaneously cause "significant harm"[20] to biodiversity by destroying local ecosystems or blocking fish migration. Under the Taxonomy, if the DNSH criteria for biodiversity are not met, that plant cannot be reported as a sustainable investment.

However, implementing DNSH requires a level of detailed data that most companies are not yet prepared to provide. Here is where the "disclosure gap" becomes a major issue.
Fund managers, who are required by the SFDR to report the DNSH alignment of their portfolios, often find themselves without the necessary information from the companies they invest in. This forces them to use estimates or third party data providers, which can be inconsistent. Previous studies highlight that this uncertainty is one of the main reasons why many "Article 9 funds"[21] were recently downgraded to "Article 8": managers simply couldn't prove, with complete certainty, that every single investment in their portfolio was fulfilling the DNSH requirements[22].

Another important point is how the DNSH principle creates a bridge between environmental goals and risk management. By checking for harm across all six objectives, the Regulation forces investors to look at "negative externalities" that were previously ignored.
Among other things, for a retail investor reading a PRIIPs Key Information Document (KID)[23], the technicalities of DNSH are almost invisible. This creates a transparency paradox: The law is incredibly precise at the technical level, but this precision is lost

[20] European Parliament and Council of the European Union, *Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the Establishment of a Framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Taxonomy Regulation).*

[21] Which are the most sustainable ones following the SFDR

[22] Boni and Cremasco, "Is the European Union (EU) Sustainable Finance Disclosure Regulation (SFDR) effective in shaping sustainability objectives? An analysis of investment fund's behaviour".

[23] It will later be described and analyzed in next chapters.

when the information is simplified for the public. The complexity of DNSH and the Taxonomy in general, is making more and more sustainability disclosures a superficial and annoying process for lawyers, rather than a useful tool for investors[24].

Finally, we must consider how the social dimension is also impacted. While the Taxonomy is primarily environmental, the Minimum Social Safeguards (MSS)[25] act as a "social DNSH". An activity that is perfectly green but violates labor laws or human rights cannot be aligned. Indeed, recent researches emphasize that this is a major step forward, as it integrates international standards, like the UN Guiding Principles[26], into the very heart of financial law[27].
This aligns perfectly with what has been initially mentioned. In particular this ensures that the "E" in ESG does not come at the expense of the "S", providing a more comprehensive, and why not a more complex protection for the market and its participants.

[24] Annunziata, *Retail Investment Strategy: How to boost retail investor's participation in financial markets.*

[25] Rules that aim to establish fundamental requirements that prevent projects and corporate operations from causing harm to human rights, labor conditions, and community well being.

[26] Are a set of 31 guidelines adopted in 2011 to prevent, address, and remedy human rights abuses in business operations.

[27] Daniel Litwin and Elsa Savourey. "Human Rights in EU Sustainable Finance". In: *Journal of Financial Regulation* (July 17, 2024).

1.4 The Concept of Double Materiality

The introduction of the concept of "double materiality" represents one of the main paradigm shift of the European sustainable finance framework, serving as the primary conceptual bridge that links the environmental objectives, based on science, of the Taxonomy Regulation with the corporate and product level disclosure mandates of the SFDR.
Historically, global financial markets operated exclusively under a "single materiality" system, fixed in traditional neoclassical economics. This convention focuses solely on Financial Materiality, often designated as the "outside-in" perspective, where environmental, social, or governance (ESG) factors are evaluated strictly based on their capacity to generate material risks or opportunities impacting an entity's cash flows, financial performance, and ultimate enterprise value[28].
Under this traditional model, sustainability is not valued intrinsically, instead, it is weaponized as a defensive risk management tool designed to safeguard investor capital from external socio environmental shocks.

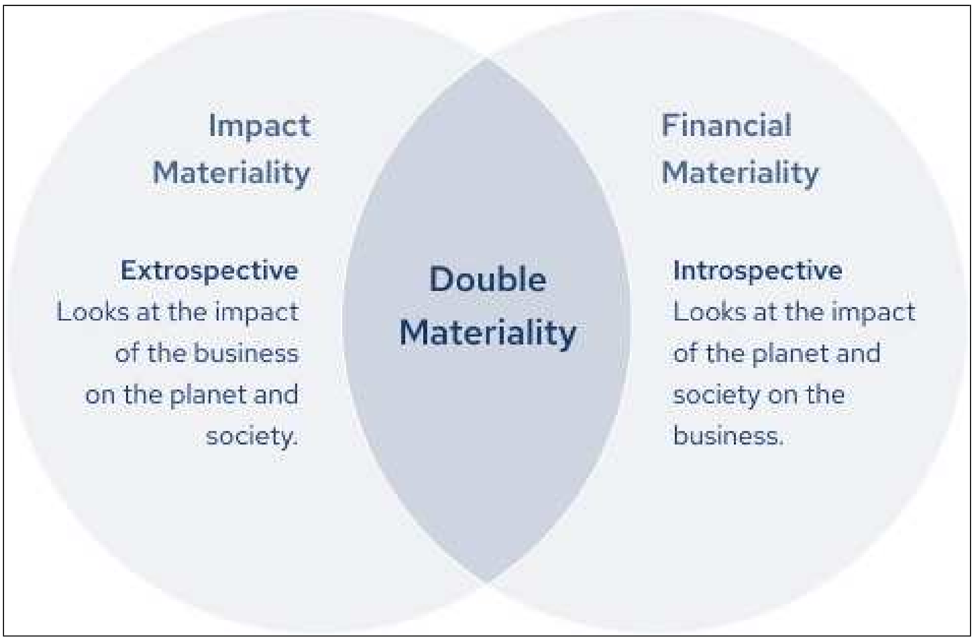
In contrast, the European Union's regulatory architecture has institutionalized a second, co-equal dimension:
Impact Materiality, or the "inside-out" perspective. Codified fundamentally within the Corporate Sustainability Reporting Directive (CSRD) and implemented through the European Sustainability Reporting Standards (ESRS), this dimension requires companies and financial market participants (FMPs) to systematically account for the actual or potential, positive or negative impacts that their operational activities cause on the environment and society at large[29].
Above all, impact materiality demands disclosure regardless of whether these external systemic harms or benefits translate into immediate, cross cutting financial consequences on the corporate balance sheet.

The integration of these dual paths creates a complex situation. This structural intersection ensures that a financial asset can no longer be deemed "sustainable" based purely

[28] European Parliament and Council of the European Union, *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR).*

[29] European Parliament and Council of the European Union. *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.* 2026.

on its financial resilience to climate transitions. For example, an energy conglomerate might exhibit optimal financial materiality by successfully hedging its carbon-tax liabilities and maintaining robust short-term profitability. However, if its core business model remains anchored to high greenhouse gas emissions, its impact materiality is profoundly negative. Under the EU architecture, both sides of this regulatory coin must be simultaneously measured and disclosed, transforming transparency from a unilateral financial shield into a bilateral instrument of market accountability[30].



(1.4a) Double Materiality Intersection.

Despite its theoretical elegance, the practical operationalization of double materiality within the SFDR and Taxonomy frameworks introduces many systemic frictions, which mostly conduce, again, to a "disclosure paradox". While financial materiality is easily quantifiable using established quantitative accounting standards, historical volatility modeling, and traditional credit risk frameworks, impact materiality, by its nature, demands the collection of forward looking, qualitative, and not linear data across highly fragmented global value chains.
Recent empirical literature highlights that the persistent lack of granular, standardized sustainability disclosures from corporate issuers, specifically observed among small and

[30] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

medium sized enterprises, has created a severe structural data gap for institutional asset managers[31].

Furthermore, an ongoing debate persists within academic and regulatory environments regarding whether the market legitimately treats these both dimensions with equal analytical weight. It will be better analyzed later, but to give a proper idea, quantitative assessments of "dark green" funds regulated under Article 9 of the SFDR reveal that a significant proportion of products marketed as possessing a sustainable investment objective are operationally optimized around the "outside-in" path[32]. Indeed, these portfolios are frequently engineered to minimize corporate exposure to ESG obstacles rather than actively maximizing useful additions to the world or generating measurable positive environmental externalities. Without strict supervisory enforcement and the implementation of quantitative minimum thresholds for the "impact" side, the financial market remains highly vulnerable to structural greenwashing, continuously prioritizing traditional financial returns under a superficial pretext of sustainability[33].

Finally, double materiality serves as the primary tool to redefine the traditional boundaries of fiduciary obligations. It affirms that an asset manager's legal and ethical obligations can no longer be confined to the optimization of the client's financial wallet, but must legally include the preservation of the client's social and environmental world[34]. However, for this conceptual revolution to effectively empower the retail user, the technical density of these dual paths must be translated into clear, useful information to take decisions, surpassing the passive transparency barriers that characterize current regulatory disclosure templates[35].

[31] Meucci et al., "Sustainable finance regulation, fund's portfolio reallocation and real effects".

[32] Lisa Scheitza and Timo Busch. "SFDR Article 9: Is It All About Impact?" In: (July 10, 2023).

[33] Adrien-Paul Lambillon and Marc Chesney. "How Green is 'Dark Green'? An Analysis of SFDR Article 9 Funds". In: (Feb. 22, 2023).

[34] Gaëtane Schaeken Willemaers. "Client Protection on European Financial Markets – From Inform Your Client to Know Your Product and Beyond: An Assessment of the PRIIPs Regulation, MiFID II/MiFIR and IMD 2". In: *Revue Trimestrielle de Droit Financier* (July 1, 2014).

[35] Filippo Annunziata. *Towards an EU Charter for the Protection of End Users in Financial Markets.* Tech. rep. Bocconi Legal Studies Research Paper No. 4200502. European Banking Institute Working Paper Series 2022 - no. 128, Aug. 25, 2022.

Chapter 2

PRIIPs: The Pre-ESG Regulatory Framework and Disclosure Limitations

2.1 The PRIIPs Regulation (Reg. EU 1286/2014): Objectives and Scope

Now that it has been established a more concrete theoretical idea of the subject which is being discussed, it is time to focus on the regulatory tools that were already in place before the "ESG revolution" came forward.
One of the most significant of these (tools) is the PRIIPs[1] one, adopted in 2014.
While the SFDR and the Taxonomy are, as we saw, relatively new and focus on the "sustainability substance" of an investment, the PRIIPs Regulation was born from a completely different necessity:
The need of protection of the retail investor in a market that had been considered dangerously opaque and not fully safe, following the 2008 financial crisis. Its primary goal was to create a match between the fragmented landscape of retail disclosures, ensuring that every non professional investor (retail) could compare products that, despite having different legal forms, shared the same investment purpose[2].

The scope of the PRIIPs Regulation is indeed intentionally large and "product neutral". It covers almost any investment product that is "packaged", which means that the amount payable to the investor is subject to fluctuations because of exposure to reference values or the performance of assets not directly held by the investor.

[1] Packaged Retail and Insurance-based Investment Products

[2] European Parliament and Council of the European Union. *Regulation (EU) No 1286/2014 on key information documents for packaged retail and insurance-based investment products (PRIIPs).* Official Journal of the European Union, L 352/1. Mar. 8, 2014.

Between the products covered we find:
UCITS[3] and alternative investment funds[4], insurance based investment products[5], structured deposits, and derivatives.
This framework shifted the European regulatory philosophy from a "buyer beware" approach to a "manufacturer responsibility" model. Indeed, now the core principle is "Know Your Product":
The manufacturer has a legal duty to extract complex financial data into a format that a regular citizen can understand[6].
Small parenthesis: This "extraction" process was designed for a financial world that measured value only in terms of Euros and Cents, largely ignoring the environmental and social externalities that the Green Deal now seeks to internalize.

With that said, one of the most significant achievements of PRIIPs was the elimination of "information arbitrage". Before its implementation, an investor comparing a unit-linked insurance policy with a traditional mutual fund would be faced with two completely different sets of disclosure documents, making any meaningful comparison really hard if not even impossible. It is here that PRIIPs regulation ended this by forcing all manufacturers to use the same standardized "template".
However, as we scale up our analysis, the actual opinion is that this standardization has two opposite sides:
Indeed, while it creates equal conditions, it also imposes a "one size fits all" rigidity. This rigidity is precisely what is making the integration of ESG data, which is by nature qualitative and forward looking, really difficult to fit into a framework built for quantitative and historical financial data.

[3]Undertakings for Collective Investment in Transferable Securities

[4]An alternative investment fund (AIF) is type of collective investment where funds are raised from a number of investors with a view to investing them in accordance with a defined investment policy. Source: Central Bank of Ireland

[5]An Insurance-Based Investment Product is a financial product whose value is exposed, wholly or partially, to market fluctuations. Since an IBIP has both an insurance and an investment component, this product offers a life cover, and at the same time, part of the premium is invested in the financial markets. Source: MFSA,Insurance-Based Investment Products under the Lens in MFSA's First Consumer Education Campaign for 2022

[6]Schaeken Willemaers, "Client Protection on European Financial Markets – From Inform Your Client to Know Your Product and Beyond: An Assessment of the PRIIPs Regulation, MiFID II/MiFIR and IMD 2".

2.1.1 The Key Information Document (KID) and its Structure

The way in which the PRIIPs Regulation is applied is through the Key Information Document (KID).
As previously said, this is a mandatory, independent document that must be provided to retail investors in good time before any transaction. The european law is extremely strict regarding its length, as it cannot exceed three A4 pages. This limit is not a mere suggestion, but a fundamental pillar of consumer protection aimed at preventing the so called "information overload". The European legislator realized that providing investors with a 100+ prospectus does not make them more "informed". Instead, it simply makes them stop reading it.
That's why, the KID must be concise, written in an easy language style, and focus on the most essential elements:
The nature of the product, the risks, the potential returns, and the costs[7].

We can now describe the internal structure of the KID:
This report is divided into highly regulated sections, such as "What is this product?", "What are the risks and what could I get in return?", and "What are the costs?". Between these sections, the most controversial element of the KID is the Summary Risk Indicator (SRI). This is a numeric scale from 1 to 7 that combines market risk and credit risk into a single score. While the SRI is effective for comparing the volatility of a bond fund versus an equity fund, it is literally "blind" to sustainability risks. A retail investor might see a low SRI score of "2" and conclude the product is "safe", without understanding that the fund might be heavily invested in industries at risk of "stranded assets"[8] due to future climate regulations[9]. The most valuable opinion on this is that this aspect creates a dangerous "transparency gap", because the investor feels protected by the SRI but remains exposed to unmeasured ESG vulnerabilities.

[7]European Parliament and Council of the European Union, *Regulation (EU) No 1286/2014 on key information documents for packaged retail and insurance-based investment products (PRIIPs).*

[8]Assets that turn out to be worth less than expected as a result of changes associated with the energy transition.

[9]Annunziata, *Retail Investment Strategy: How to boost retail investor's participation in financial markets.*

Structured Invest
Member of UniCredit

Key Information Document

Purpose

This document provides you with key information about this investment product. It is not marketing material. The information is required by law to help you understand the nature, risks, costs, potential gains and losses of this product and to help you compare it with other products.

Product

onemarkets Fidelity Longevity & Leisure Fund
a Sub-Fund of onemarkets Fund SICAV
share class: S

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website: www.structuredinvest.lu
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onemarkets Fund SICAV is a UCITS authorized in Luxembourg and supervised by the Commission de Surveillance du Secteur Financier (CSSF) in relation to this Key Information Document (KID).This PRIIP is authorised in Luxembourg.
Structured Invest S.A. is authorised in Luxembourg and regulated by Commission de Surveillance du Secteur Financier (CSSF).
This document is dated 31/03/2025

What is this product?

Type

This is a Sub-Fund (the "Sub-Fund") of onemarkets Fund. onemarkets Fund is an investment company with variable share capital (SICAV) with multiple Sub-Funds and governed by the Luxembourg Law of December 17, 2010 on Undertakings for Collective Investment.

Term

The Sub-Fund is established for an unlimited duration. The Management Company can proceed unilaterally to a redemption of a share class of an investor or switch the holding to another share class if the investor no longer meets the qualifying criteria to maintain the share class he holds. The Board of Directors may decide under certain circumstances to compulsorily redeem all shares of the relevant Sub-Fund or share class at the Net Asset Value per share for the valuation date in respect of which such decision shall be effective, and to terminate and liquidate such Sub-Fund or share class.

Objectives

Investment Objective: The Sub-Fund's investment objective is to achieve capital growth over the long term.
Investment Strategy: This Sub-Fund aims to achieve capital growth by investing in a diversified global equity portfolio. It also aims to capitalize on longevity-associated themes, selecting companies based on factors influencing life in retirement, providing exposure to evolving needs of the ageing population. In actively managing the Sub-Fund, the Investment Manager considers growth and valuation metrics, company financials, return on capital, cash flows and other measures, as well as company management, industry, economic conditions, and other factors.
Investment Policy: The Sub-Fund invests at least 70% of its Net Assets in equities of companies from anywhere in the world, including China (up to 30%) and emerging markets (up to 30%). It will also seek exposure to longevity-associated themes, selecting companies that benefit from long-term (structural and not cyclical) economic or social trends related to life in retirement. Investments in equity linked equity (ADRs and GDRs) may represent up to 30%. The Sub-Fund may also invest in REITs up to 20%. The Sub-Fund will invest no more than 10% of its Net Assets in shares or units of other UCITS or other UCIs eligible under the 2010 Law. The Sub-Fund may invest without limitation in instruments denominated in currencies other than the reference currency. Systematic currency hedging is not provided. For more information, please refer to the prospectus.
Derivatives: The Sub-Fund may use financial derivatives.
Securities Financing Transactions: The Sub-Fund will not enter into transactions under SFTR.
Techniques and Instruments: The Sub-Fund may use derivatives for hedging, efficient portfolio management and investment purposes, including listed futures on equity indices and bonds, listed options on equity indices and single stock, listed options on bond futures, FX Options, FX Forwards, FX Spot, FX Non-Deliverable Forwards (NFDs, Swaptions).
Benchmark and use: The Sub-Fund does not use any index under the Benchmark Regulation.
SFDR classification: The Sub-Fund qualifies as a financial product under Art. 8 of SFDR.
Distribution policy: This is an accumulating share class.
Subscription and Redemption: Shares are issued on each Valuation Day at the issue price. Shareholders are entitled to request the redemption of their Shares at any time at the Net Asset Value per share.
Currency: The reference currency of the Sub-Fund is the EUR.
Practical information: The Sub-Fund depositary is CACEIS Bank, Luxembourg Branch. Further information: This Key Information Document is prepared for a share class. Assets and liabilities of each Sub-Fund of onemarkets Fund SICAV are segregated, meaning that your investment in this Sub-Fund is only impacted by profits and losses in this Sub-Fund. The annual report, semi-annual report, prospectus, latest share price, and other practical information are available in English, free of charge, at www.structuredinvest.lu

Intended Retail Investor

This share class is open for institutional investors and open for financial intermediaries which do not accept and retain inducements including intermediaries providing discretionary portfolio management. An investment in this Sub-Fund is suitable only for investors who are able to appraise the risks and economic value of the investment. The investor must be prepared to accept a significant volatility of the Sub-Fund and potentially high capital losses in order to achieve high potential investment performances. The Sub-Fund is intended for investors with a medium to long-term investment horizon.

(2.1a) Real example of the first section of a KID: *What is this product?*

What are the risks and what could I get in return?

Risk Indicator

1	2	3	4	5	6	7

Lower risk ← → Higher risk

The risk indicator assumes you keep the product for 4 years.

The summary risk indicator is a guide to the level of risk of this product compared to other products. It shows how likely it is that the product will lose money because of movements in the markets or because we are not able to pay you.

We have classified this product as 3 out of 7, which is a medium-low risk class.
This rates the potential losses from future performance at a medium-low level, and poor market conditions are unlikely to impact the capacity to pay you.

This product does not include any protection from future market performance so you could lose some or all of your investment.

Performance scenarios

The figures shown include all the costs of the product itself, but may not include all the costs that you pay to your advisor or distributor. The figures do not take into account your personal tax situation, which may also affect how much you get back.

What you will get from this product depends on future market performance. Market developments in the future are uncertain and cannot be accurately predicted.

The unfavourable, moderate, and favourable scenarios shown are illustrations using the worst, average, and best performance of the product and a suitable benchmark over the last 10 years. The scenarios shown are illustrations based on results from the past and on certain assumptions. Markets could develop very differently in the future.

Recommended holding period : 4 years			
Investment EUR10,000 Scenarios		**If you exit after 1 year**	**If you exit after 4 years**
Minimum	There is no minimum guaranteed return. You could lose some or all of your investment.		
Stress	What you might get back after costs	5,410 EUR	6,340 EUR
	Average return each year	-45.9%	-10.8%
Unfavourable	What you might get back after costs	8,470 EUR	9,740 EUR
	Average return each year	-15.3%	-0.7%
Moderate	What you might get back after costs	10,380 EUR	12,450 EUR
	Average return each year	3.8%	5.6%
Favourable	What you might get back after costs	12,050 EUR	14,990 EUR
	Average return each year	20.5%	10.7%

The stress scenario shows what you might get back in extreme market circumstances.
The unfavourable scenario occurred for an investment between 12/2021 and 12/2024.
The moderate scenario occurred for an investment between 05/2019 and 05/2023.
The favourable scenario occurred for an investment between 08/2017 and 08/2021.

(2.1b) Real example of the second section of a KID: *What are the risks and what could I get in return? - Performance Scenarios*

Now, a further description of the KID through the Performance Scenarios:
Estimates of what might happen to the investment under different market conditions (stress, unfavorable, moderate, and favorable).
It is, however, important to underline how these scenarios have faced heavy criticism because they are based on historical performance. Indeed, in the context of the European Green Deal, using the last five years of data to predict the next ten years is increasingly difficult and unlikely to be fully accurate.

The third, but not least important, pillar of the Key Information Document:
Following the description of the product and its risks, this is the disclosure of costs.
In the original spirit of the PRIIPs Regulation, this section was designed to eliminate the "hidden fees" that had historically eroded the returns of retail investors. The regulation introduced a standardized way of presenting costs through two main tables:
The "Costs over time" and the "Composition of costs". The goal was to provide a single figure, in order to show how much the total costs of the investment would consume the final return. Different structure of the costs are displayed based on the recommended holding period and the possibility of early redemption.

The use in the KID document of visual examples and standardized templates, as the ones analyzed in the previous figures, indeed aligns with the evolving European regulatory framework aimed at enhancing retail investor protection. As highlighted by the recent Retail Investment Strategy[10], the traditional way of "only disclosing" model has often proved insufficient for unprofessional investors due to the excessive complexity of financial products. In this context, the PRIIPs Regulation introduced the KID as an essential tool to support comparability through a concise and highly structured format.
The effectiveness of these visual aids is further supported by the doctrine of "layering" information[11], which suggests that presenting data in manageable levels, by combining textual clarity with graphical indicators, helps mitigate behavioral prejudice and cognitive overload.

[10] Annunziata, *Retail Investment Strategy: How to boost retail investor's participation in financial markets.*
[11] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

What are the costs?

The person advising on or selling you this product may charge you other costs. If so, this person will provide you with information about these costs and how they affect your investment.

Cost over time

The tables show the amounts that are taken from your investment to cover different types of costs. These amounts depend on how much you invest, how long you hold the product and how well the product does. The amounts shown here are illustrations based on an example investment amount and different possible investment periods. We have assumed:

- In the first year, you would get back the amount that you invested (0% annual return). For the other holding periods we have assumed the product performs as shown in the moderate scenario.
- EUR 10,000 is invested.

	If you exit after 1 year	If you exit after 5 years
Total costs	365 EUR	943 EUR
Annual cost impact (*)	3.6%	1.9% each year

(*) This illustrates how costs reduce your return each year over the holding period. For example, it shows that if you exit at the recommended holding period your average return per year is projected to be 0.3% before costs and -1.6% after costs.

We may share part of the costs with the person selling you the product to cover the services they provide to you. They will inform you of the amount.

These figures include the maximum distribution fee that the person selling you the product may charge (0.0% of amount invested / 0 EUR).

Composition of costs

One-off costs upon entry or exit		If you exit after 1 year
Entry costs	We do not charge an entry fee.	None
Exit costs	1.7 % of your investment before it is paid out to you. Exit costs only apply if the duration of the investment is less than three years.	170 EUR
Ongoing costs taken each year		
Management fees and other administrative or operating costs	1.7 % of the value of your investment per year. This figure is based on expenses for the year ending December 2024. This figure may vary from year to year.	174 EUR
Transaction costs	0.2 % of the value of your investment per year. This is an estimate of the costs incurred when we buy and sell the underlying investments for the product. The actual amount will vary depending on how much we buy and sell.	21 EUR
Incidental costs taken under specific conditions		
Performance fees	There is no performance fee for this product.	None

How long should I hold it and can I take money out early?

Recommended holding period: 5 years

The recommended holding period has been defined by taking into account the expected composition of the Sub-Fund's portfolio, as well as long-term averages of return and risk for relevant asset classes and markets.

You may request the redemption of your units on a daily basis. You may receive less than expected if you cash in earlier than the recommended holding period. The recommended holding period is an estimate and must not be taken as a guarantee or an indication of future performance, return or risk levels.

Investors may request redemption at any time. Redemption will be performed by the Administrator normally within 10 bank business days after the relevant dealing deadline.

If you redeem a share from this class within 3 years of the dealing day that the relevant share is first issued, you may be subject to a contingent deferred sales charge of up to a maximum of 2.55% payable on your redemption proceeds calculated as a percentage of the subscription price at which the share was acquired based on a 3 year amortisation of this maximum charge. The imposition of such charge will gradually decrease by reference to the duration for which the share is held in accordance with the 3 year amortisation period commencing on the dealing day that the relevant share is first issued. The impact of such a charge will reduce the redemption proceeds you will receive. Please refer to the section "What are the costs" for additional information.

(2.1c) Real example of the third section of a KID: *What are the costs and How long should I hold it and can I take money out early?*

Furthermore, the integration of sustainability disclosures related to the SFDR into these documents (see Section 2.3) tries to initiate (not really successfully) a transition toward a more comprehensive protective framework.

This approach aims to help the "weak party" in the financial market, which should now be not only informed about risks and costs but should also be empowered to understand the "double materiality" of their investments, trying to reduce the gap between technical regulation and practical investor comprehension.

However, this KID document is not always as easy and complete as it could seem on a first look. There also is, actually, a growing mismatch between the static, backward looking nature of the KID and the dynamic, forward looking nature of the SFDR. This tension is unfortunateloy leading to a situation where the KID is becoming a "hybrid" document that tries to fulfill too many roles at once, acting as a risk report, a cost disclosure, and now, an ESG label, resulting in "disclosure fatigue" for the investors that were originally meant to be protected[12].

[12]European Supervisory Authorities (ESAs). *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR)*. June 18, 2024.

2.2 Pre-Contractual Disclosure: Focus on Risk, Return and Costs

The disclosure of risk within the KID is primarily managed through the Summary Risk Indicator (SRI), a numerical scale ranging from 1 to 7. This indicator is a composite measure of market risk and credit risk, calculated using historical volatility and Value at Risk (VaR) methodologies. However, this purely quantitative approach is fundamentally backward looking. Indeed, the doctrine generally agrees about the fact that it is wrongly assumed that the historical performance of an asset class is a sufficient proxy for its future riskiness. In the context of sustainable finance, this methodology proves to be insufficient, as it fails to account for transition risks and physical climate risks that are not yet reflected in historical market prices.

As a consequence, a retail investor might be presented with an SRI score that suggests a low level of risk for a "brown" investment, simply because the financial markets have not yet fully priced in the regulatory and economic shifts associated with the low-carbon transition. This creates a transparency gap where the investor is informed about past volatility but remains blind to future sustainability and the related financial risks[13].

Similarly, the performance scenarios section of the KID requires manufacturers to present four different outcomes: stressed, unfavorable, moderate, and favorable.

These scenarios are intended to show how much an investor might get back after costs under different market conditions, and are based on mathematical simulations based on past performance. Consequently, here another paradox: While an Article 9 fund might have the objective of contributing to a net zero economy, its performance scenarios in the KID might still be driven by historical data from an era dominated by fossil fuel based growth. There still is no explicit mechanism within the PRIIPs Regulation to include "forward looking" ESG scenarios, such as the impact of a sudden carbon tax or the benefits of a circular economy transition. As a result, the KID often provides contradictory messages: The qualitative description of the product highlights its green side, while the quantitative scenarios remain confined to a traditional and unsustainable

[13] Commission Delegated Regulation (EU) 2017/653 (the "PRIIPs RTS"), Annex II (Methodology for the Summary Risk Indicator)

economic paradigm[14].

The third pillar, and probably the most complex for the retail investor to visually read and understand, is the disclosure of costs. The KID requires a detailed indication of one off costs, ongoing costs, and incidental costs, summarized by the "Reduction in Yield" (RIY) indicator. This section is designed to show the total impact of fees on the investment return over the recommended holding period.

In the case of sustainable investments, this transparency reveals what is often named the "ESG Premium". Managing a fund with high ESG ambitions requires significant additional operational expenses, including the acquisition of proprietary ESG data, continuous monitoring of "Principal Adverse Impacts" (PAIs), and active protected activities.

Under the rigid PRIIPs template, these costs are often aggregated without sufficient qualitative explanation, making sustainable products appear more expensive than their traditional counterparts. This translates into the retail investor who sees the higher cost but is not provided with the narrative context to understand that these fees finance the extra layer of due diligence and impact verification that defines a sustainable product[15].

Furthermore, the "composition of costs" table often fails to capture the hints of transaction costs in the sustainable market. Green assets, particularly those focused on niche technologies or social impact, can exhibit lower liquidity than mainstream securities, leading to higher implicit transaction costs. The methodology used in the KID to calculate these costs, often based on the "arrival price"[16] of a security, can be highly technical and opaque for an unprofessional user. The investor is presented with a volume of technical data that fulfills the legal requirements of transparency but fails to provide meaningful clarity.

Ultimately, it's noticeable how the current structure of the KID reflects a legacy of "Financial First"[17] regulation that struggles to accommodate the "Double Materiality" of today, where costs and risks are inextricably linked to environmental and social outcomes[18].

[14]Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

[15]Meucci et al., "Sustainable finance regulation, fund's portfolio reallocation and real effects".

[16]The arrival price or (AP) of a security is the mid-price (average of best bid and offer) at the exact time an order is transmitted to a broker or market for execution.

[17]By "Financial First" it is meant how in the early years of life of the PRIIP Regulation, returns and financial volatily were the mainly important "ingredients" of the objective of the report.

[18]Annunziata, *Retail Investment Strategy: How to boost retail investor's participation in financial markets.*

2.2.1 Methodological Flaws: Historical Volatility vs. ESG Transition Risks

This subparagraph wants to give a small but proper explanation of the mathematical aspects behind the various calculations needed to complete the different sections of a KID. As it has already been illustrated in the subchapter above, the core of the PRIIPs disclosure regarding performance scenarios and risk assessment is described through a strictly quantitative approach, that, even if mathematical, is conceptually "sustainability blind". The Summary Risk Indicator (SRI) and the four performance scenarios (stress, unfavourable, moderate, and favourable)[19] are generated using the VaR (Value at Risk) Equivalent Volatility (VEV).

For most retail products, specifically those classified as Category 2[20], the VEV is derived from the historical prices of the underlying assets over the preceding five years. If the returns are not normally distributed, the regulation requires the use of the Cornish-Fisher expansion to account for skewness and kurtosis in the calculation of the Value at Risk:

$$VEV = \sqrt{\left(\frac{3.842 - 2 \cdot VaR}{T}\right)}$$

This formula treats volatility (σ) and mean return (μ) as static parameters derived from the past.

However, from an ESG perspective, historical data is an unreliable predictor of future performance. The transition to a low-carbon economy represents a "structural break", which is a fundamental shift in market dynamics that cannot be captured by looking back at the last five years of trading.

For example, a financial product, heavily exposed to carbon intensive industries, might exhibit low historical volatility and stable returns, resulting in a misleadingly low SRI and optimistic performance scenarios. In reality, such an asset faces significant transition risks, such as sudden regulatory changes or the "stranding" of assets, which are not yet reflected in its historical price series[21].

[19] Image 2.1.b

[20] Category 2 stands for the investment products which provide a return that is linearly related to the underlying assets.

[21] European Parliament and Council of the European Union, *Regulation (EU) No 1286/2014 on key information documents for packaged retail and insurance-based investment products (PRIIPs).*

The projection of the performance scenarios also further aggravates this bias.
Then, the estimated value of an investment at the end of the recommended holding period (T) is generally calculated based on a log normal distribution:

$$V = V_0 \cdot e^{\left(\mu \cdot T + \sigma \cdot \sqrt{T} \cdot Z\right)}$$

Where V_0 is the initial investment and Z represents the quantile associated with the specific scenario (e.g., the 10th percentile for the unfavourable scenario and the 50th for the moderate one).
Because μ and σ are calculated without any ESG adjustment factor, the KID effectively ignores the "Double Materiality" of climate risk. There is no mechanism within the PRIIPs methodology to simulate "shocks" related to environmental externalities, such as the sudden implementation of a carbon tax or the rapid technological obsolescence of not sustainable firms. Consequently, the performance scenarios provide a mathematically accurate reflection of the past, but a dangerously distorted vision of a future created by the Green Deal[22].
This methodological flaw leads to a transparency paradox:
While the manufacturer may act in technical compliance with the PRIIPs Regulatory Technical Standards (RTS), the resulting disclosure may inadvertently contribute to greenwashing by making "brown" assets appear safer or more profitable than sustainable ones. The lack of progressive ESG scenarios within the KID structure means that the retail investor is provided with a navigational tool that is calibrated for a stable, traditional economy, leaving him exposed to the systemic risks of a global transition that the current formulas are simply not designed to see[23].

[22] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*
[23] Annunziata, *Retail Investment Strategy: How to boost retail investor's participation in financial markets.*

2.3 PRIIPs' Limitations Regarding Environment and Sustainability

As mentioned in the previous paragraph, the main focus of the PRIIP KID was almost exclusively on market volatility, credit defaults, and hidden fee structures. Consequently, the regulation was not designed to accommodate the "extra financial" dimensions that have since become the cornerstone of European financial policy. This historical misalignment has resulted in profound limitations regarding environment and sustainability, as the rigid structure of the Key Information Document (KID) effectively filters out the qualitative and progressive data that define sustainable investments.

The primary limitation lies in the "materiality gap":

While the Green Deal requires an assessment of how an investment impacts the planet, the PRIIPs framework remains strictly confined to how the market impacts the investment's immediate financial value.

This limitation is most evident in the descriptive sections of the KID. Because the regulation mandates extreme summarize of the document at three pages, manufacturers often lack the space to provide a scientifically grounded explanation of a product's sustainability objectives. In the absence of standardized ESG reporting fields within the PRIIPs template, many firms have resorted to high level, generic language to describe their "green" characteristics. This lack of granularity creates a fertile ground for "inadvertent greenwashing", where products with vastly different levels of ESG integration appear identical to the retail investor.

Without a mandatory link to the EU Taxonomy's technical screening criteria within the KID itself, the "sustainability" of a product becomes a subjective claim rather than a verifiable fact, undermining the comparability that the PRIIPs Regulation was supposed to guarantee[24].

As we can see in real examples, these are the only sections used to display ESG information inside a PRIIP KID. Two short sentences, one under the "Objective" section, while the second under the "What are the risks and what could I get in return?" one.

[24] European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

What is this product?

Type: onemarkets - Smart Plan (the "Sub-Fund") is an undertaking for collective investment in transferable securities and is a sub-fund of onemarkets Italy ICAV (the "Fund") which is established as an open-ended umbrella type Irish collective asset-management vehicle with limited liability and segregated liability between sub-funds

Term: This product has no specific maturity date.

Nova Investment Management Limited is entitled to terminate the contract unilaterally.

Nova Investment Management Limited may terminate the contract unilaterally inter alia in the case of liquidation or merger of the Sub-Fund. Please refer to the prospectus for additional information on early termination circumstances.

Objectives

The Sub-Fund's investment objective is to achieve medium to long-term capital growth by gradually increasing the exposure to equities and equity related securities issued by companies worldwide (including emerging markets), over a 5-year period commencing from the launch of the Sub-Fund (the "equity accumulation phase").

The initial exposure to equities will be gradually increased over a period of 5 years according to an investment plan actively managed by the Investment Manager to achieve a net equity exposure of up to 100% of its net assets. After the equity accumulation phase, the Sub-Fund's portfolio shall be actively managed with at least 75% of its net assets in equities and equity related securities.

Throughout its lifetime, the Sub-Fund may invest up to 100% of its net assets in units of Collective Investment Schemes ("CIS") (including ETFs). These CIS may be domiciled in the European Union or the United Kingdom.

During the first 3 years, the Sub-Fund may invest up to 70% of its net assets directly and/or indirectly in equities and equity related securities, including up to 15% in emerging markets companies. Indirect exposure to equities and equity related securities may be obtained by investing in CIS (including ETFs) and financial derivative instruments on equities and equity related securities and/or equity indices. The Sub-Fund may also invest up to 100% of its net assets, directly and/or indirectly through CIS (including ETFs) and/or financial derivatives, in debt securities and money market instruments rated investment grade and up to 40% in debt securities rated sub-investment grade. The Sub-Fund may also invest up to 10% of its net assets in CoCo bonds, and up to 20% in emerging market debt. From the third to the fifth years, the Sub-Fund may invest up to 100% of its net assets directly and/or indirectly in equities and equity related securities, including up to 20% in emerging markets companies. The Sub-Fund may also invest up to 55% of its net assets, directly and/or indirectly through CIS (including ETFs) and/or financial derivatives, in debt securities and money market instruments rated investment grade and up to 35% in debt securities rated sub-investment grade. The Sub-Fund may also invest up to 10% of its net assets in CoCo bonds, and up to 20% in emerging market debt. From the fifth year onward, the Sub-Fund may invest up to 100% of its net assets directly and/or indirectly in equities and equity related securities, including up to 20% in emerging markets companies. The Sub-Fund may also invest up to 25% of its net assets, directly and/or indirectly through CIS (including ETFs) and/or financial derivatives, in debt securities and money market instruments rated investment grade and sub-investment grade. The Sub-Fund may also invest up to 10% of its net assets in CoCo bonds, and up to 15% in emerging market debt.

The Sub-Fund may use financial derivative instruments for hedging and/or investment purposes . The Sub-Fund aims at maintaining a leverage effect lower than 100%, calculated on the total of all financial derivative instruments' notional amounts.

For the first three years, the Sub-Fund is actively managed in reference to 35% of the MSCI World Net Total Return EUR Index plus 65% of the Bloomberg Euro Aggregate 1-5 Year Total Return Index Unhedged EUR. After a period of three years and until the end of the fifth year the Sub-Fund is actively managed in reference to 75% of the MSCI World Net Total Return EUR Index plus 25% of the Bloomberg Euro Aggregate 1-5 Year Total Return Index Unhedged EUR. After the fifth year the Sub-Fund is actively managed in reference to 90% of the MSCI World Net Total Return EUR Index plus 10% of the Bloomberg Euro Aggregate 1-5 Year Total Return Index Unhedged EUR. The Sub-Fund is actively managed in reference to these benchmarks by virtue of the fact that it seeks to outperform the benchmarks. Some of the Sub-Fund s securities may be components of and may have similar weightings to the benchmarks. However the benchmarks are not used to define the portfolio composition of the Sub-Fund and the Sub-Fund may potentially be wholly invested in securities which are not constituents of the benchmarks.

This Sub-Fund promotes environmental and/or social characteristics and qualifies as Article 8 under the SFDR (Sustainable Finance Disclosure Regulation). Further information regarding the ESG methodology of the Fund is available in the prospectus.

You may request the redemption of your units on a daily basis.

Dividends are not intended to be distributed. Any income derived from the product is reinvested.

Intended retail investor: The Sub-Fund is intended to be marketed to professional investors and retail investors who are able and willing to invest in a fund actively managing the allocation between equities and debt securities, with a medium risk grading and seeking to achieve a return over 5 years.

(2.3.a) Real example of an ESG disclosure under the section: *What is this product? - Objectives*

What are the risks and what could I get in return?

Risk indicator

1	2	3	4	5	6	7

Lower Risk ⟵⟶ Higher Risk

The risk indicator assumes you keep the product for 5 years.
The actual risk can vary significantly if you cash in at an early stage and you may get back less.

The summary risk indicator is a guide to the level of risk of this product compared to other products. It shows how likely it is that the product will lose money because of movements in the markets or because we are not able to pay you.

We have classified this product as 2 out of 7, which is a low risk class. This classification rates the potential losses from future performance at a low level, and poor market conditions are very unlikely to impact our capacity to pay you.

This product has contractually agreed-upon early exit penalties. For more information on related conditions, you can refer to the section 'How long should I hold it and can I take money out early?'.

Other risks materially relevant to the product not included in the summary risk indicator: risk associated with derivatives, credit risk, emerging market risk, currency risk, interest rate risk, risk associated with the "long/short" strategy, risks associated with investing in Chinese markets, custody risks, risks associated with leverage, risks associated with investing in high-yield bonds, risks associated with direct and indirect investment in contingent convertible bonds ("CoCo bonds"), risks associated with convertible bonds, risks associated with investment policies that take an ESG (Environmental, Social and Governance criteria) approach, risks associated with equities.

This product does not include any protection from future market performance so you could lose some or all of your investment.

If we are not able to pay you what is owed, you could lose your entire investment.

(2.3.b) Real example of an ESG disclosure under the section: *What are the risks and what could I get in return? - Performance Scenarios*

As immediately obvious from the images displayed, the information displayed is insufficient to enable a retail investor to make a fully informed decision.

Furthermore, the environmental limitations of the PRIIPs framework extend to the methodology of risk assessment. The current Summary Risk Indicator (SRI) is, as already said many times, "sustainability blind". For a retail investor, this creates a significant distortion of reality and this methodological failure prevents the KID from acting as an early warning system for the long term systemic risks inherent in the transition to a net zero economy[25].

The third major limitation concerns the lack of "impact materiality" in the disclosure of returns. What I mean by that, is that the performance scenarios section of the KID is designed to show the potential growth of an investment in different market environments, but they do not reflect the "environmental return" or the carbon reduction impact of the capital. For a growing segment of retail investors, the "value" of a sustainable product is not only measured in Euros but also in avoided CO2 emissions or social progress.
The current PRIIPs structure, however, forces these two types of value into a hierarchy where financial return is the only visible metric. This effectively discourages the reallocation of capital toward truly transformative projects, as the "costs" of achieving sustainability are clearly visible in the KID's fee tables, while the "benefits" of that sustainability remain hidden in external, complex SFDR annexes that the average investor do not, or rarely consults[26].

Ultimately, the friction between the PRIIPs Regulation and the sustainability agenda comes from a fundamental difference in time horizons. PRIIPs is focused on the "Recommended Holding Period" (RHP), which is usually between three and seven years[27]; sustainability, by contrast, operates on a multiyear horizon.
By forcing ESG data into a kind of "shor term" financial disclosure tool, the European legislator has created a "mismatch of scales." The result is a disclosure regime that is fulfilled following the legislation and transparency rules, but fails to capture the spirit of the transition.
Without a radical fix that integrates "Double Materiality" into the core of the KID, the PRIIPs framework will continue to act almost as a sort of "legacy barrier" to the full realization of the European Sustainable Finance Action Plan[28].

[25]Annunziata, *Retail Investment Strategy: How to boost retail investor's participation in financial markets.*

[26]Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

[27]This is not a rule, but a simple overall indication.

[28]Meucci et al., "Sustainable finance regulation, fund's portfolio reallocation and real effects".

2.3.1 The Inadvertent Contribution to Greenwashing (Pre-SFDR)

Prior to the complete implementation of the Sustainable Finance Disclosure Regulation (SFDR), the PRIIPs framework inadvertently created a regulatory environment contributory to "greenwashing". By that, it is meant the practice of providing misleading information about the environmental benefits of a product.
This phenomenon did not necessarily emerge from a deliberate attempt by manufacturers to deceive investors, but rather from the structural inadequacy of the Key Information Document (KID) itself. By providing a standardized template that lacked specific ESG safeguards, the regulation allowed firms to leverage the "green label" without being subject to a uniform methodology.
In this "Pre SFDR" era, the sustainability of a financial product was defined more by marketing narratives than by technical compliance, leading to a significant distortion of the retail market's perception of potential impact.

The main driver of this inadvertent greenwashing was the flexibility of the "What is this product?" section[29].
Since the KID is limited to three pages, the description of environmental objectives was often reduced to vague, qualitative claims such as "investing in sustainable leaders" or "promoting climate-friendly transitions". Without the strict alignment boundaries later introduced by the EU Taxonomy, these terms remained legally undefined. Consequently, a fund with minimal ESG integration could use the same terminology as a highly ambitious impact fund, making them indistinguishable to a retail investor[30].
This lack of precision effectively lowered the barrier to entry for "green-labeled" products, allowing manufacturers to attract capital under the pretext of sustainability without the operational charge and weight of rigorous ESG due diligence[31].

Furthermore, the PRIIPs Regulation's gives more importance on simplicity over granularity, which means that "negative externalities", the harmful environmental impacts of an investment, are being rarely disclosed.
The KID's focus on financial materiality led to a situation where a product could be

[29] Image 2.1.a
[30] We never have to forget that as per definition of retail investor, it does not have a proper financial knowledge at all
[31] Annunziata, *Retail Investment Strategy: How to boost retail investor's participation in financial markets.*

marketed as "green" based on a single positive attribute[32] while ignoring significant environmental damage in another[33]. This selective transparency has become a feature of greenwashing.
Now, because the KID do not require a "Do No Significant Harm" (DNSH) assessment, the retail investor is presented with a fragmented and overly optimistic view of the product's sustainability. This structural "blindness" not only misleads investors but also creates an uneven situation, where truly sustainable manufacturers struggles to differentiate their high cost, high integrity products from cheaper, superficial "green" alternatives[34].

Ultimately, the Pre SFDR landscape under the PRIIPs regime demonstrated that standardized financial disclosure is not a substitute for specialized ESG transparency. By forcing complex sustainability data into a rigid, three page document designed for 2014 market conditions, the European legislator created a "transparency paradox":
The more the KID attempted to simplify information for the retail investor, the more it covered the reality of the underlying assets.
This inadvertent contribution to greenwashing highlights the necessity of the subsequent "double materiality" approach, as it has been shown that without a common technical language, standardized disclosures can hide themselves for unsustainable practices rather than transforming into a tool for environmental progress[35].

[32] Such as a low carbon footprint in one sector

[33] Such as super high water consumption or biodiversity loss

[34] European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

[35] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

2.4 Beyond Rigid Standardization: The UK Consumer Composite Investments (CCI) Model as an Alternative Narrative Framework

The structural vulnerabilities of the EU PRIIPs framework discussed in the previous section are not just theoretical, indeed they have induced major regulatory bodies to completely redesign retail disclosure architecture.
Following its birth from the European Union, the United Kingdom's Financial Conduct Authority (FCA) finalized a definitive break from the EU's PRIIPs regime by introducing the Consumer Composite Investments (CCI) framework. Officially launched with an optional transition phase (starting from April 2026), the CCI model completely rewrites the rules thanks, mainly, to a more dynamic "Product Summary". Analyzing how the UK CCI regime deviates from the EU PRIIPs framework reveals a fundamentally different approach to consumer communication, one that is uniquely better suited to contain complex sustainable finance data[36].

As established in Section 2.1.1, one of the primary limitations of the EU PRIIPs KID is its rigid, three pages template. This strict physical boundary forces asset managers to drastically condense information, leaving no room to explain how a fund achieves its ESG objectives or manages risks related to climate. In pure contrast, the UK CCI framework explicitly removes prescribed templates and rigid page limits. Under the FCA's Consumer Duty principles, product manufacturers are given the freedom and flexibility to design layouts, use narrative explanations, and include supplementary contextual information. For sustainable investments, this extra space is a fundamentally important. It allows fund managers to provide the qualitative commentary necessary to explain complex EU Taxonomy alignments or SFDR principal adverse impacts without compromising the disclosure of core financial costs and risks[37].
The EU PRIIPs framework relies heavily on rigid, progressive mathematical formulas and performance scenarios that often confuse retail investors. It treats sustainability as an isolated data point to be checked off, rather than an active investment strategy. It is then

[36] Fscom. "FCA Consumer Composite Investments (CCIs): Say goodbye to the KI(I)DS!". In: (Mar. 12, 2026).
[37] Ibidem.

here that the UK's CCI framework bridges this gap by mixing mandatory standardized quantitative data (such as costs, historical performance charts, and an expanded 1 to 10 risk scale, instead of 1 to 7) with unrestricted narrative context[38].

The table below summarizes how these two frameworks differ when it comes to presenting sustainability information to everyday investors:

Disclosure Feature	EU PRIIPs Framework	UK CCI Framework
Document Format	Highly rigid, standardized template.	Flexible, bespoke layout tailored to the product.
Length Restrictions	Strictly capped at **3 pages**.	**No page limits**; scaled to consumer understanding.
Sustainability Context	Restricted; ESG data must fit into pre-existing, tight boxes.	Highly accommodating; ample room for explanatory narratives.
Primary Philosophy	Uniformity at all costs to allow direct mathematical comparison.	Meaningful understanding; empowering consumers to make informed choices.

(2.4.a) Comparison between PRIIPS and UK CCI Frameworks.

Ultimately, by prioritizing "consumer outcomes" over "formalistic compliance," the UK CCI model demonstrates that retail disclosure does not have to be an enemy of sustainable finance. Instead, it offers a functional blueprint for how the EU might eventually refine its own rules, proving that to truly eliminate greenwashing, regulators must give asset managers the structural space to tell the whole truth[39].

[38]Srivastava Deepak. "UK CCI and EU PRIIPs: Key Regulatory Differences. A side-by-side analysis of costs, risk and performance requirements". In: (Feb. 19, 2026).
[39]Fscom, "FCA Consumer Composite Investments (CCIs): Say goodbye to the KI(I)DS!".

Chapter 3

The SFDR as a Disclosure Revolution: The Entity-Level Requirements

3.1 The SFDR Regulation (Reg. EU 2019/2088): Objectives and Key Novelties

The regulatory imperfections outlined in the previous chapter highlight a fundamental tension within the European financial framework:
While instruments such as the PRIIPs Regulation were designed to improve retail investor protection through standardized disclosure, they proved structurally inadequate in capturing the emerging sustainability dimension of financial markets.
In particular, the absence of a coherent methodology for integrating environmental, social, and governance (ESG) factors into pre-contractual information contributed to informational asymmetries and, in some cases, facilitated forms of inadvertent greenwashing.
Against this context and situation, the introduction of the Sustainable Finance Disclosure Regulation (SFDR) represents a decisive shift in the European regulatory approach. Rather than merely refining existing disclosure practices, the SFDR establishes a comprehensive and harmonized framework aimed at fixing sustainability considerations directly into the processes of making decisions of financial market participants and financial advisers. In doing so, it transforms transparency from a passive reporting obligation into an active regulatory tool designed to influence market behavior and capital allocation.
The term SFDR is born from the Regulation (EU) 2019/2088 of 27 November 2019 on sustainability-related disclosures in the financial services sector. In particular, this settlement is one of the earliest results gotten from the European Commission's Sustainable Finance Action Plan, and began applying on 10 March 2021. Then, it has been integrated

by the Level 2 Commission Delegated Regulation (CDR 2022/1288), and itself amended by CDR 2023/363.
From that moment, the general opinion was that the Regulation has been the reference legal text for asset managers, financial advisors and institutional investors, when determining the sustainability-related disclosures, at product-level and entity-level.
Initially, because the Commission had no other models or blueprints, the outcome of the Regulation was quite impressive, but after several years, considering how te world evolved, it has been observed how it didn't quite function as intended. Rather than acting strictly as a disclosure regime, it evolved into a de facto labeling scheme for sustainable products. Also, without any binding criteria to justify these 'green' labels, investors found it difficult to verify the claims. This lack of clarity significantly increased the risk of greenwashing, leading to situations in which products were sold under false pretenses.
It is also important to point out that, as the Commission itself thought, the cooperation between the SFDR and other parts of the EU legislation was not the best[1].
To adjust this initial misalignment, the Commission initiated an overall (re)assessment of the SFDR, even through a public[2] and then a targeted[3] consultation in September 2023. The final result is a legislative proposal translated into an amended SFDR which fully entered into force two years after the consultations.

With that said, it is time to examine the objectives and key novelties.
First of all, the regulation tells us that the SFDR is described and divided into "Recitals" (More than 70) and 2articles. The first 5 (Recitals) describe and settle the pillars of the political ideas of the legislation, by putting together finance and sustainable objectives, as follows:

(Recital (1)): frame the discussion between United Nations (UN), Sustainable Development Goals (SDGs) and Commission and Council statements;
(Recitals (2) and (3)): refer specifically to climate change and the Paris Agreement;

[1] European Parliament and Council of the European Union, *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR).*
[2] Available at: `https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13961-Sustainable-Finance-Disclosure-Regulation-assessment/F_en`.
[3] Available at: `https://finance.ec.europa.eu/regulation-and-supervision/consultations/finance-2023-sfdr-implementation_en`.

(Recital (4)): mention the harmonized rules on investment funds, including Undertakings for the Collective Investment in Transferable Securities (UCITS), Alternative Investment Funds Managers Directive (AIFMD), European Long-Term Investment Funds (ELTIFS), Institutions for Occupational Retirement Provision (IORPs), European Social Entrepreneurship Funds (EuSEF) and Pan-European Personal Pension Products (PEPPs);
and then a "problem", which, according to Recital (5), was that:
Disclosures to end investors on the integration of sustainability risks, on the consideration of adverse sustainability impacts, on sustainable investment objectives, or on the promotion of environmental or social characteristics, in investment decision-making and in advisory processes, are insufficiently developed because such disclosures are not yet subject to harmonized requirements.

This could seem like a lot of information, so let's summarize it:
The basis for the regulation, according to the co-legislators, are "disclosures", and the problem, as previously cited, has 3 main points:
(1) integration of sustainability risks (including, as seen in previous chapters, their impact on remuneration),
(2) consideration of adverse sustainability impacts, and
(3) sustainable investment objectives or the promotion of environmental or social characteristics, all in investment decision-making and advisory processes.
Obviously, all three points are important for the final investors, as also confirmed by the legislator, and are better displayed and analyzed in Article 1 SFDR, which finally addresses the scope of the SFDR Legislation itself:

"This Regulation lays down harmonized rules for financial market participants and financial advisers on transparency with regard to the integration of sustainability risks and the consideration of adverse sustainability impacts in their processes and the provision of sustainability-related information with respect to financial products."

And then it continues by illustrating the subjective scope of application:

"i.e., “financial market participants” (FMPs) and “financial advisers” (FAs) as the addressees of its provisions, the former including all kinds of financial institutions that provide portfolio management and fund management services, or financial advice; and The objective scope of application, i.e., “financial products”, which are defined as portfolios that are subject to management under MiFID, alternative investment funds (AIF), insurance-based investment products (IBIPs), pension products, pension schemes, UCITS or pan-European pension products (PEPPs)."[4]

Basically, the SFDR is a broad rule that focuses on the people who actually manage and sell investments, like fund managers and financial advisers. This is key because most regular investors don't buy individual stocks; they rely on these professionals to build and manage portfolios for them.
By making it mandatory for managers to include sustainability data, the law makes sure that investors finally have all the information about environmental risks and impacts before they put their money in.
This, however, raises an important issue as practical challenges have already been identified by the ESG disclosures analyzed in Figure 2.3.a, where the integration of SFDR requirements into the pre-existing PRIIPs framework is often resulting in fragmented or inconsistent information for the final investor.
This regulatory shift also marks the implementation of the double materiality paradigm previously discussed (see Section 1.4). While the PRIIPs framework (Chapter 2) remains primarily anchored to financial materiality, focusing on how sustainability risks might affect the investor's return, the SFDR implement impact materiality.
By requiring disclosures through Principal Adverse Impacts (see Section 3.3), the SFDR forces financial institutions to account for their noticeable impact on the environment and society, bridging the gap between traditional investor protection and the bigger objectives of the EU Sustainable Finance strategy.

It's also important to remember that the SFDR was a sort of "first mover". It was passed in 2019, which is quite early. Because of this, it forced managers to report on "sustainable investments" before there was even a clear, official European definition of

[4]European Parliament and Council of the European Union, *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR).*

Article 2 (1) (17) SFDR	Article 3 TR
sustainable investment' means an investment in an economic activity that contributes to an environmental objective, as measured, for example, by key resource efficiency indicators on the use of energy, renewable energy, raw materials, water and land, on the production of waste, and greenhouse gas emissions, or on its impact on biodiversity and the circular economy, or an investment in an economic activity that contributes to a social objective, in particular an investment that contributes to tackling inequality or that fosters social cohesion, social integration and labour relations, or an investment in human capital or economically or socially disadvantaged communities, provided that such investments do not significantly harm any of those objectives and that the investee companies follow good governance practices, in particular with respect to sound management structures, employee relations, remuneration of staff and tax compliance;	For the purposes of establishing the degree to which an investment is environmentally sustainable, an economic activity shall qualify as environmentally sustainable where that economic activity: a) contributes substantially to one or more of the environmental objectives set out in Article 9 in accordance with Articles 10 to 16; b) does not significantly harm any of the environmental objectives set out in Article 9 in accordance with Article 17; c) is carried out in compliance with the minimum safeguards laid down in Article 18; and, d) complies with technical screening criteria that have been established by the Commission in accordance with Article 10 (3), 11(3), 12(2), 13(2), 14(2) or 15(2).
Requirements 1. Contribution to an environmental or social objective. 2. Do not significant harm to environmental or social objective. 3. Good governance practices in investee companies.	Requirements 1. Substantial contribution to environmental objective. 2. Do not significant harm to environmental objective. 3. Respect of minimum safeguards. 4. Compliance with technical screening criteria.

(3.1.a) The Concept of Sustainable Investment - Comparison

what that actually meant.

The Taxonomy Regulation (which defines "green" activities) didn't come along until 2020 and only covers environmental issues, not social ones. It was then here that the SFDR had to come up with its own definition for both "green" and "social" investments.

Then, even if it mostly aligns with newer rules, some tricky differences have been identified between the two definitions, as shown in Figure 3.1.a

If we compare the two, the Taxonomy (TR) is much more specific about environmental rules. It has very strict "technical checklists" that an investment must pass to be called green. The SFDR, on the other hand, is broader and doesn't require those same detailed technical tests.[5]

However, the SFDR looks at both the environmental and the social side of things. This means that under the SFDR, an investment isn't considered "sustainable" if it helps the planet but hurts people (or vice versa).[6]

Also, the company being invested in must be managed properly and honestly; if the leadership is poor or unethical, it can't be called a sustainable investment.

[5] Ibidem.

[6] While the Final Report on Social Taxonomy was published by the Platform on Sustainable Finance in February 2022, the legislative process has encountered significant political friction. Indeed, as of 2024, the SFDR is still the primary tool for social investment disclosure.

3.2 Entity-Level Disclosure: The Integration of Sustainability Risks

The SFDR architecture is built upon a "two-tier" disclosure obligation:
The product-level, which focuses on the specific characteristics of financial instruments, and the entity-level, which addresses the institutional framework of Financial Market Participants (FMPs) and Financial Advisers.
This distinction is crucial because it recognizes that the transparency of a product is only as credible as the institutional commitment behind it. The SFDR is the "key element" of a strategy that seeks to align the internal governance of financial firms with the broader goals of the EU Green Deal[7].
Under Article 3 of the SFDR, entities are required to publish information about their policies on the integration of sustainability risks in their investment decision-making process. This requirement marks a departure from the traditional "compliance-only" approach to ESG.
Indeed, sustainability risk is defined as an environmental, social, or governance event that could cause an actual or a potential material negative impact on the value of an investment, which means that it is no longer treated as a marginal "ethical" concern but as a structural financial risk.

The integration of this risk requires a sophisticated redesign of internal risk management systems. Financial entities must now demonstrate how they identify, measure, and manage the sustainability risk. This process is inherently linked to the concept of financial materiality discussed in Chapter 2 regarding PRIIPs; however, the SFDR expands this by forcing entities to disclose the methodology used.
Despite that, also in this case, the challenge lies in the lack of standardized data, which often forces entities to rely on third-party ESG ratings that may lack transparency and consistency[8].

[7]Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

[8]European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

It is time to shift this analysis on the different aspects, where one of the most innovative one related to the entity-level disclosure is Article 4, which introduces the Principal Adverse Impacts (PAIs). While Article 3 focuses on how sustainability risks affect the firm (outside-in), Article 4 focuses on how the firm's investments affect the world (inside-out), implementing the impact materiality pillar of the double materiality paradigm.

The regulation adopts a "comply or explain" mechanism, where FMPs with more than 500 employees are mandatorily required to disclose how they consider PAIs, while smaller entities may choose to explain the reasons for not disclosing anything.
This approach aims to balance the need for transparency with the administrative weight on smaller players.
However, empirical evidence suggests a "signaling effect": Even smaller firms are increasingly opting in to avoid being perceived as "less sustainable" by institutional investors.

To ensure that sustainability is interlinked into the very framework of corporate culture, Article 5 of the SFDR, instead, requires entities to disclose how their remuneration policies are consistent with the integration of sustainability risks. This is a powerful tool to fight against the "short-termism" that has historically affected financial markets[9].

By linking executive compensation to ESG performance or, at the very least, to the proper management of sustainability risks, the regulation aligns the interests of management with long-term value creation. Client protection is not just about "informing the client" but about "knowing the product" and ensuring that the manufacturer has an attitude that prioritizes the client's best interest[10].
It is also true, however, that the complexity of entity-level disclosures poses a significant challenge for retail investors. While the information is technically "available" on websites, its accessibility is often limited.
Also, in the context of the Retail Investment Strategy (RIS), the general idea would be that transparency must go beyond the mere publication of PDF documents[11], and this is

[9]European Parliament and Council of the European Union, *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR).*

[10]Schaeken Willemaers, "Client Protection on European Financial Markets – From Inform Your Client to Know Your Product and Beyond: An Assessment of the PRIIPs Regulation, MiFID II/MiFIR and IMD 2".

[11]Annunziata, *Retail Investment Strategy: How to boost retail investor's participation in financial markets.*

not an easy objective to achieve, given the difficulty of the matter.

The way information is presented online, the so called "digital architecture", can act as a form of "hope the retail client is motivated by reading this".
If entity-level disclosures are put under several layers of sub-menus, the transparency objective is almost defeated; who would ever be always willing to read and understand everything?
Therefore, the SFDR must be read in conjunction with MiFID II[12] and the upcoming RIS[13] developments, to ensure that the retail investor can actually use this institutional information to make informed comparisons[14] (Something which is not easy and guaranteed as well).

GarantiBank International N.V. (LEI - L35YSDFOIH056VDJ2557) recognizes that events or circumstances of an environmental, social or governance nature (ESG), if they occur, can have an actual or potential significant adverse effect on the value of an investment. These are referred to as sustainability risks.

Here are a few examples of sustainability risks:

1. Climate change risks: These risks refer to the physical and financial impacts of climate change, such as extreme weather events, sea level rise, and regulatory changes related to carbon emissions.
2. Water scarcity risks: As freshwater resources become increasingly scarce in some parts of the world, companies and investors may face risks related to water availability, water quality, and water pricing.
3. Biodiversity risks: As ecosystems are disrupted by human activity, there are risks related to the loss of biodiversity and the resulting impacts on human health, food security, and other key factors.
4. Labor and human rights risks: Companies and investors may face risks related to labor practices, such as worker safety and working conditions, as well as risks related to human rights violations in their supply chains.
5. Corporate governance risks: Poor corporate governance practices, such as lack of transparency or conflicts of interest, can lead to financial and reputational risks for companies and investors.

These are just a few examples of the types of sustainability risks that investors and companies may face. It's important to note that these risks can vary depending on the specific industry, geography, and other factors.

(3.2.a) Examples of sustainable risks recognized by *GarantiBank International N.V.*

[12] MiFID II establishes how financial advisers and asset managers interact with clients: e.g. the final's investment preferences and risk tolerance. Later amended in 2022 so as to ensure that client sustainability preferences are taken into account during the investment process. Source: Eurosif

[13] Retail Investment Strategy

[14] Annunziata, *Towards an EU Charter for the Protection of End Users in Financial Markets.*

3.3 Principal Adverse Impacts (PAIs): The Negative Impact Paradigm

The introduction of Principal Adverse Impacts (PAIs) represents arguably the most significant paradigm shift within the Sustainable Finance Disclosure Regulation.
This is because, while traditional financial regulation, exemplified by the PRIIPs framework and MiFID II, focuses on the "outside-in" perspective, by assessing how sustainability risks may affect the financial value of an investment (financial materiality), the PAI regime applies the "inside-out" perspective. Indeed, it expresses that Financial Market Participants disclose the negative externalities, that their investment decisions utilize, on the environment and society. This transition, from an approach centered on risk to an impact one, marks the birth of the "negative impact paradigm" in European financial law[15].
The PAI framework is the technical engine of the "impact" pillar within the double materiality doctrine. By requiring the disclosure of specific indicators, the SFDR forces a shift in the financial responsibilities of asset managers:
They are no longer merely "managers" of financial capital, but they also oversee the social and environmental aspects.
However, as also mentioned previously, the legislative design of Article 4 SFDR introduces a "comply or explain" mechanism that creates a graded transparency landscape. While mandatory for large FMPs (exceeding 500 employees), smaller entities may opt out by providing reasons for not considering adverse impacts. This regulatory flexibility has been criticized for creating "isolated entities" and a "signaling gap" in the retail market.
Indeed, empirical evidence suggests that retail investors often struggle to interpret the absence of PAI disclosures, potentially misunderstanding smaller firm's "explanation" as a lack of sustainability commitment, rather than a proportional administrative choice[16].
Furthermore, the lack of a standardized format for these "explanations" weakens the comparability that the SFDR tried to establish[17].

[15] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

[16] Boni and Cremasco, "Is the European Union (EU) Sustainable Finance Disclosure Regulation (SFDR) effective in shaping sustainability objectives? An analysis of investment fund's behaviour".

[17] European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

If we go back to the PAI structure, we see that its regime is governed by a set of mandatory and opt-in indicators detailed in the Regulatory Technical Standards (RTS). These range from greenhouse gas emissions and carbon footprint to social metrics such as the unadjusted gender pay gap and board gender diversity.
In that case, it highlights how the fundamental challenge is now the "data mismatch":

"The SFDR requirements preceded the comprehensive corporate reporting mandates under the Corporate Sustainability Reporting Directive (CSRD)."

This temporal gap has forced FMPs to rely heavily on third-party data providers and "implied" metrics. As a consequence, the reliance on estimated data introduces significant noise into the reporting process.
When a manager "delegates" the carbon footprint of an investee company due to missing public disclosures, the resulting PAI score may reflect the data provider's methodology more than the company's actual environmental impact[18].
This "methodological fragmentation" poses a direct threat to the integrity of the disclosure, as different providers often provide diverging results for the same PAI indicator[19].
A critical, yet often misunderstood, function of PAIs is their role in the "Do No Significant Harm" (DNSH) assessment under Article 2(17) of the SFDR.
To qualify if an investment is "sustainable," a manager must prove that it does not significantly harm any environmental or social objective. The SFDR technical standards specify that this proof must be anchored in the PAI indicators.
This creates a considerable point of technical friction. Unlike the Taxonomy Regulation, which uses Technical Screening Criteria (TSC), based on science, to define harm, the SFDR uses PAIs as high-level "red flags".
An investment might pass the PAI boundary but still be considered harmful under the Taxonomy's more granular DNSH criteria, or vice versa. This "dual-track" harm assessment leads to operational complexity and increases the risk of inadvertent greenwashing, where a fund is marketed as "sustainable" under SFDR but fails to meet the scientific

[18] Lambillon and Chesney, "How Green is 'Dark Green'? An Analysis of SFDR Article 9 Funds".
[19] Scheitza and Busch, "SFDR Article 9: Is It All About Impact?"

rigor of the Taxonomy[20].

While environmental PAIs dominate the discourse, the social PAIs (e.g., violations of UN Global Compact principles) are becoming increasingly central, especially given the absence of a formal Social Taxonomy. It is then here that the SFDR tries to limit the gap of measure for social sustainability.

However, the financial sector often lacks the expertise to conduct deep human rights due diligence. This results in "mediocre" disclosures where entities claim compliance with minimum safeguards without providing evidence of active engagement or mitigation of social adverse impacts[21].

In the end, for the retail investor, the PAI paradigm presents a significant mental fatigue. The raw data, such as "hazardous waste ratio" or "emissions to water", is often incomprehensible without context.

The effectiveness of the PAI paradigm is dependent on the Retail Investment Strategy and its ability to translate technical disclosures into "digital prompts" and comparable labels[22].

Without a simplified interface, the PAI disclosure remains a "passive transparency" exercise, which is made available on a website but functionally invisible to the end-user. As a result, it fails to achieve its primary goal of reorienting capital flows toward truly sustainable activities[23].

[20] EU Platform on Sustainable Finance, *Advancing Sustainable Finance: Technical Criteria for New Activities & First Review of the Climate Delegated Act*.

[21] Litwin and Savourey, “Human Rights in EU Sustainable Finance”.

[22] Annunziata, *Retail Investment Strategy: How to boost retail investor’s participation in financial markets*.

[23] Schaeken Willemaers, “Client Protection on European Financial Markets – From Inform Your Client to Know Your Product and Beyond: An Assessment of the PRIIPs Regulation, MiFID II/MiFIR and IMD 2”.

3.3.1 Mandatory and Optional PAIs: The Comply or Explain Approach

This small section is dedicated to better explain the "comply or explain" approach of the PAIs (Article 4 SFDR).

It is stated that there is a distinction between mandatory indicators and those that are left to the discretion of the Financial Market Participant. Indeed, according to the Regulatory Technical Standards, FMPs are required to report on a set of 14 mandatory indicators for investments in investee companies, covering areas such as greenhouse gas emissions, biodiversity, water, and social matters, plus additional indicators for investments in sovereigns[24].

Beyond these, the regulation provides a list of optional environmental and social indicators, from which FMPs must select at least one of each to extend the scope of their impact assessment.

While intended to alleviate the administrative burden on small and medium sized enterprises in the financial sector, the "explain" option has created an unintended market hierarchy.

Indeed, the SFDR has transformed "explanation" into a negative signal. In an environment increasingly dominated by institutional directives for sustainability, choosing the "explain" route can lead to a bad "reputational achievement", where smaller managers are excluded from certain distribution channels or institutional portfolios because they lack the technical infrastructure to report on their sustainability PAIs[25].

This has led to an almost forced "opt-in" phenomenon. This is because many smaller FMPs are choosing to comply with Article 4 despite being below the 500 employee limit, driven by the need to maintain competitiveness and avoid being perceived as "less transparent" than their larger counterparts. This shift from a voluntary to an almost mandatory regime highlights the power of disclosure as a market tool, but it also raises concerns about the quality of the data produced by smaller entities that may lack the resources for

[24] European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

[25] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

rigorous impact measurement[26].

The "comply or explain" mechanism also highlights the friction between the ambition of the EU Sustainable Finance strategy and the reality of data availability. Many entities opting for the "explain" route cite the "lack of data from investee companies" as their primary justification[27].

This suggests that the "explain" statement is not merely a refusal to comply, but a reflection of a systemic gap in the data value chain.

Furthermore, the complexity of the mandatory indicators,which require granular data on topics like "unadjusted gender pay gap" or "emissions to water", means that even for complying entities, the "comply" part of the regime is often filled with warnings and estimations.

In the end, the critical analysis of this section suggests that the "comply or explain" approach, while it legally sounds as an interesting procedure, it remains functionally blocked by the delay in the full implementation of corporate reporting standards, leading to a situation where "compliance" often results in mediocre disclosures rather than useful information that could assist the final investor into his decision making plan[28].

Below, PAI indicators and technical disclosures being summarized in three major tables, highlighting the general requirements along with the clear market pressure that is being put on smaller entities (<500 employees):

[26] Boni and Cremasco, "Is the European Union (EU) Sustainable Finance Disclosure Regulation (SFDR) effective in shaping sustainability objectives? An analysis of investment fund's behaviour".

[27] European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

[28] Annunziata, *Towards an EU Charter for the Protection of End Users in Financial Markets.*

SFDR TABLE 1 - Statement on principal adverse impacts of investment decisions on sustainability factors		
Indicators applicable to investments in investee companies		
Adverse sustainability indicator		Metric
CLIMATE AND OTHER ENVIRONMENT-RELATED INDICATORS		
Greenhouse gas emissions	1. GHG emissions	Scope 1 GHG emissions
		Scope 2 GHG emissions
		Scope 3 GHG emissions
		Total GHG emissions
	2. Carbon footprint	Carbon footprint
	3. GHG intensity of investee companies	GHG intensity of investee companies
	4. Exposure to companies active in the fossil fuel sector	Share of investments in companies active in the fossil fuel sector
	5. Share of non-renewable energy consumption and production	Share of non-renewable energy consumption and non-renewable energy production of investee companies from non-renewable energy sources compared to renewable energy sources, expressed as a percentage of total energy sources
	6. Energy consumption intensity per high impact climate sector	Energy consumption in GWh per million EUR of revenue of investee companies, per high impact climate sector
Biodiversity	7. Activities negatively affecting biodiversity-sensitive areas	Share of investments in investee companies with sites/operations located in or near to biodiversity-sensitive areas where activities of those investee companies negatively affect those areas
Water	8. Emissions to water	Tonnes of emissions to water generated by investee companies per million EUR invested, expressed as a weighted average
Waste	9. Hazardous waste and radioactive waste ratio	Tonnes of hazardous waste and radioactive waste generated by investee companies per million EUR invested, expressed as a weighted average
INDICATORS FOR SOCIAL AND EMPLOYEE, RESPECT FOR HUMAN RIGHTS, ANTI-CORRUPTION AND ANTI-BRIBERY MATTERS		
Social and employee matters	10. Violations of UN Global Compact principles and Organisation for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises	Share of investments in investee companies that have been involved in violations of the UNGC principles or OECD Guidelines for Multinational Enterprises
	11. Lack of processes and compliance mechanisms to monitor compliance with UN Global Compact principles and OECD Guidelines for Multinational Enterprises	Share of investments in investee companies without policies to monitor compliance with the UNGC principles or OECD Guidelines for Multinational Enterprises or grievance/complaints handling mechanisms to address violations of the UNGC principles or OECD Guidelines for Multinational Enterprises
	12. Unadjusted gender pay gap	Average unadjusted gender pay gap of investee companies
	13. Board gender diversity	Average ratio of female to male board members in investee companies, expressed as a percentage of all board members
	14. Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons and biological weapons)	Share of investments in investee companies involved in the manufacture or selling of controversial weapons
Indicators applicable to investments in sovereigns and supranationals		
Adverse sustainability indicator		Metric
Environmental	15. GHG intensity	GHG intensity of investee countries
Social	16. Investee countries subject to social violations	Number of investee countries subject to social violations (absolute number and relative number divided by all investee countries), as referred to in international treaties and conventions, United Nations principles and, where applicable, national law
Indicators applicable to investments in real estate assets		
Adverse sustainability indicator		Metric
Fossil fuels	17. Exposure to fossil fuels through real estate assets	Share of investments in real estate assets involved in the extraction, storage, transport or manufacture of fossil fuels
Energy efficiency	18. Exposure to energy-inefficient real estate assets	Share of investments in energy-inefficient real estate assets

(3.3.a) Examples of PAI Indicators: Statement on principal adverse impacts of investment decisions on sustainability factors by *Invest Europe*

SFDR TABLE 1 - Statement on principal adverse impacts of investment decisions on sustainability factors		
Indicators applicable to investments in investee companies		
Adverse sustainability indicator		Metric
CLIMATE AND OTHER ENVIRONMENT-RELATED INDICATORS		
Greenhouse gas emissions	1. GHG emissions	Scope 1 GHG emissions
		Scope 2 GHG emissions
		Scope 3 GHG emissions
		Total GHG emissions
	2. Carbon footprint	Carbon footprint
	3. GHG intensity of investee companies	GHG intensity of investee companies
	4. Exposure to companies active in the fossil fuel sector	Share of investments in companies active in the fossil fuel sector
	5. Share of non-renewable energy consumption and production	Share of non-renewable energy consumption and non-renewable energy production of investee companies from non-renewable energy sources compared to renewable energy sources, expressed as a percentage of total energy sources
	6. Energy consumption intensity per high impact climate sector	Energy consumption in GWh per million EUR of revenue of investee companies, per high impact climate sector
Biodiversity	7. Activities negatively affecting biodiversity-sensitive areas	Share of investments in investee companies with sites/operations located in or near to biodiversity-sensitive areas where activities of those investee companies negatively affect those areas
Water	8. Emissions to water	Tonnes of emissions to water generated by investee companies per million EUR invested, expressed as a weighted average
Waste	9. Hazardous waste and radioactive waste ratio	Tonnes of hazardous waste and radioactive waste generated by investee companies per million EUR invested, expressed as a weighted average
INDICATORS FOR SOCIAL AND EMPLOYEE, RESPECT FOR HUMAN RIGHTS, ANTI-CORRUPTION AND ANTI-BRIBERY MATTERS		
Social and employee matters	10. Violations of UN Global Compact principles and Organisation for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises	Share of investments in investee companies that have been involved in violations of the UNGC principles or OECD Guidelines for Multinational Enterprises
	11. Lack of processes and compliance mechanisms to monitor compliance with UN Global Compact principles and OECD Guidelines for Multinational Enterprises	Share of investments in investee companies without policies to monitor compliance with the UNGC principles or OECD Guidelines for Multinational Enterprises or grievance/complaints handling mechanisms to address violations of the UNGC principles or OECD Guidelines for Multinational Enterprises
	12. Unadjusted gender pay gap	Average unadjusted gender pay gap of investee companies
	13. Board gender diversity	Average ratio of female to male board members in investee companies, expressed as a percentage of all board members
	14. Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons and biological weapons)	Share of investments in investee companies involved in the manufacture or selling of controversial weapons
Indicators applicable to investments in sovereigns and supranationals		
Adverse sustainability indicator		Metric
Environmental	15. GHG intensity	GHG intensity of investee countries
Social	16. Investee countries subject to social violations	Number of investee countries subject to social violations (absolute number and relative number divided by all investee countries), as referred to in international treaties and conventions, United Nations principles and, where applicable, national law
Indicators applicable to investments in real estate assets		
Adverse sustainability indicator		Metric
Fossil fuels	17. Exposure to fossil fuels through real estate assets	Share of investments in real estate assets involved in the extraction, storage, transport or manufacture of fossil fuels
Energy efficiency	18. Exposure to energy-inefficient real estate assets	Share of investments in energy-inefficient real estate assets

(3.3.b) Examples of PAI Indicators: Statement on principal adverse impacts of investment decisions on sustainability factors by *Invest Europe*

Adverse sustainability impact	Adverse impact on sustainability factors (qualitative or quantitative)	Metric
SFDR TABLE 2 - Additional climate and other environment-related indicators		
Indicators applicable to investments in investee companies		
CLIMATE AND OTHER ENVIRONMENT-RELATED INDICATORS		
Emissions	1. Emissions of inorganic pollutants	Tonnes of inorganic pollutants equivalent per million EUR invested, expressed as a weighted average
	2. Emissions of air pollutants	Tonnes of air pollutants equivalent per million EUR invested, expressed as a weighted average
	3. Emissions of ozone-depleting substances	Tonnes of ozone-depleting substances equivalent per million EUR invested, expressed as a weighted average
	4. Investments in companies without carbon emission reduction initiatives	Share of investments in investee companies without carbon emission reduction initiatives aimed at aligning with the Paris Agreement
Energy performance	5. Breakdown of energy consumption by type of non-renewable sources of energy	Share of energy from non-renewable sources used by investee companies broken down by each non-renewable energy source
Water, waste and material emissions	6. Water usage and recycling	1. Average amount of water consumed by the investee companies (in cubic meters) per million EUR of revenue of investee companies
		2. Weighted average percentage of water recycled and reused by investee companies
	7. Investments in companies without water management policies	Share of investments in investee companies without water management policies
	8. Exposure to areas of high water stress	Share of investments in investee companies with sites located in areas of high water stress without a water management policy
	9. Investments in companies producing chemicals	Share of investments in investee companies the activities of which fall under Division 20.2 of Annex I to Regulation (EC) No 1893/2006
	10. Land degradation, desertification, soil sealing	Share of investments in investee companies the activities of which cause land degradation, desertification or soil sealing
	11. Investments in companies without sustainable land/agriculture practices	Share of investments in investee companies without sustainable land/agriculture practices or policies
	12. Investments in companies without sustainable oceans/seas practices	Share of investments in investee companies without sustainable oceans/seas practices or policies
	13. Non-recycled waste ratio	Tonnes of non-recycled waste generated by investee companies per million EUR invested, expressed as a weighted average
	14. Natural species and protected areas	1. Share of investments in investee companies whose operations affect threatened species
		2. Share of investments in investee companies without a biodiversity protection policy covering operational sites owned, leased, managed in, or adjacent to, a protected area or an area of high biodiversity value outside protected areas
	15. Deforestation	Share of investments in companies without a policy to address deforestation
Green securities	16. Share of securities not issued under Union legislation on environmentally sustainable bonds	Share of securities in investments not issued under Union legislation on environmentally sustainable bonds
Indicators applicable to investments in sovereigns and supranationals		
Green securities	17. Share of bonds not issued under Union legislation on environmentally sustainable bonds	Share of bonds not issued under Union legislation on environmentally sustainable bonds
Indicators applicable to investments in real estate assets		
Greenhouse gas emissions	18. GHG emissions	Scope 1 GHG emissions generated by real estate assets
		Scope 2 GHG emissions generated by real estate assets
		Scope 3 GHG emissions generated by real estate assets
		Total GHG emissions generated by real estate assets
Energy consumption	19. Energy consumption intensity	Energy consumption in GWh of owned real estate assets per square meter
Waste	20. Waste production in operations	Share of real estate assets not equipped with facilities for waste sorting and not covered by a waste recovery or recycling contract
Resource consumption	21. Raw materials consumption for new construction and major renovations	Share of raw building materials (excluding recovered, recycled and biosourced) compared to the total weight of building materials used in new construction and major renovations
Biodiversity	22. Land artificialisation	Share of non-vegetated surface area (surfaces that have not been vegetated in ground, as well as on roofs, terraces and walls) compared to the total surface area of the plots of all assets

(3.3.c) Examples of PAI Indicators: Additional climate and other environment-related indicators by *Invest Europe*

Adverse sustainability impact	Adverse impact on sustainability factors (qualitative or quantitative)	Metric
SFDR TABLE 3 - Additional indicators for social and employee, respect for human rights, anti-corruption and anti-bribery matters		
INDICATORS FOR SOCIAL AND EMPLOYEE, RESPECT FOR HUMAN RIGHTS, ANTI-CORRUPTION AND ANTI-BRIBERY MATTERS		
Indicators applicable to investments in investee companies		
Social and employee matters	1. Investments in companies without workplace accident prevention policies	Share of investments in investee companies without a workplace accident prevention policy
	2. Rate of accidents	Rate of accidents in investee companies expressed as a weighted average
	3. Number of days lost to injuries, accidents, fatalities or illness	Number of workdays lost to injuries, accidents, fatalities or illness of investee companies expressed as a weighted average
	4. Lack of a supplier code of conduct	Share of investments in investee companies without any supplier code of conduct (against unsafe working conditions, precarious work, child labour and forced labour)
	5. Lack of grievance/complaints handling mechanism related to employee matters	Share of investments in investee companies without any grievance/complaints handling mechanism related to employee matters
	6. Insufficient whistleblower protection	Share of investments in entities without policies on the protection of whistleblowers
	7. Incidents of discrimination	1. Number of incidents of discrimination reported in investee companies expressed as a weighted average
		2. Number of incidents of discrimination leading to sanctions in investee companies expressed as a weighted average
	8. Excessive CEO pay ratio	Average ratio within investee companies of the annual total compensation for the highest compensated individual to the median annual total compensation for all employees (excluding the highest-compensated individual)
Human Rights	9. Lack of a human rights policy	Share of investments in entities without a human rights policy
	10. Lack of due diligence	Share of investments in entities without a due diligence process to identify, prevent, mitigate and address adverse human rights impacts
	11. Lack of processes and measures for preventing trafficking in human beings	Share of investments in investee companies without policies against trafficking in human beings
	12. Operations and suppliers at significant risk of incidents of child labour	Share of investments in investee companies exposed to operations and suppliers at significant risk of incidents of child labour in terms of geographic areas or type of operation
	13. Operations and suppliers at significant risk of incidents of forced or compulsory labour	Share of the investments in investee companies exposed to operations and suppliers at significant risk of incidents of forced or compulsory labour in terms of geographic areas and/or the type of operation
	14. Number of identified cases of severe human rights issues and incidents	Number of cases of severe human rights issues and incidents connected to investee companies on a weighted average basis
Anti-corruption and anti-bribery	15. Lack of anti-corruption and anti-bribery policies	Share of investments in entities without policies on anti-corruption and anti-bribery consistent with the United Nations Convention against Corruption
	16. Cases of insufficient action taken to address breaches of standards of anti-corruption and anti-bribery	Share of investments in investee companies with identified insufficiencies in actions taken to address breaches in procedures and standards of anti-corruption and anti-bribery
	17. Number of convictions and amount of fines for violation of anti-corruption and anti-bribery laws	Number of convictions and amount of fines for violations of anti-corruption and anti-bribery laws by investee companies

(3.3.d) Examples of PAI Indicators: Additional indicators for social and employee, respect for human rights, anti-corruption and anti-bribery matters by *Invest Europe*

3.4 The Regulatory Interplay: SFDR, RTS, and the Taxonomy

The European sustainable finance framework is often described as a "tripod" where the SFDR, the Taxonomy Regulation (TR), and the Corporate Sustainability Reporting Directive (CSRD) must work simultaneously together.
However, the practical integration of these pillars relies heavily on the Regulatory Technical Standards (RTS)[29], the measures called "Level 2". The interplay between these regulations is not merely a matter of legal alignment but a complex methodological challenge, as the SFDR provides the disclosure obligations while the Taxonomy provides the scientific criteria for what constitutes a "green" activity[30].
The RTS were introduced to provide the granular templates and indicators necessary to make SFDR disclosures comparable. Their primary function in this interplay is to standardize how "Taxonomy alignment" is reported within SFDR pre-contractual and periodic documents. This bridge is essential because, while the Taxonomy defines "environmentally sustainable economic activities," the SFDR defines "sustainable investments", an extensive category that includes social objectives and does not necessarily require strict Taxonomy alignment[31].

Financial year (N)	2025														
KPI (1)	Total (2)	Propotion of Taxonomy eligible activities (3)	Taxonomy aligned activities (4)	Proportion of Taxonomy aligned activities (5)	Breakdown by environmental objectives of Taxonomy aligned activities						Proportion of enabling activities (12)	Proportion of transitional activities (13)	Not assessed activities considered non-material (14)	Taxonomy aligned activities in previous financial year (N-1) (15)	Proportion of Taxonomy aligned activities in previous financial year (N-1) (16)
					Climate Change Mitigation (6)	Climate Change Adaptation (7)	Water (8)	Circular Economy (9)	Pollution (10)	Biodiversity (11)					
Text	*EUR m*	*%*	*EUR m*	*%*	*%*	*%*	*%*	*%*	*%*	*%*	*%*	*%*	*%*	*Currency*	*%*
Turnover	**1500**	**93,3%**	**1000**	**66,7%**	**53,3%**	**0,0%**		**13,3%**			**0,0%**	**0,0%**	**6,7%**		
CapEx															
OpEx															

(3.4.a) Template Illustrative Example: Proportion of turnover, CapEx, OpEx from products or services associated with Taxonomy-eligible or Taxonomyaligned economic activities – disclosure covering year (N)(summary KPIs) by *European Commission*

[29]Standards issued by the ESBA which aim to define the term market for the purpose of calculating the 'general' component of market risk for equities under the standardized rules.
[30]Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*
[31]European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

This distinction has created a "compliance overlap" where Financial Market Participants (FMPs) must navigate two different sets of criteria for the same portfolio. The RTS attempt to harmonize this by requiring FMPs to disclose the percentage of the product's investments that are Taxonomy-aligned, using a mandatory template to visualize the degree of greenness[32], as in Figure 3.4.a.

A major point of conflict in this regulatory interplay is the "Do No Significant Harm" (DNSH) principle.

Although the principle exists in both the SFDR and the Taxonomy, it is implemented differently.

In the Taxonomy, DNSH is strictly linked to Technical Screening Criteria (TSC) for six environmental objectives, while in the SFDR, DNSH is assessed through the Principal Adverse Impacts (PAIs) indicators.

Main Features	SFDR DNSH (Art. 2(17) SFDR)	Taxonomy DNSH (Art. 17 TR)
Level of Application	**Entity or Investment Level** (portfolio/company).	**Activity Level** (specific economic activity).
Focus/Scope	Vey Large as it covers environmental and social objectives.	Specific as it focuses on the 6 environmental objectives.
Criteria	Aligned with Principal Adverse Impact (PAI) indicators.	Prescriptive "Technical Screening Criteria".
Nature	Qualitative/Quantitative.	Mostly quantitative/highly technical.
Goal	Ensure sustainable investments don't harm ESG goals.	Validate alignment for taxonomy-eligible activities.

(3.4.b) Comparison between the SFDR DNHS and the EU Taxonomy DNSH

This discrepancy leads to a sort of "DNSH contradiction":

An investment could potentially be considered "sustainable" under SFDR Article 2(17) because it passes the harm test based on the PAIs, but it fails to be "Taxonomy-aligned" because it does not meet the specific TSC required by the TR[33].

This lack of "interactiveness" between the two DNSH results in a big source of confusion for retail investors and a significant obstacle for fund managers who must maintain two separate compliance pipelines for a single financial product[34].

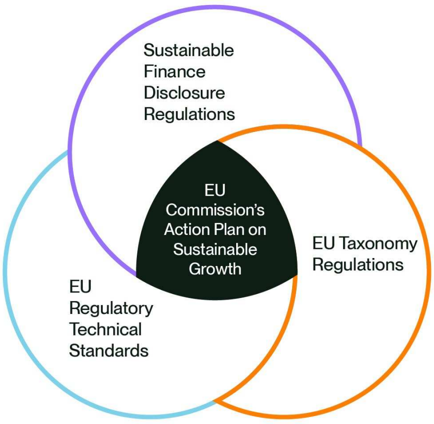
The effectiveness of the SFDR and Taxonomy interplay is fundamentally constrained by the availability of high-quality corporate data. While the TR requires companies to dis-

[32]Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR)*.

[33]EU Platform on Sustainable Finance, *Advancing Sustainable Finance: Technical Criteria for New Activities & First Review of the Climate Delegated Act*.

[34]European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR)*.

close their green turnover, CapEx, and OpEx, many firms (especially outside the EU or below the CSRD boundaries) do not yet provide this information. Consequently, FMPs are often forced to rely on "equivalent information" or third-party estimates to determine Taxonomy alignment[35].
This reliance on third-party estimates undermines the scientific integrity of the Taxonomy. Indeed, when the "greenness" of a fund is based on estimated alignment rather than reported data, the interplay between SFDR and TR becomes fragile, potentially even leading to "unintentional greenwashing". The RTS templates try to mitigate this by requiring a clear distinction between "reported" and "estimated" alignment, but for the retail investor, this refinement is often lost in the technical complexity of the disclosures[36].
Finally, the interplay is linked by the requirement for Minimum Safeguards (MS).
For an activity to be Taxonomy-aligned, it must comply not only with environmental TSC but also with international social standards[37]. The SFDR, on the other side, reinforces this through its "good governance" requirement and social PAI reporting.
The Minimum Safeguards function as a "social floor" for the entire framework[38].
However, the lack of a formal Social Taxonomy means that the social dimension of the interplay remains less developed than the environmental one, relying on qualitative assessments that are difficult to standardize within the RTS framework[39].



(3.4.c) SFDR, RTS, and the Taxonomy Regulatory Interplay

[35] Scheitza and Busch, "SFDR Article 9: Is It All About Impact?"
[36] Lambillon and Chesney, "How Green is 'Dark Green'? An Analysis of SFDR Article 9 Funds".
[37] Like OECD Guidelines, UNGPs
[38] Litwin and Savourey, "Human Rights in EU Sustainable Finance".
[39] Annunziata, *Towards an EU Charter for the Protection of End Users in Financial Markets.*

Chapter 4

SFDR: Product Disclosure and Benefits for Sustainable Finance

4.1 The Classification of Financial Products

When evaluated from a technical and regulatory perspective, the architecture of Regulation (EU) 2019/2088 (SFDR) is structured through a traditional European legislative design, split into explanatory recitals and explicit statutory provisions[1]. Subsequently, by comprising a total of 20 articles, as already mentioned many times, the regulation establishes a comprehensive harmonized framework designed to govern transparency across European financial markets.
Indeed, as dictated by Article 1 ("Subject Matter"), the primary objective of the SFDR is to lay down:

"harmonized rules for financial market participants and financial advisers on transparency with regard to the integration of sustainability risks and the consideration of adverse sustainability impacts in their processes and the provision of sustainability-related information with respect to financial products"[2].

While originally created strictly as an informational transparency tool to mitigate market fragmentation and information asymmetry, the practical application of the SFDR has undergone a radical transformation.
In practice, the regime has evolved from a pure disclosure mechanism into an inadvertent

[1] European Parliament and Council of the European Union, *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR).*

[2] Ibidem

product classification and labeling system. Market participants such as distributors, and retail investors have quickly adopted the disclosure standards established under Articles 8 and 9[3] as representative "quality labels" or corporate signatures of sustainability. This unintended shift has caused severe "classification pressure" on financial market participants and financial advisers, forcing them to strategically align and market their fund collection based on the qualitative intensity of their sustainability objectives[4].

To fully comprehend the structural mechanics of this product labeling phenomenon, it is necessary to investigate the regulatory path established by the preliminary articles of the SFDR. These opening statements create an institutional baseline regarding risk integration and governance that entities must navigate before evaluating product specific disclosures.

Following the definitions set firstly in Article 2, Article 3 introduces the initial disclosure mandates to provide on the websites. Under this provision, FMPs and financial advisers are legally required to publish clear policies on their corporate websites detailing how they integrate sustainability risks into their decisions made for their investment frameworks or insurance advisory processes.

Although this ensures that "green information" is theoretically available within the public domain, the institutional reality reveals a persistent clarity gap. For the retail investor, these website disclosures are frequently characterized by dense legal vocabulary, making the information difficult to navigate and compare[5].

This corporate governance framework is reinforced by Article 5, which targets internal corporate structures by directly linking executive and professional compensation to the management of sustainability risks. The primary objective of Article 5 is to align corporate culture with long-term value creation, ensuring that an institution's internal remuneration architecture does not incentivize behaviors suck as taking high risk on a short-term view, ignoring environmental, social, or governance (ESG) discredit.

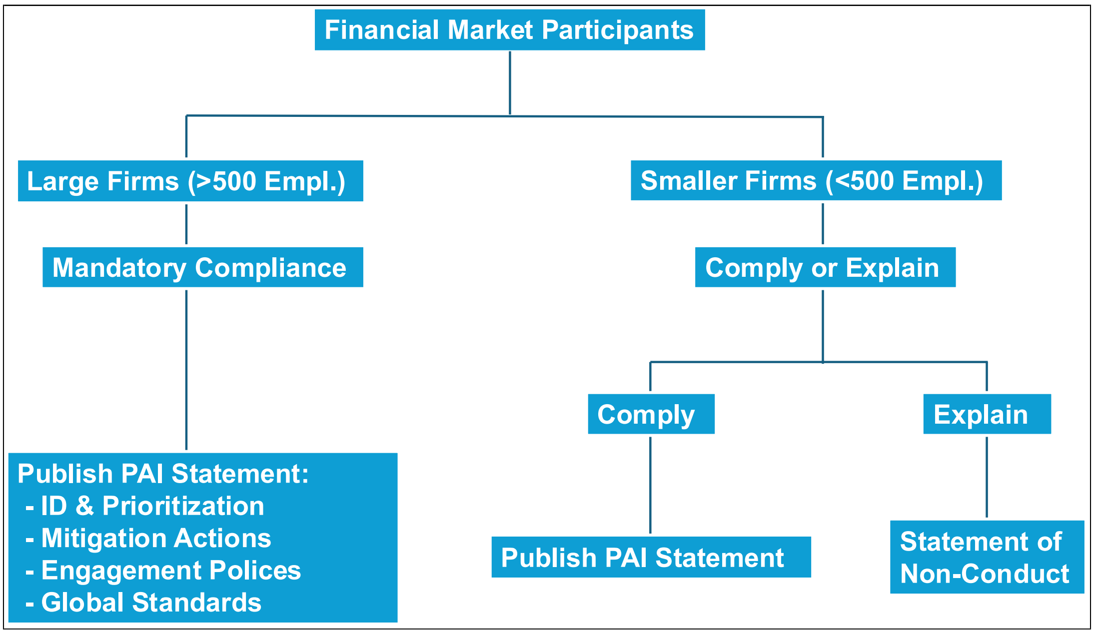
Operationally, Article 5 requires FMPs and financial advisers to incorporate explicit descriptions within their remuneration policies explaining how their salary and bonus struc-

[3] Which will be later analyzed.

[4] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR)*.

[5] Annunziata, *Retail Investment Strategy: How to boost retail investor's participation in financial markets.*

tures maintain consistency with the integration of sustainability risks[6]. Rather than forcing firms to draft independent, parallel corporate frameworks, the regulation mandates that this sustainability perspective be mixed into already existing remuneration policies required under sectoral EU legislation (such as UCITS, AIFMD, or MiFID II).
Furthermore, the mandate enforces website transparency, allowing external stakeholders to filter whether a firm's financial incentives are legitimately aligned with its sustainable marketing claims or if they introduce susceptibility based on conflict of interest[7].
Situated between these institutional mandates and product-specific classifications we find Article 4, which controls the "inside out" dimension of the double materiality paradigm through the Principal Adverse Impacts (PAIs) regime analyzed in the previous chapter.
Only to briefly summarize, Article 4 introduces a strict "comply or explain" mechanism, splitting the regulatory duties of financial entities based on corporate scale. Under this mechanism, market participants must state on their websites whether they actively record the negative externalities and the adverse impacts of their capital allocations on sustainability factors.



(4.1.a) Chart Summarizing how the PAI Statement Works

[6] European Parliament and Council of the European Union, *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR)*.

[7] Schaeken Willemaers, "Client Protection on European Financial Markets – From Inform Your Client to Know Your Product and Beyond: An Assessment of the PRIIPs Regulation, MiFID II/MiFIR and IMD 2".

Firms that choose to track these impacts must publish a comprehensive due diligence statement:

GREENMAN INVESTMENTS

SFDR Article 4 Disclosure

Statement on Principal Adverse Impacts

For the year ending 31 December 2023

1.0 Summary

1.1. Financial market participation

This statement on principal adverse impacts of investment decisions on sustainability factors (the **"Statement"**, **"PAI statement"**) applies to Premier Benchmark Property Limited t/a Greenman Investments. (**"Greenman"**), Legal Entity Identifier, 894500L5P5VR60BOUJ68.

1.2. Summary

Greenman considers principal adverse impacts (**"PAIs"**) of investment decisions on sustainability factors. This Statement is the consolidated statement on PAIs of investment decisions on sustainability factors for Greenman. This Statement covers the reference period from 1 January 2023 to 31 December 2023 (the **"Current Year"**). For the purpose of quantitative disclosures contained in this statement, disclosure is also made in respect of the reference period 1 January 2022 to 31 December 2022 (the **"Prior Year"**) where data is available.

Greenman's Board of Directors (the **"Board"**) is responsible for producing this statement and for considering the PAIs of investment decisions on sustainability factors, leveraging the methodologies and expertise of the wider Greenman Group to do so, where required and appropriate. The PAI indicators disclosed in this statement relate to assets held in Products for which Greenman is the AIFM. This applies irrespective of whether Greenman has delegated investment management of any of those Products to other Greenman Group entities. References throughout this document to assets managed by Greenman should be read accordingly.

Figure 4.1: Visual Example of Article 4, Due Diligence Statement

This disclosure outlines their (FPMs) methodologies for identifying, prioritizing, and mitigating the social and environmental harm caused by their investee companies. However, this process remains highly vulnerable to data fragmentation and imprecision, as corporate reporting standards across global value chains have decreased behind the implementation of the SFDR[8].

On the other side, firms that opt out of tracking these adverse impacts are legally mandated to provide a clear, public justification explaining the reasons behind their non-compliance, alongside an indication of whether and when they intend to adopt such measurements in the future.

For entities that comply with Article 4, the web-based due diligence statement must absolutely contain four core qualitative pillars:

- Identification and Prioritization: A clear breakdown of how the firm detects adverse impacts and determines which indicators carry material priority.
- Mitigation Actions: A detailed description of the actual adverse impacts discovered and the subsequent corrective measures implemented or planned by the firm to reduce them.
- Engagement Policies: A summary of corporate engagement, outlining how the FMP exercises its voting rights and maintains direct dialogue with investee companies to reduce sustainability harms.
- Alignment with Global Standards: A formal assessment of the firm's adherence to international codes of responsible business conduct, specifically measuring portfolio alignment with the long-term climate targets of the Paris Agreement.

Crucially, the regulatory flexibility of the "comply or explain" approach ceases to exist for large organizations. Article 4 establishes a mandatory threshold for FMPs and group structures exceeding 500 employees. For these larger institutions, opting out via an "explanation" is legally prohibited; they must actively monitor, manage, and report on the standardized PAI indicators[9].

This progressive acceleration from entity-level transparency (Articles 3 and 5) to adverse impact metrics (Article 4) creates the structural framework that shapes the product-level landscape. It is this institutional accumulation of data that ultimately drives and dictates the subsequent classification of financial products under Articles 6, 8, and 9[10].

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[8] European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

[9] European Parliament and Council of the European Union, *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR).*

[10] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

4.1.1 Article 6 Funds: The Basic Approach

Within the architecture of the SFDR, Article 6 represents the foundational baseline and the regulatory floor upon which the entire disclosure framework is constructed. While the financial industry and academic literature predominantly focus on the higher tier categories of Articles 8 and 9, a critical assessment of the regulation reveals that Article 6 is the mechanical anchor of the transparency regime. It ensures that no financial product distributed within the European Union can remain completely silent regarding its relationship with sustainability risks[11].

By establishing a universal minimum standard, the legislative intent of Article 6 was not to create an "ESG category", but rather to eliminate the historical opacity of traditional financial products, inserting the consideration of sustainability risks directly into the standard fiduciary duties of all asset managers[12].

The operational framework of Article 6 is governed by a strict dual mandate that applies to all financial products that do not qualify as promoting environmental or social characteristics (Article 8) or pursuing sustainable investments as their core objective (Article 9).

This mandate forces financial market participants and financial advisers to choose between two structural pathways: Integration or explicit justification.

The Integration Pathway (Article 6(1)(a)) dictates:

"FMPs must provide clear, pre-contractual disclosures detailing the manner in which sustainability risks are integrated into their investment decisions. This requires a qualitative explanation of how environmental, social, or governance events, such as climate transition costs, regulatory penalties, or labor disputes, are featured into the traditional risk and return financial models".

[11] European Parliament and Council of the European Union, *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR).*

[12] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

We then find the Justification Pathway (Article 6(1)(b)):

"If an FMP estimates sustainability risks to be entirely immaterial to a specific investment strategy, it cannot simply omit the disclosure. Instead, the regulation enforces a "comply or explain" mechanism at the product level: the manager must provide a clear, public, and legally binding explanation of the reasons why those risks are not considered relevant[13]".

This design marks a significant departure from pre-SFDR market practices. By forcing a fund, which is not ESG, to publicly state that it ignores sustainability risks, the regulation creates a powerful reputational deterrent. On that point, as already argued , this mechanism turns silence or "non integration" into a negative market signal, effectively forcing asset managers to conduct at least a baseline assessment of ESG risks to avoid the commercial stigma of distributing a product that explicitly declares an indifference to sustainability factors[14].
The underlying philosophy of Article 6 is strictly connected to the "outside-in" perspective of the double materiality paradigm, called financial materiality.
Indeed, unlike Articles 8 and 9, which introduce varying degrees of impact materiality (how the fund affects the world), Article 6 is concerned purely with asset protection (how the world may affects the fund's value).
From a legal point of view, this redefines the traditional scope of fiduciary duty on European financial markets. The regulation establishes that ignoring ESG risks is no longer an applicable option for a prudent agent: If a traditional, non-ESG equity fund suffers severe capital losses due to an unqualified climate risk (e.g., abandoned carbon assets or supply chain disruptions caused by extreme weather events), the pre-contractual disclosure mandated by Article 6 serves as the legal benchmark to evaluate whether the asset manager properly informed investors of these vulnerabilities[15].

[13]European Parliament and Council of the European Union, *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR).*

[14]Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

[15]Schaeken Willemaers, "Client Protection on European Financial Markets – From Inform Your Client to Know Your Product and Beyond: An Assessment of the PRIIPs Regulation, MiFID II/MiFIR and IMD 2".

Consequently, Article 6 acts as a bridge between the pre-ESG regulatory framework analyzed in Chapter 2 and the new sustainable finance regime. It puts into practice the principle that sustainability risk is, first and primary, a financial risk that can erode portfolio value, regardless of whether the fund manager or the end-investor possesses ethical or sustainable preferences[16].

A critical technical dimension of Article 6 funds is their explicit interaction with the Taxonomy Regulation.
Under Article 7 of the TR, any financial product that falls under Article 6 of the SFDR, and therefore does not promote environmental characteristics or invest in sustainable objectives, must explicitly include a standardized, mandatory disclaimer in its pre-contractual and periodic reports[17].
The statutory text requires the following exact formulation:

"The investments underlying this financial product do not take into account the EU criteria for environmentally sustainable economic activities."

This requirement represents a conscious legislative strategy to protect consumers from "stealth greenwashing" or label confusion. By enforcing a plain, negative disclosure, the regulatory interplay between the SFDR, RTS and the Taxonomy ensures that an Article 6 product cannot use ambiguous marketing language, such as "responsible", "resilient", or "long-term focused", to imply a degree of environmental sustainability that it does not legally possess. It establishes a detailed, binary boundary in the mind of the investor: Either a fund conforms to the strict criteria of the sustainable tripod, or it must carry a conspicuous warning label indicating that it is not aligned[18].
However, despite its foundational importance, the practical reality of the financial market has transformed Article 6 into a "residual category" or a marker of sustainability exclusion. In the initial phases of SFDR implementation, Article 6 funds represented the vast

[16] European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*
[17] European Parliament and Council of the European Union, *Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the Establishment of a Framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Taxonomy Regulation).*
[18] Annunziata, *Towards an EU Charter for the Protection of End Users in Financial Markets.*

majority of European asset volumes. Instead, as institutional investors (such as pension funds and insurance companies) faced their own entity-level PAI reporting requirements under Article 4, they began demanding, initially, that their asset managers shift portfolios towards Article 8 or 9 structures[19] (A trend which is actually changing substantially).
This institutional pressure has led to a structural contraction of the Article 6 market share in Europe. As of today, asset managers increasingly view Article 6 not as a valid neutral stance, but as a commercial liability. It has been observed that this trend highlights a broader tension within the Retail Investment Strategy:
While Article 6 successfully enforces technical transparency, its disclosures are functionally invisible to the average retail investor, who simply perceives these products as "not sustainable" or "not clean".
The technical composition of an Article 6 risk integration statement is often put deep down within a prospectus, failing to provide useful information for decisions making processes to the retail user, while simultaneously increasing the compliance and documentation costs for the manufacturer[20].
Therefore, while highly effective as a legal mechanism to redefine fiduciary risk, Article 6 remains a pure reminder of the limits of passive disclosure in empowering the final user within the sustainable financial market.

(4.1.1a) Comparison between Art.6, Art.8 and Art.9 of the SFDR

[19] Scheitza and Busch, “SFDR Article 9: Is It All About Impact?”
[20] Annunziata, *Retail Investment Strategy: How to boost retail investor’s participation in financial markets.*

4.1.2 Article 8 Funds ("Light Green")

If Article 6 sets the absolute legal minimum for sustainability risk integration, Article 8 of the SFDR acts as the primary and most expansive regulatory category for sustainable financial products within the European Union. Legally defined as products that "promote, among other characteristics, environmental or social characteristics, or a combination of those characteristics, provided that the companies in which the investments are made follow good governance practices," these instruments are universally referred to in market and academic discourse as "Light Green" funds[21].

The defining regulatory feature of Article 8 is its intentional lack of defined guidelines regarding how or to what extent these environmental or social characteristics must be pursued.

Rather than establishing a mandate driven by an objective, the European legislator opted for a broad, disclosure framework based on principles. Consequently, Article 8 does not dictate that a financial product invest exclusively, or even partially, in sustainable assets, but it simply demands that if a fund claims to incorporate sustainability into its investment narrative, it must transparently demonstrate the technical mechanisms used to fulfill that promotion[22].

The vast legal flexibility included within Article 8 has transformed the category into a highly heterogeneous universe. Because the regulatory text fails to provide a quantitative minimum limit or a strict definition for what constitutes the "promotion" of ESG characteristics, asset managers have utilized Article 8 to capture a massive scope of varying investment strategies.

At the lower boundary of this "Light Green" scope sit funds that employ passive ESG covers, such as simple sector based restrictive screens (e.g., depriving from controversial weapons, tobacco, or thermal coal) or basic asset weighted adjustments based on traditional third party ESG scores. In contrast, at the upper limit of Article 8 sit highly sophisticated financial products that actively engage in thematic sustainability targeting, clean energy transition support, or mandatory carbon-reduction paths, frequently hold-

[21] European Parliament and Council of the European Union, *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR).*

[22] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

ing a substantial proportion of "sustainable investments" as defined under Article 2(17) SFDR, despite not claiming a formal sustainable objective[23].

This extreme structural diversity introduces a significant analytical challenge, frequently identified in literature as the "heterogeneity problem". To better explain, by grouping passive, low ambition screening funds under the exact same legal banner as highly active, focused on transition strategies, the SFDR inadvertently distorts product comparability. For the end-user, the Article 8 designation ceases to operate as an indicator of environmental or social quality, instead functioning as an ambiguous umbrella category that masks deep variations in actual portfolio composition and sustainability outcomes[24].

A critical, often overlooked technical constraint of Article 8 is the explicit statutory requirement regarding the governance of investee companies. Under Article 8(1), the promotion of environmental or social traits is strictly conditional upon the fact that the underlying entities "follow good governance practices". The regulatory technical standards (RTS) clarify that this assessment must specifically focus on sound management structures, employee relations, remuneration of staff, and tax compliance[25].

This requirement acts as a not negotiable statutory filter. Unlike the environmental or social characteristics, which can be defined fluidly by the asset manager, "good governance" is an absolute compliance baseline. If an investee company is found to violate basic corporate governance principles, such as engaging in systemic tax evasion, failing to recognize basic labor rights, or suffering from severe management corruption, the financial product is legally banned from counting that asset toward its Article 8 promotional alignment, regardless of how "green" the company's underlying operational activities might be.

However, it has been criticized that because the financial industry heavily relies on third-party data providers to score and verify these governance pillars, the assessment frequently degenerates into a superficial compliance exercise. The "good governance" filter often lacks real due diligence depth, allowing firms with systemic supply-chain labor vulnerabilities to remain within Article 8 portfolios as long as their most important corporate policies appear compliant on paper[26].

[23] Scheitza and Busch, "SFDR Article 9: Is It All About Impact?"

[24] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

[25] European Parliament and Council of the European Union, *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR).*

[26] Litwin and Savourey, "Human Rights in EU Sustainable Finance".

The regulatory landscape of Article 8 was further complicated by the subsequent introduction of the Level 2 Regulatory Technical Standards. To give greater clarity into this extensive category, the RTS introduced a mandatory disclosure requirement forcing asset managers to state whether an Article 8 fund makes a mandatory minimum commitment to hold a specific percentage of "sustainable investments" (Article 2(17) SFDR) or "Taxonomy-aligned investments".

This technical addition effectively fractured the category, giving birth to a distinction driven by the market often called "Article 8 Standard" vs. "Article 8+":

- Article 8 Standard: Funds that promote ESG characteristics but declare a 0 percent minimum commitment to formal sustainable investments. These funds rely purely on limited screens or qualitative ESG integration.
- Article 8+: Funds that voluntarily commit to a mandatory minimum percentage (e.g., 10, 20, or 50 percent) of sustainable or Taxonomy-aligned assets within their pre-contractual prospectuses[27].

This sub-classification demonstrates the intense regulatory pressure exerted on product manufacturers. While an asset manager can legally maintain a 0 percent commitment, doing so exposes the fund to a competitive disadvantage among institutional allocators. This double split within Article 8 creates a "transparency paradox":

By trying to make the category clearer through minimum commitment percentages, the regulators have added another layer of mathematical complexity that the average retail investor is entirely unequipped to comprehend, adding the cognitive difficulty already analyzed in the context of PRIIPs KIDs[28].

The structural elasticity of Article 8 makes that the primary front for contemporary greenwashing disputes. Because the legal standard for "promoting" characteristics is so large, it creates an optimal environment for marketing inflation. A fund can easily advertise itself using green visual imagery and sustainable terminology while maintaining an underlying portfolio that differs marginally from a traditional, non ESG benchmark[29].

[27] European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

[28] Ibidem.

[29] Lambillon and Chesney, "How Green is 'Dark Green'? An Analysis of SFDR Article 9 Funds".

From the perspective of consumer protection, Article 8 represents a major structural vulnerability within the current architecture of the European market. Because retail investors naturally compare the "Light Green" status with positive environmental action, they are highly susceptible to "tricky" risks. The technical disclosures provided in the RTS templates, detailing complex indicator metrics and mandatory percentages, act as a legal shield for the asset manager against regulatory sanctions, but they fail to provide genuine, clear useful infos to the end consumer. Consequently, Article 8 exposes the natural limitation of a framework focused primarily on disclosures:
It successfully forces the publication of immense technical documentation, but, in the meanwhile, it leaves the retail investor trapped in a gap between marketing expectations and complex regulatory realities[30].

4.1.3 Article 9 Funds ("Dark Green")

At the top of the SFDR's regulatory architecture we find Article 9, which governs financial products universally named within market practice and academic literature as "Dark Green" funds.
Legally, Article 9 applies to financial products that explicitly have "sustainable investment as their objective"[31]. Unlike the promotional and open-ended nature of Article 8, Article 9 introduces a strict mandate driven by a specific purpose. Indeed, it represents a qualitative skip from the mere integration or promotion of environmental and social characteristics to the active, intentional chase of measurable sustainability outcomes, placing the generation of sustainable utility on an equal, or even superior, foundation with traditional financial risk and return optimization[32].
The defining legal feature of an Article 9 product is its restrictive asset allocation requirement. Following the technical clarifications issued by the European Commission and the European Supervisory Authorities, a "Dark Green" product must be composed entirely

[30] Annunziata, *Retail Investment Strategy: How to boost retail investor's participation in financial markets.*
[31] European Parliament and Council of the European Union, *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR).*
[32] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

of "sustainable investments" as defined under Article 2(17) of the SFDR, except for assets held strictly for specific secondary purposes, such as hedging or liquidity requirements[33]. Consequently, Article 9 leaves no space for the structural elasticity or strategic heterogeneity that characterizes the "Light Green" scope, establishing a rigid legal standard that demands absolute alignment with sustainable objectives.
To maintain its legal classification, an Article 9 fund must systematically prove that every underlying company or asset within its portfolio fulfills the tripartite test of Article 2(17) SFDR:

- First, the investee company must actively contribute to an environmental objective (measured via metrics like carbon efficiency or renewable energy generation) or a social objective (such as community development or inclusive education).
- Second, the asset must pass the rigid "Do No Significant Harm" filter, made possible through the mandatory Principal Adverse Impacts (PAIs) indicators.
- Third, the company must rigidly stick to the "good governance" baseline[34].

Furthermore, Article 9 contains a specific, independent legal provision for funds that target the reduction of greenhouse gas emissions. More specifically, under Article 9(3), if a product aims to achieve a reduction in carbon emissions, its pre-contractual disclosures must explicitly state whether it adopts an official EU Climate Transition Benchmark (EU CTB) or an EU Paris-Aligned Benchmark (EU PAB)[35]. If no such harmonized indicator is available, the asset manager is legally mandated to provide a detailed, methodological explanation of how the fund's objective of carbon reduction is systematically aligned with the long term temperature targets of the Paris Agreement. This objective transforms Article 9 from a passive reporting exercise into an active, forward looking portfolio tool[36].

[33]European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*
[34]European Parliament and Council of the European Union, *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector (SFDR).*
[35]Ibidem.
[36]Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

Despite the strictness of the "Dark Green" label, the practical execution of Article 9 has been characterized by severe regulatory volatility and market confusions. When the SFDR Level 1 text entered into force in 2021, the lack of granular guidance led many asset managers to aggressively classify their standard (ESG issued) strategies as Article 9 products, with the goal of capturing the commercial premium name associated with the highest tier of sustainability disclosure.
However, the subsequent publication of the Level 2 Regulatory Technical Standards (RTS) and the explicit clarifications by the European Commission in late 2022 broke this initial market comfort. The regulator confirmed that Article 9 funds could not simply contain a high proportion of ESG screened assets. Instead, they were legally bound to a 100 percent sustainable investment target (minus liquidity and hedging). This clarification triggered a systemic market phenomenon often called as the "Great Reclassification". Between Q4 2022 and Q1 2023, asset managers defensively downgraded hundreds of billions of euros in assets from Article 9 to Article 8, fearing regulatory sanctions, legal actions risks, and accusations of greenwashing[37]. This massive structural migration exposed the profound fragility of the SFDR framework. The systemic reclassification indeed demonstrated that the legal limit between "promoting characteristics" and "pursuing an objective" was originally so ambiguous that even major institutional players could not properly distinguish between them, resulting in massive distortions in historical fund data and weaken market stability[38].

A central academic critique of Article 9 centers on the intrinsic subjectivity of the "sustainable investment" definition itself. While the Taxonomy Regulation provides a highly objective, and based on science framework via Technical Screening Criteria, Article 2(17) SFDR allows asset managers to design their own proprietary methodologies to measure whether a company "contributes" or not to an environmental or social goal.
This methodological autonomy has created a structural "subjectivity crisis" within the Dark Green universe. Two separate Article 9 funds could hold the exact same underlying equity asset, but justify its "sustainable contribution" using completely different qualita-

[37]Scheitza and Busch, "SFDR Article 9: Is It All About Impact?"
[38]Lambillon and Chesney, "How Green is 'Dark Green'? An Analysis of SFDR Article 9 Funds".

tive or quantitative metrics[39]. One manager might define a tech company as sustainable because of its internal data center energy efficiency, while another might exclude it due to its electronic waste footprint. This lack of an equal, objective standard means that the Article 9 label, despite its regulatory prestige, remains vulnerable to fragmentation, as the definition of what constitutes a "Dark Green" objective is ultimately outsourced to the internal compliance departments of private asset managers[40].

From the perspective of consumer protection, instead, Article 9 represents the ultimate paradox of the European sustainable finance framework. The regulation succeeds in forcing an unprecedented level of technical transparency:

An Article 9 prospectus contains exhaustive disclosures regarding PAI filters, carbon benchmark alignments, and sustainable percentage allocations. However, this extreme technical density acts as an informational barrier for the very group the regulation seeks to protect: the retail investor. Indeed, the average consumer frequently misinterprets the technical mechanics of Article 9.

Retail users naturally assume that a "Dark Green" fund guarantees a positive, real environmental impact (such as complementarity or direct green project financing). In reality, an Article 9 fund can be composed entirely of secondary, market liquid equities of large multinational corporations that simply score well on proprietary ESG metrics, without funding new sustainable infrastructure[41]. This gap between retail expectations of environmental impact and the complex corporate accounting realities of the RTS templates creates an obvious "clarity gap". It emphasizes the limit of a regime based on disclosures by prioritizing passive transparency over simplified, consumer friendly outcome indicators.

Article 9, finally, inadvertently creates an environment where sophisticated legal compliance can mask a lack of genuine complementarity in the green transition[42].

[39]Lisa Scheitza, Timo Busch, and Johannes Metzler. “The Impact of Impact Funds – A Global Analysis of Funds With Impact-Claim”. In: *Journal of Financial Transformation* (Apr. 12, 2022).

[40]European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

[41]Annunziata, *Retail Investment Strategy: How to boost retail investor’s participation in financial markets.*

[42]Schaeken Willemaers, “Client Protection on European Financial Markets – From Inform Your Client to Know Your Product and Beyond: An Assessment of the PRIIPs Regulation, MiFID II/MiFIR and IMD 2”.

4.2 Comparative Analysis: Market Data and Implications of the Classification (Art.6 vs Art.8 vs Art.9)

While the official boundaries dividing the SFDR framework are legally structured around disclosure mandates, ranging from the risk integration baseline of Article 6 to the active promotion of Article 8 and the constraints (driven by objectives) of Article 9, the true operational mechanics of sustainable finance are exposed through empirical market data.

Rather than viewing these categories as isolated regulatory segments, a rigorous quantitative analysis reveals a highly interconnected, asymmetric market architecture.

Indeed, the practical distribution of assets, capital flows, and asset class allocations across the three pillars exposes how private asset managers strategically navigate compliance costs, how macroeconomic cycles alter investor behavior, and how institutional market forces have reshaped the European sustainable financial landscape[43].

An empirical examination of the European fund universe reveals a massive structural imbalance in capital concentration across the three SFDR categories. At the macro level, combined assets in Article 8 and Article 9 funds represent a substantial portion of the European market, stabilizing at approximately EUR 6 trillion and accounting for 61% of total EU fund assets [44].

This implies that traditional, not ESG Article 6 funds command the remaining 39% of total asset volume. However, measuring the market purely by the number of available funds reveals that Article 6 remains the largest single category, encompassing 49.9% of the market share, followed closely by Article 8 at 45.9%, while Article 9 occupies a highly restricted, niche segment of just 4.2% (See Fig:4.2.a).

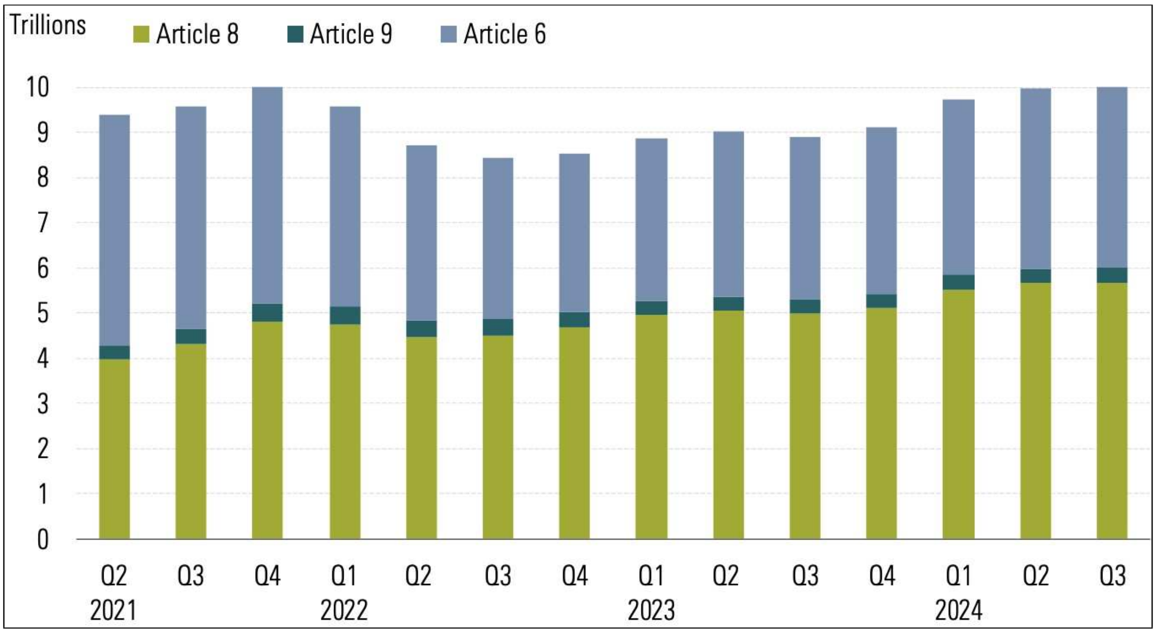
The true structural tension, however, is manifested in capital flow dynamics rather than static volume. According to data from the third quarter of 2024, investor preferences have heavily shifted away from high expectations sustainable strategies in favor of traditional or general products.

While Article 8 funds registered a notable flow recovery by netting EUR 38 billion of

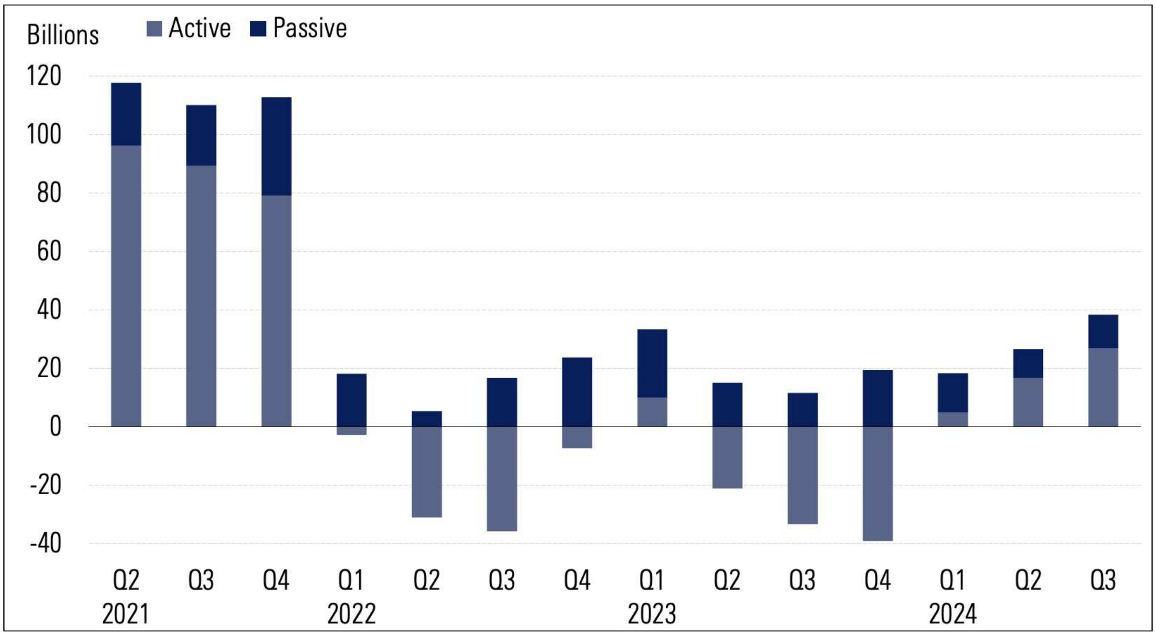
[43] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

[44] Morningstar Direct, Sustainalytics, *SFDR Article 8 and Article 9 Funds: Q3 2024 in Review.* October 30, 2024

new money (See Fig:4.2.b), marking their highest inflows since 2021, these figures pale in comparison to Article 6 fund flows, which garnered a staggering EUR 96 billion in net subscriptions within the same period of three months[45].



(4.2.a) Quarterly Asset Breakdown by SFDR Classification (EUR Trillion). Source: *Morningstar Direct. Data as of September 2024.*



(4.2.b) Net Flows Into Article 8 Funds Divided by Active and Passive (EUR Billion). Source: *Morningstar Direct. Data as of September 2024.*

[45]Ibidem.

At the same time, Article 9 funds experienced their fourth consecutive quarter of net reimbursements, with investors pulling EUR 2.2 billion out of these strategies[46]. This complex divergence confirms that while asset managers have widely adopted the "Light Green" disclosure cover for marketing and baseline compliance, actual investor capital continues to favor the unrestricted flexibility of Article 6 vehicles during periods of macroeconomic uncertainty[47].

The empirical data from the SFDR landscape exposes a distinct division in how different asset classes utilize sustainability classifications. Traditional equity and fixed-income strategies are calculated in clear different ways across the three categories.
Equity concentration is an explicit characteristic of the top level disclosures. Indeed, Article 9 funds shows an extreme, structural inclination towards equity strategies, which constitute almost 70% of all Article 9 products (See Fig:4.2.c).

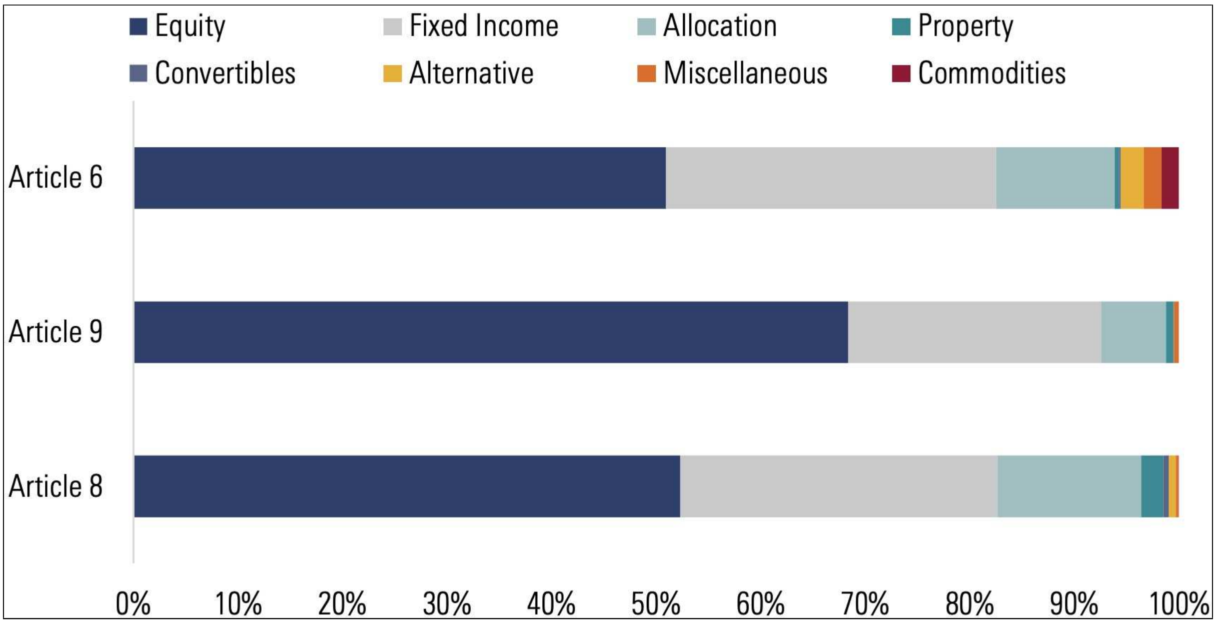
Name	SFDR Fund Type	Morningstar Global Category	AUM (EUR Billion)	Active / Passive	Morningstar Sustainability Rating	Minimum % Sustainable Investments
Handelsbanken Global Index Criteria	9	Global Equity Large Cap	11.4	Passive	🌐🌐🌐	90
Pictet-Water	9	Equity Miscellaneous	8.4	Active	🌐🌐🌐🌐	80
Nordea 1 - Global Climate and Environment Fund	9	Global Equity Mid/Small Cap	8.4	Active	🌐🌐🌐🌐	85
Pictet - Global Environmental Opportunities	9	Global Equity Large Cap	7.4	Active	🌐🌐🌐🌐🌐	80
Mirova Global Sustainable Equity Fund	9	Global Equity Large Cap	5.5	Active	🌐🌐🌐🌐🌐	90
Handelsbanken USA Index Criteria	9	US Equity Large Cap Blend	5.0	Passive	🌐🌐🌐🌐	90
Handelsbanken Norden Index Criteria	9	Europe Equity Large Cap	4.9	Passive	🌐🌐	90
BlackRock Global Funds - Sustainable Energy Fund	9	Energy Sector Equity	4.8	Active	🌐🌐🌐🌐🌐	80
BNP Paribas Funds Aqua	9	Equity Miscellaneous	3.7	Active	🌐🌐🌐🌐	85
Pictet - Clean Energy Transition	9	Energy Sector Equity	3.7	Active	🌐🌐🌐🌐🌐	80
DPAM L - Bonds Emerging Markets Sustainable	9	Emerging Markets Fixed Income	3.7	Active	🌐🌐🌐🌐	80
BNP Paribas Aqua	9	Equity Miscellaneous	3.6	Active	🌐🌐🌐🌐	85
Robeco Sustainable Water	9	Equity Miscellaneous	3.1	Active	🌐🌐🌐🌐	90
Robeco Smart Energy	9	Energy Sector Equity	3.0	Active	🌐🌐🌐🌐🌐	90
Candriam Sustainable Bond Euro Corporate	9	Europe Fixed Income	2.9	Active	🌐🌐🌐	80
Handelsbanken Developed Markets Index Criteria	9	Global Equity Large Cap	2.8	Passive	🌐🌐🌐🌐	90
Impact ES Actions Europe	9	Europe Equity Large Cap	2.8	Active	🌐🌐🌐🌐	90
L&G ESG Paris Aligned World Equity Index Fund	9	Global Equity Large Cap	2.7	Passive	🌐🌐🌐🌐	0
BlueOrchard Microfinance Fund	9	Fixed Income Miscellaneous	2.5	Active	–	0
Swisscanto Portfolio Fund Sustainable Balanced	9	Moderate Allocation	2.5	Active	🌐🌐🌐🌐🌐	80

(4.2.c) The 20 Largest Article 9 Funds. Source: *Morningstar Direct. Data as of September 2024.*

In direct contrast, equity allocations are significantly lower in the lower level disclosure, making up 52% of Article 8 assets and 51% of Article 6 assets (See Fig:4.2.d). Because

[46] Ibidem.
[47] European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

proving a 100% contribution to a sustainable objective under Article 2(17) requires the granular transparency typical of public corporate equities, "Dark Green" funds remain heavily put together in liquid equity space at the expense of other asset classes[48].



(4.2.d) Article 8 and Article 9 Funds Per Broad Asset Class. Source: *Morningstar Direct. Data as of September 2024.*

In terms of capital movement, fixed income has emerged as the primary driver of flow recovery across the sustainable scope. In Q3 2024, Article 8 bond funds pulled in almost EUR 45 billion, surpassing even their Article 6 equivalents, which collected EUR 39 billion[49].

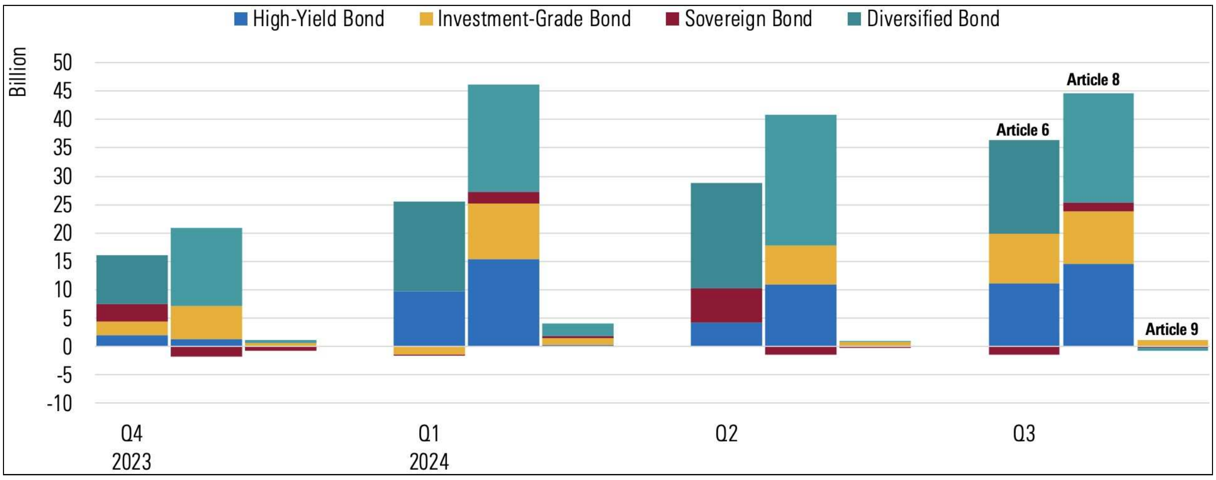
For Article 9, strategies of fixed income were the sole positive contributor, bringing in EUR 797 million and balancing deep reimbursements in Article 9 equity products, which drain EUR 2.7 billion in capital (See Fig:4.2.e).

This asset-class data carries deep structural implications. It demonstrates that when investors look for downside protection and yield security, they actively use Article 8 fixed income covers, which primarily utilize corporate investment and grade bonds, while avoiding sovereign bonds due to the systemic technical challenges of applying ESG criteria to debt issuers on a state level[50].

[48]Scheitza and Busch, "SFDR Article 9: Is It All About Impact?"

[49]Morningstar Direct, Sustainalytics, *SFDR Article 8 and Article 9 Funds: Q3 2024 in Review.* October 30, 2024

[50]Ibidem.



(4.2.e) Net Flows Into Article 8, Article 9, and Article 6 Fixed-Income Funds (EUR Billion). Source: *Morningstar Direct. Data as of September 2024.*

The structural interplay between Article 8 and Article 9 is further made it clear by analyzing the internal division of the "Light Green" scope through industry data templates like the European ESG Template (EET). When forced to disclose mandatory minimum commitments to formal sustainable investments under Article 2(17), the vast majority of asset managers actively avoid top level targets. As of late 2024, the highest volume of capital flows within the Article 8 universe was captured by funds declaring a 0% formal commitment to sustainable investments, netting EUR 10.6 billion, followed closely by funds targeting a nominal commitment between 0.1% and 20%, which garnered EUR 10.3 billion (See Fig:4.2.f).

Taken together, these low commitment products command over EUR 2.9 trillion in assets under management[51]. This distribution highlights a deep regulatory paradox:

While approximately 75% of Article 8 funds claim to hold some sustainable investments on an as reported basis, the actual binding legal levels in their prospectuses are kept exceptionally low to avoid tracking errors and regulatory wrong compliance[52].

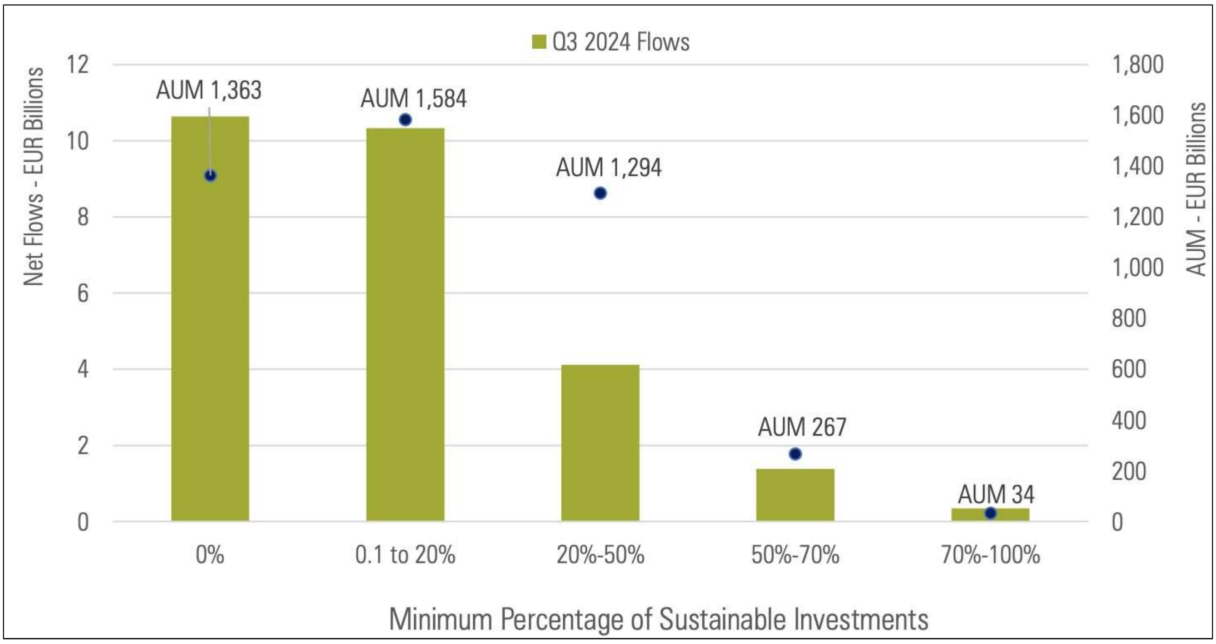
This groups the vast majority of "Light Green" capital right above the Article 6 regulatory baseline. By contrast, Article 9 funds are mechanically forced to maintain sustainable investment commitments above 80%, with the remainder held for cash or hedging[53].

[51]Ibidem.

[52]Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

[53]Morningstar Direct, Sustainalytics, *SFDR Article 8 and Article 9 Funds: Q3 2024 in Review.* October 30, 2024

This mathematical rigidity isolates Article 9 from the primary channels of corporate asset allocation, transforming the "Dark Green" label into a commercially restrictive product category rather than the making them part of a wider market as the European Commission originally aspired[54].



(4.2.f) Net Flows Into Article 8 Funds Per Percentage of Minimum Sustainable Investments (EUR Billion). Source: *Morningstar Direct. Data as of September 2024.*

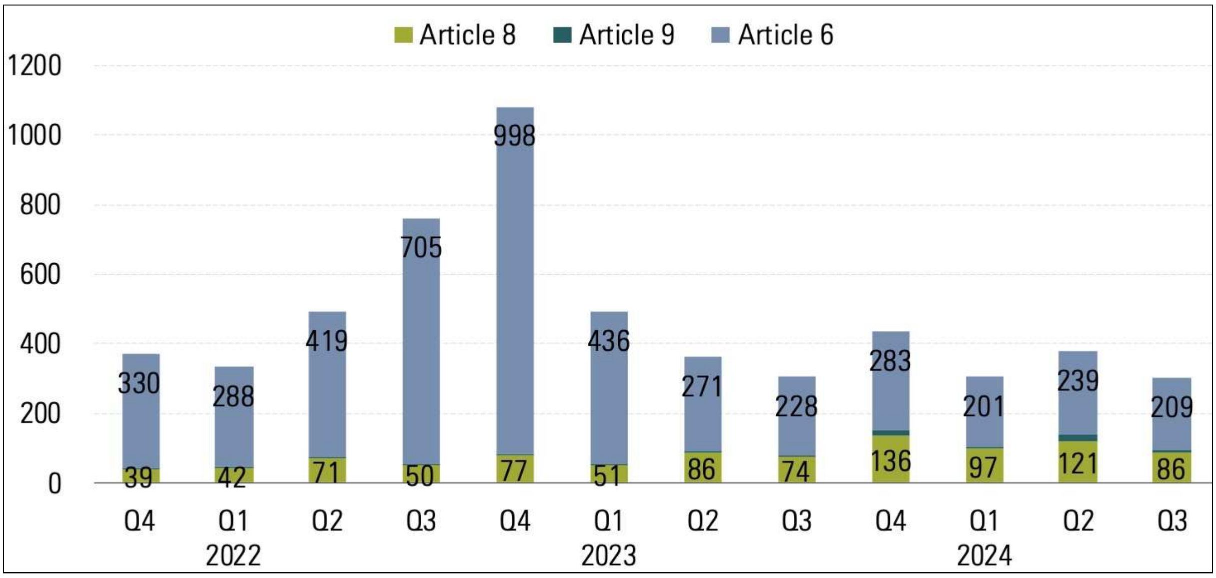
If we continue our analysis, we see that the structural evolution of the market data indicates that the "Great Reclassification era", which saw massive, defensive downgrades from Article 9 to Article 8, has reached a state of stabilization. That equilibrium has hit historical lows, dropping to just over 10 product adjustments per quarter (See Fig. Below: 4.2.g).

Furthermore, asset managers show a clear structural preference for maintaining existing sustainable products over traditional ones. Indeed in Q3 2024, a significant 209 Article 6 funds were dissolved, merged, or liquidated, compared to a modest 86 closures within the combined Article 8 and 9 universes (See Fig. Ibidem: 4.2.g).

However, this structural stability faces imminent disruption from regulatory interventions aimed to stop greenwashing, specifically the European Securities and Markets Authority (ESMA) guidelines on funds' names using ESG or terms related to sustainability.

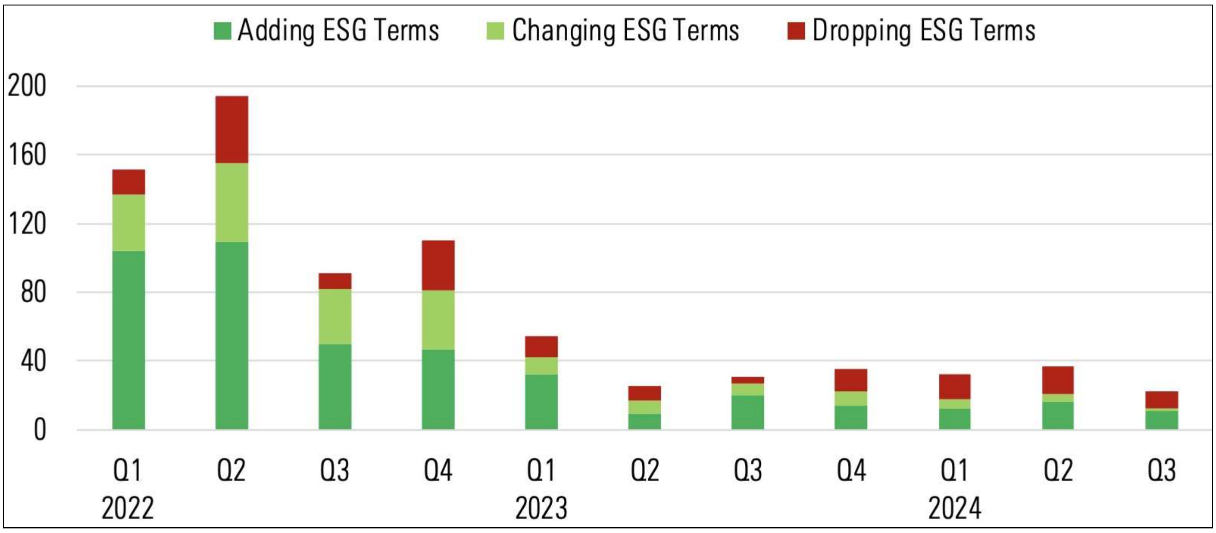
[54]Lambillon and Chesney, "How Green is 'Dark Green'? An Analysis of SFDR Article 9 Funds".

Because many active portfolio managers are unable or unwilling to meet the strict quantitative thresholds demanded by these new rules, a significant wave of corporate rebranding has emerged[55].



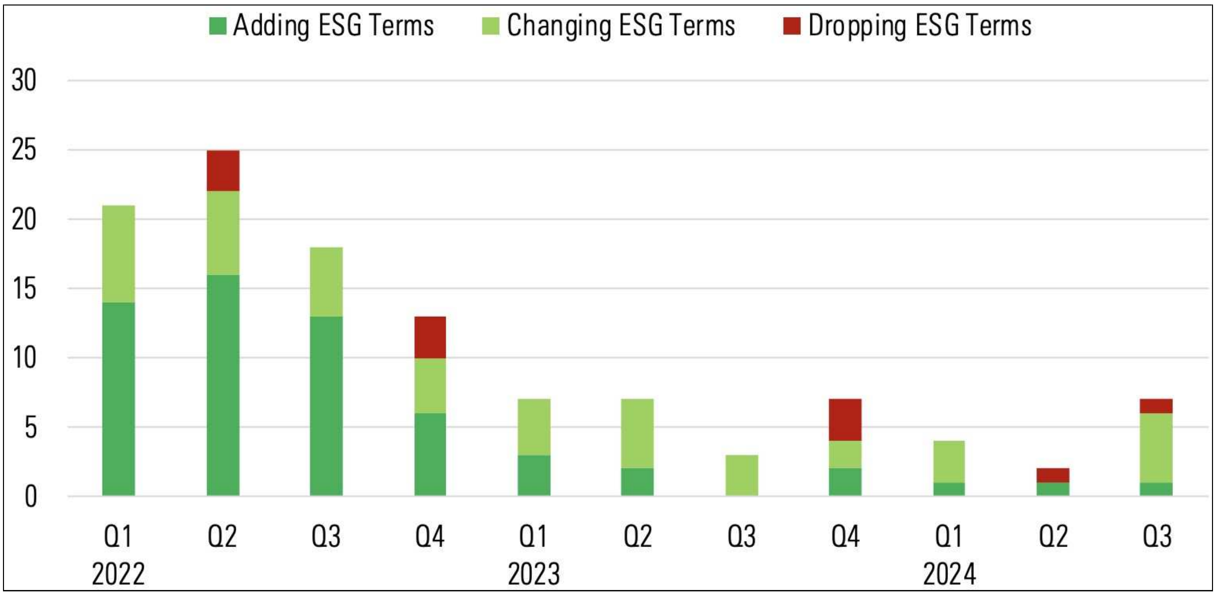
(4.2.g) Quarterly Breakdown of Fund Closures. Source: *Morningstar Direct. Data as of September 2024.*

Over 104 sustainable funds have executed formal name changes:



(4.2.h) Article 8 Fund's Rebranding Activity. Source: *Morningstar Direct. Data as of September 2024.*

[55]Annunziata, *Retail Investment Strategy: How to boost retail investor's participation in financial markets.*



(4.2.i) Article 9 Fund's Rebranding Activity. Source: *Morningstar Direct. Data as of September 2024.*

While around 40 funds added explicit ESG terms to align with transition strategies, another 40 funds completely dropped ESG-key terms, transforming labels like "ESG Screened" or "ESG Leaders" into neutral terms like "Screened" or "Leaders"[56].
This shifting data pattern indicates that the market is entering a phase of tactical rationalization. To protect themselves from lawsuits and compliance issues, asset managers are intentionally reducing their public marketing claims, causing a structural compression of the visible ESG fund universe and further obscuring the practical line of distinction between entry level Article 8 overlays and standard Article 6 products[57].

[56] Morningstar Direct, Sustainalytics, *SFDR Article 8 and Article 9 Funds: Q3 2024 in Review.* October 30, 2024
[57] Annunziata, *Towards an EU Charter for the Protection of End Users in Financial Markets.*

4.3 Current Challenges and Future Perspectives of the SFDR

As the final analytical pillar of this thesis, this sub-chapter synthesizes the structural conflicts exposed across the preceding ones, moving from the baseline institutional risk architectures to the empirical classification anomalies of Articles 6, 8, and 9.
While the Sustainable Finance Disclosure Regulation has successfully catalyzed unprecedented levels of corporate transparency and fundamentally redefined the parameters of fiduciary responsibilities across the European Union, its practical market implementation has reached a critical regulatory turning point.
The framework currently lays between its original legal intent, which has been designed purely as an informational disclosure mechanism, and the market's insistence on treating it as a product labeling regime.
By analyzing the structural challenges regarding data interaction, information processing by retail consumers, and the upcoming legislative repairs launched by European regulatory bodies, this section provides a forward-looking critique of the future path of European sustainable capital allocation.

The primary structural challenge damaging the technical integrity of the SFDR is the severe lack of systemic interaction across the different pillars of the European sustainable finance tripod. As analyzed in Chapter 3, the SFDR operates on a double materiality engine that relies heavily on levels of corporate disclosures to feed its product's Principal Adverse Impacts (PAIs) and metrics related to the Taxonomy alignment.
However, the legislative execution of this framework was ruined by a profound "chronological mismatch". Financial Market Participants were legally obligated to disclose granular PAI profiles and exact Taxonomy percentages under the Level 2 Regulatory Technical Standards long before their underlying investee companies were legally required to report that exact data under the Corporate Sustainability Reporting Directive (CSRD)[58].
This chronological gap created a basic data emptiness. To achieve compliance and avoid regulatory lawsuits because of the non compliance, the asset management industry was

[58]European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

forced to outsource its data collection channels to third-party ESG rating agencies and commercial data providers. As a result, the technical foundation of many Article 8 and Article 9 funds is built not on verified, standardized corporate disclosures, but on proprietary approximated methodologies, imputed values, and estimated alignments[59].

As argued by critics, this reliance on third-party estimates creates a severe "data fragmentation risk". Because separate data providers utilize completely different algorithms and qualitative criteria to impute missing PAI variables (such as greenhouse gas emissions or supply-chain human rights indicators), the exact same financial portfolio can exhibit huge divergent sustainability profiles depending entirely on which commercial vendor a fund manager chooses to contracts.

This data fragmentation compromises the scientific integrity of the framework, turning technical disclosure from an objective benchmarking exercise into a subjective exercise in data acquisition (especially for smaller firms), and increasing the risk of unintentional greenwashing across the internal market[60].

The second fundamental challenge resides at the intersection of technical density and consumer behavior, exposing a profound "clarity gap" that pressures the core mandate of investor protection. The introduction of the Level 2 RTS brought highly structured, exhaustive mandatory templates designed to provide absolute transparency to the market. However, the operational reality of these disclosure document, frequently extending across lot of pages of dense legalistic style, multiple options, and super technical statistical metrics, has caused a severe state of information overload for the final user[61].

This information architecture fails to align with the cognitive capacities, of processing such information, of the average retail investor.

If we look into the traditional financial domain, the Key Information Document (KID) under the PRIIPs Regulation, analyzed exhaustively in Chapter 2, attempted to resolve informational asymmetries by strictly compressing risk, performance, and cost profiles

[59] Morningstar Direct, Sustainalytics, *SFDR Article 8 and Article 9 Funds: Q3 2024 in Review.* October 30, 2024

[60] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

[61] Schaeken Willemaers, "Client Protection on European Financial Markets – From Inform Your Client to Know Your Product and Beyond: An Assessment of the PRIIPs Regulation, MiFID II/MiFIR and IMD 2".

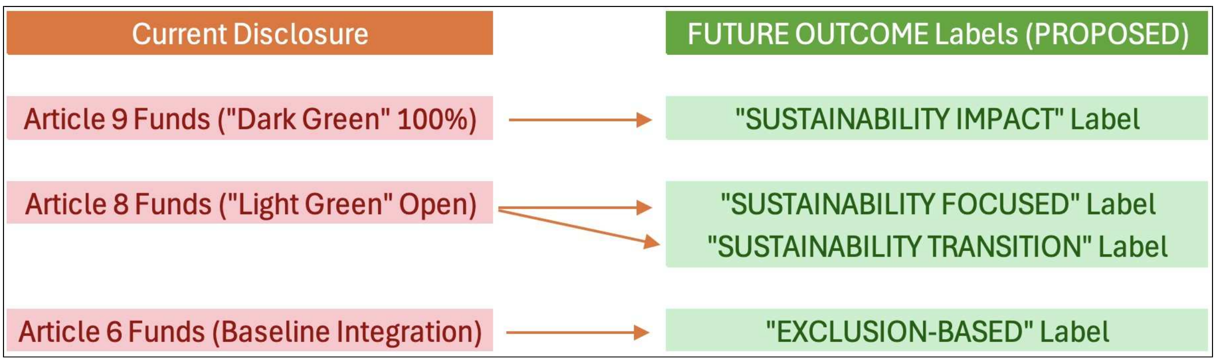
into a three page, friendly for consumers visual format.
The SFDR, on the other side, has taken an opposite path. A retail investor attempting to allocate capital to an Article 8 or Article 9 fund is faced with a massive intellective barrier:
Trying to figure out mathematical percentages regarding "sustainable investment definitions" alongside qualitative explanations of corporate voting and engagement policies[62].
In the context of the Retail Investment Strategy, this technical complexity leads directly to investor giving up. Rather than encouraging individuals to actively direct their personal savings toward sustainable or green economic activities, the complex density of the RTS templates acts as a disincentive. The retail investor is functionally weakened by the disclosure architecture, forced to rely naively on the top level marketing nomenclature of the "Light Green" or "Dark Green" articles.
This failure exposes a fundamental limitation of passive, text transparency:
It successfully move the legal liability away from the product manufacturer through complete corporate documentation, but it simultaneously fails to deliver useful tool for comprehension to the end consumer, increasing the gap between sustainable intent and financial understanding[63].

Recognizing these deep structural fractures, the European Commission, supported by inclusive technical assessments from the European Supervisory Authorities, has initiated an intense legislative re-evaluation of the SFDR. The unity across both academic critique and regulatory reviews indicates that the actual structure, where Articles 8 and 9 function as basically product categories, is fundamentally unsustainable and highly inclined to marketing inflation. Consequently, the future policy evolution of the framework points toward a radical structural shift:
Disassembling the current articles based fundamentally on disclosures and replacing them with an explicit, voluntary product labeling regime[64].
Under the distinguished policy proposals evaluated in the Joint ESAs Opinion on the As-

[62] Annunziata, *Towards an EU Charter for the Protection of End Users in Financial Markets.*
[63] Annunziata, *Retail Investment Strategy: How to boost retail investor's participation in financial markets.*
[64] European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

sessment of the SFDR, the European Union is moving toward a taxonomy of sustainability categories focused on consumers. Rather than forcing asset managers to legally justify their funds under the technical parameters of Articles 8 and 9, the future framework reflects on the introduction of clearly defined, voluntary labels (See Fig: 4.3.a), structured around distinct investment ideas:

- The "Sustainability Impact" Label: Reserved exclusively for deep green, objective driven financial products designed to generate measurable, real environmental or social outcomes, by adding the original, rigorous intent of Article 9.
- The "Sustainability Transition" Label: Thought to capture strategies targeting companies that are currently intensive in carbon or socially not compliant, but possess credible, mandatory, and verifiable capital expenditure tracks to transition toward sustainable operations. This label provides a formal legal home for the transition finance assets currently trapped or misclassified within the mixed Article 8 scope.
- The "Sustainability Focused" Label: Designed for portfolios targeting high performance ESG assets, utilizing rigid exclusions and alignment metrics to provide to risk averse and sustainability inclined allocators.
- The "Exclusion-Based" Label: A simplified category for entry-level products that rely purely on basic sections based on the sector (such as weapons or fossil fuels), separating low ambition layers from complex active ESG integration models[65].



(4.3.a) Visual Example including the proposed innovations

[65] Ibidem.

This structural evolution marks a significant conceptual turning point, from the transparency of the early SFDR text, to a product categorization purely oriented on results. By putting together clear, descriptive labels supported by minimum quantitative eligibility criteria, the European regulator aims to realign the framework with the core principles of the Retail Investment Strategy, resolving the "variety" problem of Article 8 and reducing the greenwashing vulnerabilities that have afflicted the market since 2021[66].

4.3.1 The Data Gap and the Impact of the CSRD

The functional stability of the entire European sustainable finance construction depends fundamentally on a continuous, reliable flow of corporate sustainability data.
As established in the preceding analysis of Articles 6, 8, and 9, financial market participants are legally required to calculate and disclose the precise adverse impacts of their portfolios (via PAIs) and the exact environmental alignment of their underlying assets (through the EU Taxonomy).
However, the practical implementation of these mandates has been severely impacted by a structural "data gap". This gap starts from a severe chronological mismatch in the EU's regulatory release:
Fund managers were forced to publish highly specific, product level ESG metrics under the SFDR Level 2 Regulatory Technical Standards in January 2023, long before their underlying investee companies were legally required to report verified corporate sustainability data under the Corporate Sustainability Reporting Directive (CSRD)[67].
In the absence of standardized corporate disclosures, FMPs faced a severe compliance challenge. To avoid regulatory problems related to a wrong compliance, the asset management industry was forced to make contracts with commercial ESG rating agencies and third party data providers to fill the missing data. Instead of working with primary, audited corporate information, fund managers have had to rely heavily on estimated

[66] Annunziata, *Retail Investment Strategy: How to boost retail investor's participation in financial markets.*
[67] Lamandini, Ramos Muñoz, and Siri, *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).*

methodologies, imputed values as well as with estimated alignments[68].

This reliance introduces significant technical risks. Because commercial data providers utilize separate, proprietary algorithms to model missing corporate variables, such as "Scope 3 downstream greenhouse gas emissions" or "international supply-chain labor indicators", the exact same investment portfolio can exhibit completely different sustainability scores depending entirely on which data provider is used.

This lack of data standardization compromises the scientific objectivity of the SFDR. It turns technical disclosure into a subjective exercise in data procurement, slowly increasing the risk of "unintentional greenwashing" where portfolios appear sustainably aligned on paper due to provider modeling rather than actual corporate performance[69].

The gradual phase in the Corporate Sustainability Reporting Directive is specifically designed to eliminate this data gap by shifting the market from estimated data calculation to mandatory, audited primary disclosures. The CSRD strongly modifies the corporate reporting landscape by expanding the scope of mandatory sustainability reporting from roughly 11,600 companies under the legacy Non-Financial Reporting Directive (NFRD)[70] to over 50,000 companies across the European internal market[71].

This corporate expansion provides an unique sign of primary ESG data directly to fund managers. The structural impact of this incoming data is already visible in the quantitative composition of European funds.

According to empirical market data from late 2024, the volume of reported sustainability metrics has begun to stabilize the product classification market. Equipped with actual corporate disclosures, asset managers are executing fewer fund reclassifications driven by uncertainty, with product downgrades hitting historical lows of just over 10 adjustments per quarter[72] (See Fig:4.2.h and Fig:4.2.i).

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[68] European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

[69] Scheitza and Busch, "SFDR Article 9: Is It All About Impact?"

[70] The objective of this Directive is to increment the transparency of the social and environmental information provided by business in all sectors to a similarly high level across all Member States in order to improve the disclosure of non-financial information by certain large undertakings. Source: Directive 2014/95/EU, NFRD

[71] European Parliament and Council of the European Union, *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.*

[72] Morningstar Direct, Sustainalytics, *SFDR Article 8 and Article 9 Funds: Q3 2024 in Review.* October 30, 2024

Furthermore, the availability of verified corporate data has allowed FMPs to implement tactical portfolio rationalization. Rather than maintaining wide, ambiguous marketing claims, firms are utilizing hard data to clean up their product characteristics. In the third quarter of 2024 alone, asset managers liquidated or merged 209 traditional Article 6 funds while maintaining a tight, and data verified scope of sustainable products, closing only 86 funds within the combined Article 8 and 9 universes[73] (See Fig:4.2.g). This demonstrates that as primary corporate data becomes available, the cost of compliance modifies, driving asset managers to defend and preserve genuine sustainable investment instruments while liquidating unclear traditional structures.

Despite the structural progress driven by the CSRD, the data gap has not been entirely eliminated. Instead, it has been pushed to the limits of the global financial market. FMPs continue to face severe corporate data blind spots in two distinct areas:

- The Non-EU Jurisdictional Gap:

European Article 8 and Article 9 funds are highly globalized, frequently holding large equity and fixed-income positions in North American, Asian, and emerging market corporations. Because these foreign companies operate completely outside the legislative scope of the CSRD and face fragmented, often voluntary disclosure rules in their home jurisdictions, European fund managers must continue to rely on third-party estimates for up to 30% to 40% of their non-EU portfolio allocations[74].

- The Small-Entity Exclusion: The CSRD exempts small/micro enterprises and companies not listed from its mandatory reporting scope to avoid imposing excessive administrative costs on smaller businesses. However, as specified in the Article 4 analysis, small asset managers or market funds investing in local innovation or regional transition projects are quite "trapped". They are legally/commercially pressured to report PAI indicators, but their underlying small cap investee companies do not produce the data, creating a local constriction that restricts capital flows to small scale green projects[75].

[73] Ibidem.

[74] Lambillon and Chesney, "How Green is 'Dark Green'? An Analysis of SFDR Article 9 Funds".

[75] Schaeken Willemaers, "Client Protection on European Financial Markets – From Inform Your Client to Know Your Product and Beyond: An Assessment of the PRIIPs Regulation, MiFID II/MiFIR and IMD 2".

Ultimately, the structural interplay between the CSRD and the SFDR proves that transparency (on product level) can not exist in emptiness. While the CSRD successfully builds the corporate foundation necessary to support the SFDR tripod, the persistent gaps in non-EU assets and small entity data highlight the ongoing limitations of a purely regional disclosure framework.

Until international sustainability reporting standards achieve true global baseline compatibility, the operational trend of the sustainable financial market will remain a hybrid mix of audited corporate facts and private commercial estimates[76].

[76] European Supervisory Authorities (ESAs), *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).*

Conclusions

This thesis set out to answer a fundamental question:
Does the interplay between the SFDR, the EU Taxonomy, and the PRIIPs Regulation create a coherent framework that can successfully eliminate greenwashing and redirect capital toward a sustainable economy?

The short answer is: not yet, but the foundation is vital.

The finding of this research is not a binary rejection or acceptance of the EU sustainable finance framework. Instead, the evidence points to a complex reality where an incredibly worthy and ambitious policy design is being held back by practical implementation friction.
The European Union deserves immense credit for taking a global leadership role. By introducing the Taxonomy Regulation (Chapter 1), the EU became the first major global economy to attempt a scientifically grounded definition of what constitutes a "green" economic activity.
Simultaneously, the SFDR (Chapter 3) has forced an unique level of accountability onto fund managers, fundamentally changing how risk and adverse sustainability impacts are discussed in boardroom meetings across Europe.
However, as this study has demonstrated, the execution of this framework has resulted in severe systemic blocks. The core problem is a chronological mismatch:
Asset managers were legally forced to disclose the sustainability profiles of their investment portfolios before underlying corporations were legally mandated to report the reliable ESG data required to make those calculations (Chapter 4). This created an extensive "data gap", leaving fund managers to rely on third-party estimates, which inadvertently weakened the reliability of Article 8 and Article 9 classifications and left the door open to unintentional greenwashing.

The most acute point of friction identified in this thesis stands at the intersection of sustainability goals and retail investor protection (Chapter 2). Here, indeed, we encounter a definitive regulatory paradox.
While the SFDR and Taxonomy demand that complex, delicated environmental and social data be communicated to the market, the pre and already existing PRIIPs framework forces this information into a rigidly standardized, highly compressed three pages template. This thesis concludes that the current PRIIPs Key Information Document (KID) is structurally incapable of handling the weight of modern ESG data.
By prioritizing strict mathematical uniformity over contextual explanation, the current regime does not empower retail investors. Instead, it risks either overwhelming them with dense legal terminology or misleading them through oversimplified metrics.
If everyday investors cannot easily understand why a fund is sustainable, the overarching goal of the European Green Deal, to redirect retail capital won't function.
To resolve these friction points and unlock the full potential of the EU's sustainable finance agenda, this thesis proposes two key structural refinements:

Adopt a Flexible Disclosure Model (as the "UK CCI" one):
The EU should consider to evolve past the restrictive, and driven by a template, format of the PRIIPs KID. Policymakers should look to the UK's Consumer Composite Investments (CCI) framework. By replacing rigid page limits with a more flexible "Product Summary", the EU could give fund manufacturers the fundamental narrative space they need to explain complex sustainability characteristics clearly.
Allowing space for qualitative explanation alongside core quantitative metrics ensures investors receive context, not just data.

Synchronize the Reporting Timeline:
Future updates to EU sustainable finance rules must ensure that corporate data disclosures (via the CSRD) are fully matured and accessible before fund managers are penalized or restricted on their disclosures on portfolio level. Eliminating the data gap at the source could be the only way to strengthen market confidence.

Ultimately, the transition to a sustainable financial ecosystem is an iterative journey, not a single legislative event. The current web of SFDR, the Taxonomy, and PRIIPs represents a historic, courageous first draft.

By shifting from a culture of rigid, formalistic compliance to a model of flexible, disclosure that centers on consumers, the European Union can bridge the gap between regulatory theory and market reality.

Only then, will sustainable finance truly become a reliable mechanism for protecting investors, safeguarding the environment, and funding our shared future.

Bibliography

Annunziata, Filippo. *Towards an EU Charter for the Protection of End Users in Financial Markets.* Tech. rep. Bocconi Legal Studies Research Paper No. 4200502. European Banking Institute Working Paper Series 2022 - no. 128, Aug. 25, 2022.

— *Retail Investment Strategy: How to boost retail investor's participation in financial markets.* Tech. rep. Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, July 7, 2023.

Deepak, Srivastava. "UK CCI and EU PRIIPs: Key Regulatory Differences. A side-by-side analysis of costs, risk and performance requirements". In: (Feb. 19, 2026).

Meucci, Giorgio et al. "Sustainable finance regulation, fund's portfolio reallocation and real effects". In: *Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers)* 948 (July 2025).

Boni, Leonardo and Chiara Cremasco. "Is the European Union (EU) Sustainable Finance Disclosure Regulation (SFDR) effective in shaping sustainability objectives? An analysis of investment fund's behaviour". In: *Journal of Sustainable Finance & Investment* (Sept. 29, 2024).

European Parliament and Council of the European Union. *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.* 2026.

Distefano, Veronica et al. "SFDR Versus Performance Classification: A Clustering Approach". In: (July 10, 2024).

European Commission. *Action Plan: Financing Sustainable Growth (COM(2018) 97 final).* Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions. 2018.

European Supervisory Authorities (ESAs). *Joint ESAs Opinion on the review of the Sustainable Finance Disclosure Regulation (SFDR).* June 18, 2024.

Lamandini, Marco, David Ramos Muñoz, and Michele Siri. *The Current Implementation of the Sustainability-Related Financial Disclosures Regulation (SFDR).* Tech. rep. The paper was requested by the European Parliament's Committee on Economic and Monetary Affairs. University of Genoa EUSFiL Law Research Working Paper Series No. 29, July 31, 2024.

Lambillon, Adrien-Paul and Marc Chesney. "How Green is 'Dark Green'? An Analysis of SFDR Article 9 Funds". In: (Feb. 22, 2023).

Litwin, Daniel and Elsa Savourey. "Human Rights in EU Sustainable Finance". In: *Journal of Financial Regulation* (July 17, 2024).

Morningstar Sustainalytics. "SFDR Article 8 and Article 9 Funds: Q3 2024 in Review". In: (Oct. 30, 2024).

European Parliament and Council of the European Union. *Regulation (EU) No 1286/2014 on key information documents for packaged retail and insurance-based investment products (PRIIPs).* Official Journal of the European Union, L 352/1. Mar. 8, 2014.

EU Platform on Sustainable Finance. *Advancing Sustainable Finance: Technical Criteria for New Activities & First Review of the Climate Delegated Act.* Report to the European Commission. Mar. 2025.

Scheitza, Lisa and Timo Busch. "SFDR Article 9: Is It All About Impact?" In: (July 10, 2023).

Scheitza, Lisa, Timo Busch, and Johannes Metzler. "The Impact of Impact Funds – A Global Analysis of Funds With Impact-Claim". In: *Journal of Financial Transformation* (Apr. 12, 2022).

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

— *Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the Establishment of a Framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Taxonomy Regulation).* June 22, 2020.

Fscom. "FCA Consumer Composite Investments (CCIs): Say goodbye to the KI(I)DS!" In: (Mar. 12, 2026).

Schaeken Willemaers, Gaëtane. "Client Protection on European Financial Markets – From Inform Your Client to Know Your Product and Beyond: An Assessment of the PRIIPs Regulation, MiFID II/MiFIR and IMD 2". In: *Revue Trimestrielle de Droit Financier* (July 1, 2014).

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