

# The EU taxonomy: a new sustainable finance paradigm?<sup>1</sup>

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## Abstract

As the scientific community continues its progress on evaluating the likeliness and possible impact of global environmental risks, focus on the role of financial market participants to mitigate these risks increases. However, these actors lack clarity on how capital can be properly channeled to firms, assets and projects that positively benefit the environment. This article reviews the latest literature on challenges faced by practitioners and academics to evaluate the environmental performance of investments and to establish relationships between environmental performance, financial performance and risk. Considering this current state of play, I perform a detailed analysis of how the EU taxonomy on sustainable activities and related measures of the European Commission could provide the necessary framework for a new sustainable finance paradigm where investments and environmental performance will be directly linked.

**Keywords:** SRI; Corporate Environmental Performance; ESG; Sustainable Finance; Climate Change; EU Taxonomy

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## 1. Introduction

In October 2018, the Intergovernmental Panel on Climate Change (IPCC) - the United Nations body for assessing the science related to climate change - published a special report on the impacts of global warming for various global warming pathways. This report built on the work of more than 6000 recent publications to provide a summary of the situation to policy makers, and its conclusion is best described by the following excerpt:

“(…) recent trends in emissions and the level of international ambition indicated by nationally determined contributions, within the Paris Agreement, deviate from a track consistent with limiting warming to well below 2°C. Without increased and urgent mitigation ambition in the coming years, leading to a sharp decline in greenhouse gas emissions by 2030, global warming will surpass 1.5°C in the following decades, leading to irreversible loss of the most fragile ecosystems, and crisis after crisis for the most vulnerable people and societies.”

Throughout the report, it is made quite clear that a 2 °C or 3 °C pathway would expose hundreds of millions of people to water stress and scarcity, heatwave events, flooding, risks related to power production, crop yield or habitat degradation, with corresponding impacts on food security, health, poverty, public unrest and political destabilization. The report also addresses the irreversible economic damages that could result from these different pathways (IPCC, 2018). More recently, it was estimated that the world’s current trajectory in terms of GhG emissions will lead global warming to rise by at least 3 °C by the end of the century (UNEP, 2019). Unsurprisingly, the 2020 Global Risks Report performed on a yearly basis by the World Economic Forum identified five environmental risks as the five leading global risks in terms of likelihood, all five of these risks also being part of the top ten risks in terms of impact, with “climate action failure” being top of the ranking, in front of “weapons of mass destruction” (World Economic Forum, 2020). For the first time, global warming has been clearly identified as the most important threat to world economies, both in terms of likelihood and potential impact.

In his March 2020 letter, which represents one of the most awaited statements of each year for financial market participants, Blackrock CEO Larry Fink calls for a “Fundamental Reshaping of Finance”, strongly advocating for its readers to consider climate risk as investment risk, and calling for governments, companies and shareholders to confront climate change. More practically, Larry Fink asks CEO’s to start to publish industry-specific sustainability disclosure as well as climate-related risk disclosure aligned with the recommendations of specialized organizations. The letter contains a clear warning : “Given the groundwork we have already laid engaging on disclosure, and the growing investment risks surrounding sustainability, we will be increasingly disposed to vote against management and board directors when companies are not making sufficient progress on sustainability-related disclosures and the business practices and plans underlying them<sup>4</sup>”. This clear warning from the largest asset manager in the world marks

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<sup>4</sup> See <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>

new progress for sustainable finance and sustainability disclosures. Much like it was the case in 2015 for COP 21, the Paris Agreements and the SDGs, particular focus in this letter is given to the possible partnerships between governments, companies and financial market participants that need to be implemented in order to face the climate urgency. Furthermore, the global asset manager puts an important emphasis on the need for all actors to provide the most optimal and comprehensive information using comparable frameworks that have been developed. The underlying message that is given through this letter is that more data is needed from companies and market participants in order for actors to understand and evaluate sustainability risks, and that these systemic risks need to be taken under account by every type of financial market participant before they can be properly managed and possibly mitigated. In essence, what the industry needs is to clearly evaluate the relationships that exist between economic activities performed by companies and their impacts in terms of sustainability.

In this paper, we explore this notion by investigating how practitioners and academics are evaluating the extra-financial performance of companies and financial market participants, focusing primarily on the environmental aspect of this overall extra-financial corporate performance. I first study the global sustainable investment industry (SRI), as well as the more specific US and European markets for SRI. From this analysis, and using the most recent available data on these markets, we conclude that even though actors from this industry seem to have common approaches and concepts regarding sustainable investing, there is a lack of common definition and metrics in order for extra-financial performance to be easily measured and compared across actors. Furthermore, even actors that specialize in this market are yet unable to provide sufficient information on each approach, and most of the available data comes from the United States or Europe, while very large actors such as China have not provided any form of reliable data on the state of the Chinese SRI market. To date, it seems that a clear transparent link between investments and environmental performance does not exist, as important work still needs to be done regarding the development of common terminology, definitions and concepts that can be used across industries, geographies and type of actors.

I then investigate how academics define the concept of corporate environmental performance by first studying the literature focusing on the relationship between environmental, social and governance (ESG) factors and financial performance before focusing more specifically on the concept corporate financial performance as both a unidimensional and multi-dimensional concept. My conclusion on this study resembles that of actors of the SRI market in the sense that there seems to lack common terminology, definitions and concepts within this academic literature. Studies on the relationship between ESG and financial performance lack a common definition for what truly constitutes ESG as a concept, with most of the work to date using a diverse set of terms to refer to the overall concept of extra-financial performance such as ‘corporate social responsibility’ (CSR), ‘corporate social performance’ (CSP), SRI, or terms more specific to social and environmental factors such as ‘environmental management’, ‘green management, social performance’ or ‘social capital’. When focusing more specifically on the academic concept of

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corporate environmental performance (CEP), authors disagree on whether CEP is a unidimensional or multidimensional concept composed of a process-based environmental management performance (EMP) and an outcomes-based environmental operational performance. An investigation of the different metrics used to define these concepts leads to the conclusion that most authors develop their own measure for these concepts, and that most studies focus on samples from different industries and geographies. Finally, there also seems to lack comparability between data provided by different ESG data providers, which further emphasizes the fact that overall, it seems that both practitioners and academics are in need of a common framework to allow for a common and comparable evaluation of what truly constitutes sustainability performance. I also note that ESG factors are almost entirely absent from the asset pricing literature even though hundreds of different factors have been put forward by academics in the last decades.

Following this finding, I study the recent European Union framework for sustainable finance to try to understand how the European Commission is tackling this challenge specifically. My analysis of available documentation on the different measures that are taken on this subject provides insight on how the European Commission has created a framework in which each different type of actor of the financial industry is being targeted individually in order to start integrating sustainability into business practices and regulation. At the center of this framework is the EU taxonomy, a detailed, industry-specific classification system which categorizes different economic activities according to their extra-financial impact in the context of 6 environmental objectives. I understand from my analysis that this classification system is intended to create common terminology, concepts and definitions to all actors in the European Union's financial system, therefore providing a solution to the aforementioned challenges faced by both practitioners and academics of the sustainable finance industry.

In the following section, I go into a more detailed analysis of the EU taxonomy and the corresponding regulation that has been implemented to date, and show how the European Commission is planning on creating a financial system where every actor has to clearly demonstrate its participation in terms of sustainability with an emphasis on climate mitigation and adaptation given the current state of the climate urgency. I also show how companies and asset managers are put at the center of the transition towards sustainable EU financial markets by being both the first to have to demonstrate their alignment with the EU taxonomy but also have to be the most precise regarding this alignment, with both types of actors having to provide precise percentages of their economic activity that is taxonomy-aligned.

In the final section of this paper, I then explore the current state of play regarding the integration of sustainability into the business practices and regulation of other types of actors such as banks, pension providers, insurance providers, credit agencies, benchmark and label providers as well as corporate governance. This final section provides a general view of the current shift that is occurring in the European Union financial system regulation regarding the creation of what can be considered as a new sustainable finance paradigm.

Overall, this paper is structured as follows. Section 2 addresses the study of the SRI industry and the corresponding ESG approach. Section 3 investigates the literature related to the definition of ESG and

Corporate environmental performance and their relationships with financial performance. Section 4 provides insight on the European Union's new framework for sustainable finance, while Section 5 focuses on the specific study of the EU taxonomy and corresponding regulation and Section 6 on the state of play of sustainability-linked measures and regulations for other actors of the EU financial markets. Section 7 concludes the paper.

## **2. The Sustainable Investment Industry and the ESG approach**

When referring to investments made by private investors for sustainability, actors of financial markets generally refer to the sustainable investment industry, which is also known as the socially responsible investing (SRI) industry. While there are many definitions of what constitutes a sustainable investment, most actors agree on the fact that this investment approach “considers environmental, social and governance (ESG) factors in portfolio selection and management” (GSIA, 2018). According to the Global Sustainable Investment Alliance (GSIA), an organization that performs a market study of the global sustainable investing industry every two years, the sustainable investment industry represented \$30.7 trillion at the start of 2018, a 34 percent increase in two years (GSIA, 2018). This would represent 38.8% of the \$79.2 trillion in total assets under management at the end of 2017 (BCG, 2018).

Much like there is common agreement that sustainable investment approaches use ESG factors in their investment decision process, there also is agreement in the industry that there are seven distinct approaches to perform sustainable investing. In Table 1, I summarize the different sustainable investing approaches, provide the definition and corresponding global assets under management for each approach using information for the GSIA global report for 2018. Furthermore, I attempt to provide further details on each approach in Europe and in the United States, using information from the Eurosif SRI Report for 2018 (Eurosif, 2018) and the US SIF Trends report from 2018 (US SIF, 2018). The GSIA, the Eurosif and the US SIF are respectively the main references in terms of market studies of the sustainable investment environment in their geographical regions, Eurosif and US SIF being underlying members that constitute the GSIA. To date, Europe and the United States constitute by far the largest SRI markets globally, considering that the Chinese market on sustainable investing has not yet been identified given a lack of available data. When looking at Table 1, a few observations can be made regarding each investment approach.

### *2.1. Negative/Exclusionary Screening*

We notice the largest investment approach is the “Negative/Exclusionary Screening Approach”, which in practice does not represent concrete investments in sustainable projects, but rather non-investment - and in some cases divestment - in industries that are considered unethical or contrary to social or environmental investor principles. As this paper primarily focuses on investments in climate change and the environment, I observe that only two environmental criteria are included in the top European criteria for exclusion. Eurosif does address the divestment from fossil fuel industries separately in their report, but this approach does not seem to be a priority for investors as of 2018. Specifications regarding the preferences of US investors in terms of negative screening are not provided by US SIF.

## *2.2. ESG Integration*

The second largest approach is “ESG integration”, for which the GSIA provides a definition that corresponds quite closely to their definition of the SRI industry as a whole<sup>5</sup>. This subject is addressed specifically by Eurosif in their study, which states clearly that there is a “lack of clarity in the parameters governing the integration of ESG factors”. In some sense, this is addressed by the US SIF which provides an analysis of the market that solely focuses on ESG categories and specific ESG criteria but does not address each investment approach separately. Looking at US SIF data, we understand that, as of 2018, sustainable investors in the US focused quite equally between social, environmental and governance categories, even though “Environment” is the third category for both Money Managers and Institutional Investors. However, in the case of the US market, the specific “Climate Change / Carbon” criteria does make the ranking of top ESG criteria used by both Money Managers and Institutional Investors.

## *2.3. Corporate Engagement and Shareholder Action*

Another largely implemented sustainable investment approach resides in “Corporate Engagement and Shareholder Action”, which consists in using shareholder power to influence corporation action. In Europe, this approach is mostly performed in the United Kingdom, which together with Sweden and the Netherlands represent 90% of the European market. Though Eurosif does not provide information on specific criteria used for this approach, US SIF provides information on leading ESG issues in the US. While the top 2 issues are governance issues, climate change does stand in third place with 270 shareholder proposals in the 2016-2018 period.

## *2.4. Norms-Based Screening*

According to the GSIA, norms-based screening is not performed in the US and consists in implementing international norms into the investment screening process. The three main norms used in Europe are the UN Global Compact (42%), the OECD Guidelines for Multinational Companies (25%) and the International Labour Organisation conventions (26%). These mostly focus on human, labour rights and anti-corruption, though the environment has also been integrated. The Eurosif also includes more than 10 other international norms that are used by the 7% of remaining investors that compose this market.

### *Sustainability Themed Investing*

This investment approach focuses on specific industries and economic activities that are known to be beneficial for climate and the environment. This approach is however one of the least popular approaches in the sustainable investment industry, as it represents only \$1,02 trillion globally, with 77% of assets under management managed in the US. Though the US SIF does not provide information on the specific market

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<sup>5</sup> In the GSIA 2018 report, the overall definition for a sustainable investment is, as aforementioned, an investment approach that “considers environmental, social and governance (ESG) factors in portfolio selection and management” while the definition for the specific “ESG Integration” investment approach refers to “the systematic and explicit inclusion by investment managers of environmental, social and governance factors into financial analysis”

**Table 1 - Global SRI approaches and corresponding assets-under-management**

| SRI Approach                                | Definition  | Global AuM        | Europe (% of Global AuM) | Distribution  | US (% of Global AuM) | Distribution  |
|---|---|-------------------|--------------------------|---|----------------------|---|
| Negative/Exclusionary Screening             | "the exclusion from a fund or portfolio of certain sectors, companies or practices based on specific ESG criteria"  | \$19.77 trillion  | 55%                      | <p>Top Exclusion Criteria:</p> <ul style="list-style-type: none"> <li>- Controversial Weapons (63.6%)</li> <li>- Tobacco (49.1%)</li> <li>- All Weapons (45.7%)</li> <li>- Gambling (34.9%)</li> <li>- Pornography (34.4%)</li> <li>- Nuclear Energy (33.9%)</li> <li>- Alcohol (30.6%)</li> <li>- GMO (24.5%)</li> <li>- Animal testing (19.3%)</li> </ul>   | 40%                  | <p><b>ESG Investing</b></p> <p><b>ESG Categories by Money Managers 2016-2018:</b></p> <ul style="list-style-type: none"> <li>- Social (\$10.8 trillion)</li> <li>- Governance (\$10.8 trillion)</li> <li>- Environmental (\$10.1 trillion)</li> <li>- Product (\$4.5 trillion)</li> </ul> <p>Top specific Criteria</p> <ul style="list-style-type: none"> <li>- Climate Change / Carbon : \$3.00 trillion</li> <li>- Tobacco : \$2.89 trillion</li> <li>- Conflict Risk : \$2.26 trillion</li> <li>- Human Rights : \$2.22 trillion</li> <li>- Transparency and Anti-Corruption : \$2.22</li> </ul> |
| ESG Integration                             | "the systematic and explicit inclusion by investment managers of environmental, social and governance factors into financial analysis"  | \$17.54 trillion  | 54%                      | <p>Indicators used by the Eurosif are:</p> <p>(1) the formalisation of an ESG integration policy in the investment process (19%)</p> <p>(2) the number of ESG analysts in the team (61% have between 1 and 5)</p>   | 28%                  | <p><b>ESG Categories by Institutional Investors 2016-2018:</b></p> <ul style="list-style-type: none"> <li>- Social (\$5.2 trillion)</li> <li>- Governance (\$3.5 trillion)</li> <li>- Environmental (\$3.5 trillion)</li> <li>- Product (\$2.9 trillion)</li> </ul> <p>Top specific Criteria</p> <ul style="list-style-type: none"> <li>- Conflict Risk : \$2.97 trillion</li> <li>- Tobacco : \$2.56 trillion</li> <li>- Climate Change / Carbon : \$2.24 trillion</li> <li>- Board Issues : \$1.73 trillion</li> <li>- Transparency and Anti-Corruption : \$1.69 trillion</li> </ul>              |
| Corporate Engagement and Shareholder Action | "the use of shareholder power to influence corporate behavior, including through direct corporate engagement (i.e., communicating with senior management and/or boards of companies), filing or co-filing shareholder proposals, and proxy voting that is guided by comprehensive ESG guidelines."            | \$9.83 trillion   | 56%                      | <ul style="list-style-type: none"> <li>- No information on distribution of different criterias.</li> <li>- Mostly performed in the UK (€2.8 trillion), Sweden (€874 billion) and the Netherlands (around €700 billion) which together represent around 90% of the market</li> </ul>   | 18%                  | <p><b>Shareholder Action</b></p> <ul style="list-style-type: none"> <li>- In 2018, 165 institutional investors and 54 investment managers controlling \$1.8 trillion in assets filed or co-filed shareholder resolutions on ESG issues</li> </ul>   |
| Norms-based Screening                       | "screening of investments against minimum standards of business practice based on international norms, such as those issued by the OECD, ILO, UN and UNICEF"  | \$4.68 trillion   | 77%                      | <p>Applied Norms :</p> <ul style="list-style-type: none"> <li>- UN Global Compact (42%)</li> <li>- OECD Guidelines for MNC's (25%)</li> <li>- ILO Conventions (26%)</li> <li>- Others (7%)</li> </ul>   | na                   |   |
| Positive/Best-in-Class Screening            | "investment in sectors, companies or projects selected for positive ESG performance relative to industry peers"   | \$1.84 trillion   | 36%                      | <ul style="list-style-type: none"> <li>- No information on distribution of different criterias.</li> <li>- Mostly performed in France which represents more than 50% of the market with close to €300 billion out of a total of €586 billion, with Netherlands and Italy representing close to €100 billion and 75€ billion respectively</li> </ul>           | 60%                  |   |
| Sustainability Themed Investing             | "investment in themes or assets specifically related to sustainability (for example clean energy, green technology or sustainable agriculture)"   | \$1.02 trillion   | 17%                      | <p>Very segmented market:</p> <ul style="list-style-type: none"> <li>- Water management (17%)</li> <li>- Renewable Energy (12%)</li> <li>- Energy Efficiency (11%)</li> <li>- Sustainable transport (11%)</li> <li>- Buildings sector (11%)</li> <li>- Land use/Forestry/Agriculture (11%)</li> <li>- Waste management (9%)</li> <li>- Other (18%)</li> </ul> | 77%                  | <p><b>Leading ESG Issues by number of Shareholder proposals filed:</b></p> <ul style="list-style-type: none"> <li>- Proxy Access (≈350)</li> <li>- Corporate Political Activity (≈300)</li> <li>- Environment: Climate Change (≈270)</li> <li>- Labor &amp; Equal Employment Opportunity (≈190)</li> <li>- Executive Pay (≈180)</li> <li>- Human Rights (≈150)</li> <li>- Independant Board Chair (≈150)</li> <li>- Special Meetings (≈120)</li> <li>- Board Diversity (≈90)</li> <li>- Sustainability Reporting (≈90)</li> <li>- Environment: Other issues (≈90)</li> </ul>                        |
| Impact/Community Investing                  | "targeted investments aimed at solving social or environmental problems, and including community investing, where capital is specifically directed to traditionally underserved individuals or communities, as well as financing that is provided to businesses with a clear social or environmental purpose" | \$ 444,26 billion | 28%                      | <p>Eurosif does not provide information on the specific sectors that are adressed by Impact Investing</p>   | 66%                  |   |

fragments that are targeted by this approach, data from Eurosif make us understand that this market is very fragmented between different activities (7 distinct activities composing respectively 17% to 9% of the market).

### *2.5. Impact and Community Investing*

The least popular sustainable investment approaches in terms of assets under management are the “Impact Investing” and “Community Investing” approaches. Impact Investing involves investments targeted specifically at environmental and social issues. Impact investors invest with the intention of generating measurable positive social and environmental impact while also maintaining positive financial results. Community Investing consists in investing in identified under-served communities and is mostly popular in the United States.

### *2.6. General remarks*

As the growth of the sustainable investing market has been capturing a lot of attention by a variety of financial market actors, going into a detailed analysis of this market provides interesting insight.

First and foremost, to date, the sustainable investment market is not solely composed of investments in activities with positive environmental and social performance, but also of non-investments in some specific activities that are subjectively assessed as non-ethical by investors. An interesting example is the exclusion of nuclear energy by some investors from their portfolios, while the negative or positive social and environmental impact of nuclear energy is still quite a debate<sup>6</sup>. Furthermore, there is debate between actors of the sustainable finance industry of whether exclusion can be considered a sustainable investment approach, as one investor that chooses not to invest or to divest from an activity or firm is in most cases replaced by another. As the need for investments in sustainable projects grows with the climate urgency, it seems quite clear that non-investment or divestment in “brown” activities will not be sufficient. The exclusion approach, however, is applied for \$19.77 trillion of assets under management that are counted as sustainable investments. The industry that represents only investments in projects or firms with positive social and environmental performance would therefore be quite smaller.

Secondly, looking at 2018 data, it seems that the environment is not yet a priority for sustainable investors. There are only two exclusion strategies that are related to the environment in Europe using Eurosif data, the only investment approach that focuses exclusively and clearly on the environment - Sustainability Investing - is one of the least popular and has grown by only 3% in Europe between 2016 and 2018. In the United States, the Environment is not the most important ESG category for both money managers and institutional investors. Climate change issues do come third in terms of shareholder proposals in the US, but sustainability reporting and other environmental issues are at the bottom of the shareholder

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<sup>6</sup> Greenhouse gas emissions from nuclear generation is quite low, but nuclear energy generation has other environmental impacts linked to uranium mining, radioactive emissions and waste heat. Though this debate is clearly outside the scope of this study, nuclear energy constitutes a good example of the subjective aspect of some SRI strategies.



proposal list. As clear investments in favor of positive environmental projects that mitigate climate change become more urgent, this did not seem to be a priority for sustainable investors as of 2018.

Finally, an analysis of what to date are considered three of the most informative reports on the sustainable investing industry leaves us with the conclusion that actors still lack clarity. Even though efforts of the GSIA allow us to have a global view of the industry, we understand that European and US markets differ and provide different approaches of the same market. Sustainable investing is still quite a broad endeavor, and the terminology for sustainability or ESG criteria is very dense. Table 1 only contains criteria that is provided in the reports, which generally consists in a list of the most used criteria. For Europe, the report mentions 9 different exclusion criteria, 13 different European norms, 7 different types of sustainable investments, and in the US, reports mention 6 top ESG criteria and 10 types of shareholder proposals. Most of the terms used are not similar and do not address the same issue. Furthermore, information on the specifics of approaches like ESG Integration, which does represent \$17.54 trillion of global assets under management according to the GSIA, are not provided. In Europe, specifics of the €4.8 trillion “Corporate Engagement and Voting” industry are also not provided.

As it seems clear today that interest for sustainability is growing amongst investors, we understand from our analysis of the industry that there still lacks visibility on what precise investments are made in projects and activities that have positive environmental outcomes, specifically with regards to climate change. Another insight from this analysis resides in the fact that while sustainability investing is described as the application of ESG factors in portfolio selection and management, there seems to lack a precise delimitation of what constitutes an ESG factor. Furthermore, the descriptions given by the GSIA for every approach mention “ESG criteria”, “ESG factors”, “ESG guidelines” and “ESG performance” without further precision of what differentiates these terms and what they refer to specifically.

### **3. Corporate Environmental Performance**

#### *3.1. ESG and Financial Performance*

In order for companies and financial market participants to truly take action to mitigate global warming, these actors need better understanding of the relationships that exist between environmental factors and factors linked to financial performance and risk. However, to date, academic literature has not yet reached a consensus on this issue and is still trying to understand the relationship of ESG disclosure as a one-dimensional concept with financial performance. We observe similar struggles in academia than that which were identified in the previous section concerning practitioners: there is no clarity on what truly constitutes ESG factors and disclosure, few studies focus on the specific relationship between environmental performance and financial performance and risk, research approaches concerning ESG criteria vary greatly and data on ESG is not always entirely reliable.

Looking at the literature, we do get a sense that a positive relationship exists between ESG and financial performance. Brooks and Oikonomou (2018) provide a comprehensive review of the effects of ESG disclosure on firm financial performance. According to the authors, a consensus has been reached regarding the statistically significant and economically modest positive relationship between ESG criteria

and corporate financial performance, with only 6% to 8% of the literature finding a negative relationship between the two concepts. Furthermore, the authors point out that the three main meta-analyses on the subject found very similar correlation between ESG and corporate financial performance, going from 0.12 (Friede et al., 2015), to 0.13 (Margolis et al., 2009) to 0.15 (Orlitzky, 2003). However, further analysis of this work provides interesting insight on some underlying issues that are faced by the literature.

The first of these issues consists in the different concepts that address the extra-financial aspect of companies and the frequently used terms of corporate social responsibility (CSR) and corporate social performance (CSP) in comparison with ESG. In practice, these three terms are almost used interchangeably, as they are used to refer to the broad category of factors that do not address financial performance or risk directly. In the aforementioned work of Brooks and Oikonomou (2018), which is dedicated to a comprehensive review of literature of the relationship between ESG disclosure and performance of firm value<sup>7</sup>, the term “ESG” is used 19 times throughout the paper, and is mentioned for the first time in section 7 of the paper which directly precedes the paper’s conclusion, when the term “CSR” is used 58 times and the term “CSP” is used 82 times throughout the paper. No explanation of the relationship between “CSR”, “CSP” and “ESG” is provided, and none of these concepts are defined. Concluding remarks address the link between “CSP/ESG and financial performance”, clearly demonstrating that the authors consider CSP and ESG to broadly address the same concepts. Further analysis of the three main meta-studies on the relationship between ESG/CSP and corporate financial performance gives further insight on the challenges faced by the literature.

In Friede, Busch and Bassen (2015), which is considered the largest and most recent meta-study on the relationship between ESG and financial performance<sup>8</sup>, authors identified 35 vote-count studies and 25 meta-analyses which together analyzed 3718 primary studies. In this work, authors broadly determine whether underlying studies focus on Environmental, Social or Governance criteria by applying “a definition of ESG that reflects the exemplary list of variables of Clarkson (1995), Wood (2010) and the investment approaches of GSIA (2013)”. However, this definition is not provided to the reader, Clarkson (1995) and Wood (2010) refer to work on the evaluation and measure of corporate social performance (CSP) and GSIA (2013) refers to the Global Sustainable Investment Review 2012, which, much like the 2018 report that was reviewed in the previous section, does not provide a definition of what constitutes ESG criteria or factors. Looking at the terminology of the titles of the underlying studies that are used in Friede, Busch and Bassen’s meta-study, it can be observed that 26 different concepts are explored in a total of 40 studies, going from the traditional “Corporate Social Responsibility” and “Corporate Social Performance” to the more specific “Environmentally Sustainable Supply Chain Management Practices”, “Social Capital of Entrepreneurs” or “High Performance Work Practices”. Table 2 contains the different terminology used in the titles of the 40 underlying studies used in Friede, Busch and Bassen (2015) as well as corresponding citations, where we

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<sup>7</sup> The title of the authors’ paper is “*The effects of environmental, social and governance disclosures and performance on firm value: A review of the literature in accounting and finance*”

<sup>8</sup> Here the title of the paper is “*ESG and financial performance: aggregated evidence from more than 2000 empirical studies*”

can observe the variety of different concepts that are used in studies that focus on the relationship between ESG/CSP and financial performance.

The two other main meta-studies used in the literature to demonstrate the relationship between “CSP/ESG” and corporate financial performance are Orlitzky et al. (2003) and Margolis et al. (2009). In their paper, Orlitzky et al. (2003) provide an overview of the studies included in their meta-studies as well as the measures of CSP and corporate financial performance that were used. More than 30 different measures of CSP and more than 20 measures of corporate financial performance are used in the 52 underlying studies. In Margolis et al. (2009) though the similar 20+ corporate financial performance measures are used, more than 100 different measures of CSP are identified in the 182 underlying studies. Amongst commonly found measures in both papers are the Kinder, Lydenberg & Domini (KLD) ratings, pollution expenditure measures, the Council for Economic Priorities (CEP) rankings, various types of annual report disclosures, Fortune magazine ratings, the Domini 400 Social stock index, the Toxics Release Inventory (TRI) measure, lawsuit filings, articles in the Wall Street Journal or affiliation to the Sullivan Principles/divestment from South Africa.

From this analysis of the literature, it can be concluded that ESG as a concept is still not clearly defined by academics, and is still one of many terms that is used to refer to the plethora of concepts and factors that address the “extra-financial” aspect of firms, projects and assets. This is quite concerning given the fact that the ESG concept is taken as a basis for what has been identified as a 30.6\$ trillion SRI industry that focuses on sustainability issues with no clear framework to understand and demonstrate how investments are truly sustainable. Furthermore, given this lack of definition and clear framework, the true relationship between ESG as a mono-dimensional concept and financial performance and risk is quite challenging to determine.

While authors like Brooks and Oikonomou (2018) provide important work to understand the current state of the literature on the concept of ESG/CSP, and do provide rich insight by putting forward the fact that there seems to be a general positive correlation between ESG/CSP and financial performance, it seems clear from the analysis of meta-studies of the field that ESG/CSP is far from a mono-dimensional concept, as these meta-studies do refer to hundreds of different underlying concepts that are categorized as ESG criteria or factors. In addition, the variables used in these studies to measure financial performance also differ greatly, further challenging the robustness of these results.

A literature specific to the study of corporate environmental performance – which is broadly categorized as the environmental branch of ESG/CSP - has also been developing as focus on the climate change urgency grew. We focus on this literature to try to further understand the specific challenges of academics trying to measure corporate environmental performance and evaluate the relationship between environmental performance and financial performance.

**Table 2 - ESG-related terminology**

| Concept used in title  | Different terminology used  | References  |
|------------------------|---|---|
| CSR                    | "Corporate Social Responsibility"   | Cochran and Wood (1984), Aupperle, Carroll, and Hatfield (1985), Pava and Krausz (1996), Griffin and Mahon (1997), Richardson, Welker, and Hutchinson (1999), Orlitzky and Benjamin (2001), McWilliams, Siegel, and Wright (2005), Boaventura, Santos da Silva, and Bandeira-de-Mello (2012), Fiska (2013), Schröder (2014), Pavie and Filho (2008) |
| CSP                    | "Corporate Social Performance"  | Wood and Jones (1995), van Beurden and Gössling (2008), Pelozo (2009), Orlitzky (2001), Orlitzky, Schmidt, and Rynes (2003), Allouche and Laroche (2005), Wu (2006), Margolis, Eifenbein, and Walsh (2009), Vishwanathan (2010)   |
| CEP                    | "Corporate Environmental Performance" or "Environmental Performance"  | Blanco, Rey-Maqueira, and Lozano (2009), Horváthová (2010), Günther, Hoppe, and Endrikat (2011), Schultze and Trommer (2012), Dixon-Fowler et al. (2013), Endrikat, Guenther, and Hoppe (2014)  |
| SRI                    | "Socially Responsible Investing" or "Sustainable Investing"   | Sjostrom (2011), Rathner (2013), Viviers and Eccles (2012), Kleine, Krautbauer, and Weller (2013), Revelli and Viviani (2013), Capelle-Blancard and Monjon (2014), Revelli and Viviani (2015)   |
| Others - Environmental | "Being Green", "Green Management", "Environmental Characteristics", "Environmental Programs", "Environmental Management", "Environmentally Sustainable Supply Chain Management Practices"                     | Ambec and Lanoie (2007), Molina-Azorin et al. (2009), Rosenbusch, Bausch, and Galander (2007), Darnall and Sides (2008), Albertini (2013),  |
| Others - Social        | "Social Responsiveness", "Social Performance", "Social Initiatives", "Social Capital", "Social Investors", "Socially Irresponsible and Illegal Behaviour", "Human Capital", "Social Capital of Entrepreneurs" | Arlow and Gannon (1982), Ullmann (1985), Roman, Hayibor, and Agle (1999), Margolis and Walsh (2003), Westlund and Adam (2010), Derwall, Koedijk, and Horst (2011), Froomean (1997), Crook et al. (2011), Unger et al. (2011), del Mar Miras-Rodríguez et al. (2015), Stam, Arzlanian, and Elfving (2014)  |
| Others                 | "Sustainability", "Shareholder Activism", "Governance", "High Performance Work Practices", "Knowledge Transfer", "Innovation", "Entrepreneurial Talent"   | Salzmann, Ionescu-Somers, and Steger (2005), Gillan and Starks (2007), Love (2010), Clark, Feiner, and Viehs (2015), Combs et al. (2006), van Wijk, Jansen, and Lyles (2008), Rosenbusch, Brinckmann, and Bausch (2011), Rubera and Kirca (2012), Mayer-Haug et al. (2013)  |

### 3.2. Environmental Performance and Financial Performance

Challenges faced by academics regarding the definition of ESG/CSP are also present in the literature that focuses on corporate environmental performance (CEP) specifically. The first dichotomy in terms of approaches in the literature concerns whether (CEP) is a mono-dimensional construct or a multi-dimensional one. As some academics directly construct unique measures to represent firm CEP, some differentiate CEP into two distinct types of performances: an environmental management performance (EMP) that focuses on process-based environmental performance such as firm strategies or policies and an environmental operational performance (EOP) that focuses on measurable environmental outcomes. This is part of a current challenge faced by academics that seems central in the literature: the lack of common measures for CEP. In table 3, I breakdown different approaches used in the CEP literature by authors that constructed a measure for CEP in their work. This table does not intend to provide a comprehensive view of the entire literature but does help us understand the complexity and variety of measuring CEP for academics, and the absence of common measures and comparability in results.

Looking at Table 3, we observe great variability in the databases that are used, as academics refer to the ASSET4 ESG database, but also to the KLD database, the CDP disclosure database, the Trucost database or use data collected from surveys. Within this databases, different data is used to measure CEP. Xue, Zhang and Li (2019) use ASSET4 ESG to create 41 EMP KPIs and get data on carbon emissions, Trumpp, Endrikat, Zopf and Guenther (2015) to create 32 EMP KPIs and get data on energy consumption, water withdrawal, waste and hazardous waste produced in addition to carbon emissions data, Trumpp &

**Table 3 - Corporate Environmental Performance in the literature**

| Study title  | Database                                | EMP   | EOP   | Final Metrics used  | Sample studied   |
|--|---|---|---|---|--|
| Xue, H., Zhang, Z. and Li, P., 2020. Corporate environmental performance, environmental management and firm risk. <i>Business Strategy and the Environment</i> , 29(3), pp.1074-1096.  | ASSET4 ESG                              | Equal-weighted average of 41 Yes/No KPIs  | Carbon Performance (carbon emissions per net sales)                 | Total CO2 and CO2 equivalents emissions in tonnes divided by net sales  | UK,924 firm year in manufacturing, 708 service industry  |
| Ren, S., He, D., Zhang, T. and Chen, X., 2019. Symbolic reactions or substantive pro-environmental behaviour? An empirical study of corporate environmental performance under the government's environmental subsidy scheme. <i>Business Strategy and the Environment</i> , 28(6), pp.1148-1165. | KLD                                     | Dummy Variable (passed ISO14001 or have not)  | Pollutants of three wastes (gas waste, water waste and solid waste) | Equal-weighted dummy variables for SO2, NOX, CO2, soot and dust, COD, ammonia nitrogen, solid waste, and energy consumption   | China  |
| Xie, S. and Hayase, K., 2007. Corporate environmental performance evaluation: a measurement model and a new concept. <i>Business Strategy and the Environment</i> , 16(2), pp.148-168.   | Survey                                  | 48 measurement items for 4 management performance indicators  | 18 measurement items for 2 operational performance indicators       | Answers from the survey of 68 measurement items   | Japan, the electrical machinery and instrument manufacturing sector  |
| Anton, W.R.Q., Deltas, G. and Khanna, M., 2004. Incentives for environmental self-regulation and implications for environmental performance. <i>Journal of environmental economics and management</i> , 48(1), pp.632-654.   | IRRC from surveys                       | 13 dummy variable EMPs  |   |   | S&P 500 firms included in the Coporate Environmental Profile Directories                                       |
| Post, C., Rahman, N. and McQuillen, C., 2015. From board composition to corporate environmental performance through sustainability-themed alliances. <i>Journal of Business Ethics</i> , 130(2), pp.423-435.   | KLD                                     | Year-to-year increases in 7 KLD environmental strenghts   |   |   | US Oil and Gaz companies that were listed in the 2009 Forbes.com Special Report The Global 2000                |
| Trumpp, C., Endrikat, J., Zopf, C. and Guenther, E., 2015. Definition, conceptualization, and measurement of coporate environmental performance: A critical examination of a multidimensional construct. <i>Journal of Business Ethics</i> , 126(2), pp.185-204.                                 | ASSET4 ESG                              | 32 Yes/No KPIs  | 5 continuous KPIs   | Energy consumption in gigajoules, water withdrawal in cubic meters, CO2 and CO2 equivalents emissions in tons, waste produced in tons, hazardous waste produced in tons | Mostly Europe Manufacturing industry and US  |
| Trumpp, C. and Guenther, T., 2017. Too little or too much? Exploring U-shaped relationships between corporate environmental performance and corporate financial performance. <i>Business Strategy and the Environment</i> , 26(1), pp.49-68.   | ASSET4 for Waste, CDP for GHG emissions | -   | GHG emissions and Waste   | Negative GHG emissions divided by sales, negative amount of waste produced by a firm divided by sales   | International, manufacturing and Service Industries  |
| Escrig-Olmedo, E., Muñoz-Torres, M.J., Fernández-Izquierdo, M.Á. and Rivera-Lirio, J.M., 2017. Measuring corporate environmental performance: A methodology for sustainable development. <i>Business Strategy and the Environment</i> , 26(2), pp.142-162.                                       | ASSET4                                  | 62 Indicators taken from ASSET4   |   |   | Agri-food industry   |
| Hartmann, J. and Vachon, S., 2018. Linking environmental management to environmental performance: The interactive role of industry context. <i>Business Strategy and the Environment</i> , 27(3), pp.359-374.  | ASSET4                                  | Carbon Emission Reduction   | -   | Absolute Carbon Emissions   | Publicly traded European manufacturing firms listed in the Asset4 database                                     |
| Delmas, M.A., Etzion, D. and Naim-Birch, N., 2013. Triangulating environmental performance: What do corporate social responsibility ratings really capture?. <i>Academy of Management Perspectives</i> , 27(3), pp.255-267.  | KLD, Trucost, SAM                       | Creation of 5 variables: KLD Total Concerns, KLD Total Strengths, Trucost Total Damage, SAM Eco-efficiency, SAM Reporting |   |   | 741 firms, no detail on industry or geography  |
| Bhattacharyya, A. and Cummings, L., 2015. Measuring corporate environmental performance stakeholder engagement evaluation. <i>Business Strategy and the Environment</i> , 24(5), pp.309-325.   | CDP Disclosure                          | GHG Emissions   |   |   | 127 companies, various industries and geographies  |
| Bhattacharyya, A. and Cummings, L., 2015. Measuring corporate environmental performance stakeholder engagement evaluation. <i>Business Strategy and the Environment</i> , 24(5), pp.309-325.   | Survey                                  | 36 MPIs and 11 OPIs   |   |   | A final sample size of 150 (from chemical, industrial engineering and pharmaceutical & biotech) from Australia |

Guenther (2017) only for waste production data, Escrig-Olmedo, Muñoz-Torres, Fernández-Izquierdo, & Rivera-Lirio (2017) to create 62 environmental indicators for the Agri-food industry and Hartmann & Vachon for carbon emissions. The KLD database is used to create variables such as KLR environmental strengths indicators (Post, Rahman and McQuillen, 2015), the KLD Total Strengths and KLD Total Concerns (Delmas, Etzion, and Nairn-Birch, 2013) or to get metrics on pollutants (Ren, He, Zhang & Chen, 2019). Given the additional flexibility that is enabled through the use of survey in terms of variable construction, customized variables are constructed using survey data (Xie & Hayase, 2007; Anton, Deltas, and Khanna, 2004; Bhattacharyya & Cummings, 2015). In addition, samples in these studies mostly consist of firms in different industries and geographies.

Focusing on the literature on the relationship between environmental performance and financial performance and risk allows for deeper understanding of the general issues faced by academics that focus on the concept of ESG/CSP. There seems to be common agreement on the terminology used in this literature – contrarily to the literature that focuses on ESG as a mono-dimensional concept – as academics do have a common usage for the main concepts linked to environmental performance such as CEP, EMP and EOP. However, the problem of evaluating and measuring these performances remains. Unlike financial performance or financial risk, which can broadly be considered as mono dimensional concepts as their measurement rely on one metric, environmental performance has a great variety of dimensions. Much like we can observe in Table 3, environmental performance can be measured by using various metrics such as CO2 emissions, GhG emissions, tons of waste, gigajoules of energy consumption. In that sense, we understand the importance of a general framework to define what truly constitutes environmental performance.

### *3.3. Environmental and Social Data*

As we understand from the analysis performed in the previous sections, both the literature that focuses broadly on ESG/CSP and the literature that focuses more specifically on environmental performance suffer from a lack a common definition of what constitutes their central concepts. It is impossible to find true consensus in the literature on what “ESG” means, what are ESG factors and how they can be measured, much like it is impossible to find consensus on the evaluation and measure of corporate environmental performance. In addition to these important challenges, recent literature has also started to look more precisely into the reliability of ESG data, and it seems that academics also face important challenges in this specific domain as well.

In a study on this subject, S. Kotsantonis and G. Serafeim (2019) hand-collected information on Employee Health and Safety data from the latest sustainability reports of 50 large publicly listed companies across a variety of sectors and found that this information was reported in 20 different ways by these randomly selected firms, using different terminology and units of measure (Kotsantonis and Serafeim, 2019). This is a significant challenge both in terms of aggregation of data as well as comparability, as it poses both a challenge within a firm to create an aggregate measure of their “Employee Health and Safety” performance and between firms to understand how and to what extent their performance might be compared

to their peers. It seems that the definition challenge that can be identified in the academic literature on the subject of ESG/CSP is common to practitioners as well, as we can understand that “Health and Safety concerns” constitute only one of the many dimensions of ESG/CSP.

This in turn causes a second limitation of ESG data relative to lack of data. The lack of standardized data means that even when regulation requires a certain type of disclosure, ESG data providers must deal with the absence of common indicators. As an example, referring to measures reported in Kotsantonis and Serafeim (2019), while a set of companies report on the “Number of accidents with fatal consequences”, another might simply report on “Injury rates”. Different methodologies are used by ESG data providers to fill this gap, but it is quite clear that the provided data is then more of an approximation than what the data would indicate in reality. Such approximations would in turn lead to less precise results. Kotsantonis and Serafeim (2019) address another key issue relative to ESG scores provided by ESG data providers on the subject of benchmarking. On this issue, the authors demonstrate how the definition of peer groups for benchmarks and the lack of transparency on the choices made by ESG data provider on their selection of peer groups leads to market-wide inconsistencies in ESG metrics and data.

Finally, another field of study addresses the lack of agreement between ESG data providers on the ESG scores of companies. In a study focusing on the ESG ratings of five ESG rating companies, Berg, Koelbel and Rigobon (2019) find that the correlation between ESG ratings is of 0.61 in average, and goes from 0.42 to 0.73, when correlation between credit ratings for Moody’s and Standard & Poor’s are correlated at 0.99. The authors conclude that given these disparities, ESG performance is therefore unlikely to be properly reflected in asset prices, discourages firms from improving their ESG ratings and poses a significant problem in empirical research as using different ESG datasets would lead to obtaining different results. This concept is verified by Diebecker, Rose and Sommer (2019) that use three distinct datasets to verify the effect of corporate sustainability performance on the cost of equity and find a negative effect when using the MSCI ESG KLD STATS dataset and the original ASSET4 dataset but do not when using the Thomson Reuters ESG dataset<sup>9</sup>. In his study on the subject, Doyle (2018) found that larger companies obtained higher ESG ratings, that there was a geographical bias toward companies in regions with high reporting requirements and that ESG agencies oversimplify industry weighting and company alignment, providing multiple concise examples of companies receiving vastly different ratings from different rating agencies. Yang (2019), even finds evidence of a link between green washing and ratings inflation. First controlling for firm size, the author finds that environmental and social ratings are largely uninformative about future corporate bad behavior. However, without controlling for size, the author finds that better environmental ratings predict more future bad behavior. Finally, findings of Christensen, Serafeim and Sikochi (2019) suggest that firms that provided greater ESG disclosure were faced with greater disagreement across ESG rating agencies.

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<sup>9</sup> MSCI ESG KLD STATS and the Thomson Reuters ESG dataset are two of the leading ESG data providers to date. Thomson Reuters purchased the Asset 4 dataset and integrated it in some of its data products in 2009. Interestingly enough, even though it could be considered that the Asset 4 data was not modifiable, it provided different results in the context of this study, demonstrating how ESG data could still have contain a subjective aspect to date.

Overall, this recent literature seems to indicate that ESG data is not yet reliable, and that different data providers are susceptible to provide different ESG data on similar firms. This means that most studies to date that rely on ESG data and ESG data providers to determine specific relationships between ESG factors and financial performance would probably have different results if they used a different source of data, even if they kept similar samples. This constitutes yet another challenge for academics of the field that already have to face the lack of common definitions, concepts and metrics in this field. Interestingly, it seems that it also a lack of common definitions, concepts and metrics that is the cause for this disparity in terms of data between data providers. Once again, we understand how it is becoming increasingly urgent to develop a common approach to ESG and sustainability in order for the industry – both practitioners and academics - to be able to reliably evaluate the extra-financial aspects of firms, assets and projects.

### *3.4. The absence of ESG factors in asset pricing*

With close to 40% of global assets under management using sustainable investing strategies according to the 2018 GSIA report and the organization's underlying data, it could be expected that environmental, social and governance factors had started to impact asset pricing and the corresponding literature in financial research. Furthermore, given the increase urgency relative to global warming, environmental factors specifically could also be considered to have an increasing impact on asset pricing.

Looking at firm environmental performance and criteria from an asset pricing perspective does make sense, as it could be reasonable to expect firms with higher environmental performance not only to have better financial performance or to be less exposed to risk, but most importantly, such highly performing environmental firms would inevitably create interest from market participants that wish to use their investment to help mitigate climate change.

Historically, this has not been the case. In a renowned study in the asset pricing literature, Harvey, Liu and Zhu (2015) identify more than 300 papers in the literature that had been put forward new factors that explained the cross-section of expected stock returns. The considered period for the identification of these factors starts from the original market return factor of Sharp (1964) and stop at the year 2012. Out of more than 300 papers, only 1 paper mentions an environmental factor (Brammer, Brooks, and Pavelin, 2006) out of only 6 papers in total that mention environmental or social factors with factors such as labor income (Campbell, 1996; Jagannathan and Wang, 1996; Gómez, Priestley, and Zapatero, 2016<sup>10</sup>), local unemployment (Korniotis and Kumar, 2009), labor unions (Chen, Kacperczyk and Ortiz-Molina, 2011) and employment and community indicators (Brammer, Brooks, and Pavelin, 2006). The environmental factor developed by Brammer, Brooks and Pavelin (2006) is built using the EIRIS database<sup>11</sup>. Authors create 3 categories of environmental performance (environmental policies, environmental management systems and management reporting) which are all given a grade between 0 to 4 for a total environmental responsibility

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<sup>10</sup> This paper is cited in Harvey, Liu and Zhu (2015) as a working paper in 2012, but the paper was later published in the *Journal of Financial and Quantitative Analysis* in 2016.

<sup>11</sup> EIRIS was an ESG research provider that also add a database of ESG data available



score out of 12. There is no reason not to think this approach to estimating environmental performance does not suffer from the same issues mentioned in the previous sections.

The sample used in Harvey, Liu and Zhu (2015) stops in 2012, and represents a period where studying the extra-financial performance of the firm was less popular, and there was much less focus on the climate urgency. However, Harvey and Liu (2019) provide an update of these factors and find 159 additional factors between 2012 and 2018. Once again, environmental and social factors are almost absent from this list of new factors, with one paper putting forward labor income as a risk factor (Gomez, Priestley and Zapatero, 2016) which was already mentioned as a working paper in 2012, and another creating a boycott risk factor based on the value-weighted return of the tobacco, alcohol, fossil, weapons and gaming firms (Luo and Balvers, 2017). Since 2019, the author has not found any additional literature in top ranking financial journals that put forward one or multiple environmental factors as possible risk factors for asset pricing. This could possibly mean that challenges faced by academics in the field prevent them from being able to provide robust empirical research on this subject using currently available environmental or social data. The absence of environmental or social risk factors in what has been described in the literature as a “zoo of factors” that attempt to explain the cross-section of stock returns provides further evidence that academics and practitioners lack a common framework and comparable metrics to evaluate sustainability risk precisely.

#### **4. The EU’s Framework**

The aforementioned challenges faced by actors of the sustainable finance industry seem to be understood by public entities and policy makers. Governments and intergovernmental entities have increasingly been focusing on creating a framework of incentives, guidelines and regulations to encourage sustainable finance. In 2015, the global community represented by the United Nations, has developed both a framework for global sustainable development through the Sustainable Development Goals (SDGs) and a framework specific to the climate change challenge through the Paris Agreements and the objective of limiting global warming to “well-below” 2 °C (UN, 2015; UNFCCC 2015). In the context of the Paris Agreement, every nation had to put forward “nationally determined contributions” (NDCs) and strengthen their efforts in the years to come. Even though these agreements provided a useful framework for governments to make progress, they were not legally binding, and did not go into detail on specific necessary measures that had to be implemented to face climate change.

In 2016, the European Commission started to focus on implementing a more specific framework for sustainable finance with the creation of a High-Level Expert Group (HLEG) on sustainable finance. The group provided advice to the Commission on steering public and private capital towards sustainable investments, on protecting the stability of the financial system from environmental risks and on deploying related policies throughout the European Union. Its final report was published in January 2018 (HLEG, 2018). This work led to the creation of the “Action Plan on Financing Sustainable Growth”, an action plan focused predominantly on the EU private sector and each category of private actors. The action plan has three objectives:

- reorient capital flows towards sustainable investment, in order to achieve sustainable and inclusive growth
- manage financial risks stemming from climate change, environmental degradation and social issues
- foster transparency and long-termism in financial and economic activity

For each objective, a series of specific actions were determined, adding up to a total of 10 distinct actions. Even though this is not specifically articulated by the European Commission in the official communication of the action plan, each action seems to correspond to one specific type of actor. Objective 1 has five underlying actions which apply to actors that provide supporting functions to financial market participants: (1) The European Commission itself through the creation of an EU classification system for sustainable activities (2) providers of labels and standards (3) EU financial institutions (4) financial advisors (5) benchmark administrators. Objective 2 has 3 underlying actions for (6) credit agencies and market research providers (7) institutional investors and asset managers and (8) banks and insurance companies. Objective 3 has 2 underlying actions for corporations through (9) corporate disclosure and (10) corporate governance. The objectives, sub-categories of objectives and corresponding actions of the official European Commission communication are summarized in Table 4, which also contains the different commitments that are taken by the Commission concerning each action.

Amongst these different actions, the European Commission emphasized the essential role of the EU classification system for sustainable activities, which it refers to as the EU Taxonomy. The official communication refers to this taxonomy as “the most important and urgent action of this Action Plan” and provides a diagram to illustrate how the action plan depends on the development of the EU taxonomy and its integration into EU legislation (European Commission, 2018). This diagram is available in Figure 1.

The EU Taxonomy tackles a challenge that has been central for actors of sustainable finance which we have explored in the previous section: to create a regulatory framework to define and delineate what constitutes a sustainable investment. Today, the sustainable finance industry is composed of many different actors that have developed their own definition of what sustainable investments are, and there still is to date an absence of common definitions and approaches on the subject. Creating a clear framework developed in collaboration with expert members of this industry that would progressively become enforceable by the Commission is a way of aggregating the different approaches of sustainable finance in a single comprehensive environment and creating a common language as well as comparability between actors and sustainable financial products.

As the new European Commission presidency started in 2019, the European Green Deal - a growth strategy to make Europe the first climate neutral continent by 2050 - was put forward, followed by a corresponding European Green Deal Financial Plan in January 2020<sup>12</sup>. This new financial plan focuses on mobilizing at least € 1 trillion of sustainable investments over the next decade, on creating a framework to enable such investments for both private and public actors and on supporting project creators that could

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<sup>12</sup> See [https://ec.europa.eu/commission/presscorner/detail/en/qanda\\_20\\_24](https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_24)

**Table 4 - The European Union Action Plan**

| Objective   | Section   | Action   | Main Commitments   |
|---|---|--|--|
| Objective 1: Reorienting capital flows towards a more sustainable economy | A unified classification system for sustainable activities        | 1. Establishing an EU Classification System for Sustainability Activities                        | <ul style="list-style-type: none"> <li>- Progressive development of an EU taxonomy</li> <li>- Focus on climate mitigation and climate change adaptation</li> </ul>   |
|   | Standards and labels for sustainable financial products           | 2. Creating Standards and Labels for Green Financial Products                                    | <ul style="list-style-type: none"> <li>- Report on green bond standard and prospectus of green bond issuances</li> <li>- Exploration of an EU Ecolabel</li> </ul>  |
|   | Fostering investment in sustainable projects                      | 3. Fostering Investment in Sustainable Projects  | <ul style="list-style-type: none"> <li>- Further measures to improve instruments aiming at sustainable investment support</li> <li>- Idea of establishing a single investment fund integrating all EU market-based instruments</li> </ul>  |
|   | Sustainability considerations in financial advice                 | 4. Incorporating Sustainability when Providing Investment Advice                                 | <ul style="list-style-type: none"> <li>- Amend the MiFID II and IDD delegated acts to ensure that sustainability preferences are incorporated in the suitability assessment</li> <li>- Invite ESMA to include provisions on sustainability preferences in its guidelines on the suitability assessment</li> </ul>  |
|   | Sustainability benchmarks   | 5. Developing Sustainability Benchmarks  | <ul style="list-style-type: none"> <li>- Adoption of delegated acts on transparency of benchmark methodologies</li> <li>- Put forward an initiative to harmonise benchmarks comprising low-carbon issuers</li> </ul>   |
| Objective 2: Mainstreaming Sustainability into risk management            | Sustainability in market research and credit ratings              | 6. Better Integrating Sustainability in Ratings and Research                                     | <ul style="list-style-type: none"> <li>- Explore the merits of amending the Credit Rating Agency Regulation</li> <li>- Invite ESMA to assess current sustainability-related practices in the credit rating market</li> <li>- Comprehensive study on sustainability ratings</li> </ul>  |
|   | Institutional investors and asset managers' sustainability duties | 7. Clarifying Institutional Investors and Asset Managers' Duties                                 | <ul style="list-style-type: none"> <li>- Proposal aiming at requiring (1) institutional investors and asset managers to integrate sustainability considerations in the investment decision-making process and (2) increase transparency to end-investors</li> </ul>  |
|   | Prudential requirements for banks and insurance companies         | 8. Incorporating Sustainability in Prudential Requirements                                       | <ul style="list-style-type: none"> <li>- Explore the feasibility of including environmental risk in institutions' risk management policies and potential calibration of capital requirements of the Capital Requirement Regulation and Directive</li> <li>- Invite EIOPA to provide an opinion on the impact of prudential rules for insurance companies on sustainable investments</li> </ul> |
| Objective 3: Fostering transparency and long-termism                      | Disclosure and accounting   | 9. Strengthening Sustainability Disclosure and Accounting Rule-Making                            | <ul style="list-style-type: none"> <li>- Fitness check of EU legislation on public corporate reporting</li> <li>- Revision of guidelines on non-financial information</li> <li>- Creation of the European Financial Reporting Advisory Group (EFRAG)</li> <li>- Assess the impact of new or revised IFRSs on sustainable investments</li> </ul>  |
|   | Corporate governance and undue capital market short-termism       | 10 - Fostering Sustainable Corporate Governance and Attenuating Short-termism in Capital Markets | <ul style="list-style-type: none"> <li>- Assess the possible need to require corporate boards to develop and disclose sustainability strategy</li> <li>- Collect evidence on short-term pressure from capital markets on corporations</li> </ul>   |

benefit from such investments. Supplementing these efforts, the European Commission's approach also consists in putting forward both a climate tracking methodology and a method to assess the environmental, climate and social impact of private investors. Financial market participants will have to implement such methodologies if they wish to benefit from European funds. These methodologies will be developed by relying on the EU Taxonomy (European Commission, 2020a). Throughout the different EU communications, it is made quite clear that the EU Green Deal Investment Plan supplements the EU Action plan on Sustainable Finance but does not replace it. Even though the plan mentions that the European Commission will renew its sustainable finance strategy in Autumn 2020, the taxonomy will keep a central role in this strategy and the progress made in the context of the Action Plan on Sustainable Finance will be used as a foundation for the new strategy<sup>13</sup>. The EU Taxonomy, and its innovative classification of sustainable activities therefore represents a new approach to sustainable finance that provides both a clear, material, metrics-based definition - developed by a large group of both private and public experts – of what constitutes sustainable finance as well as a legally-backed regulatory framework. We investigate the EU Taxonomy in more detail in the following section.

## **5. The EU Taxonomy**

The beginning of the new European Commission presidency was also an important milestone for the EU taxonomy. In December 2019, the proposal for a regulation on the establishment of a framework to facilitate sustainable investment (what is referred as the 'Taxonomy Regulation') was approved by the European parliament and the European Council (Council of the European Union, 2019a), and in March 2020, the final report on the EU Taxonomy was published by the TEG (European Commission, 2020c). In order to develop its classification system, the TEG first identified six environmental objectives:

1. Climate change mitigation
2. Climate change adaptation
3. Protection of water and marine resources
4. Transition to a circular economy
5. Pollution prevention and control
6. Protection and restoration of biodiversity and ecosystems

The approach put forward by the EU Taxonomy was then developed by focusing on economic activities and identifying how each economic activity performed by a firm was or could be aligned with these objectives. In order for this to be the case, a defined set of criteria, both general and specific to the activity, are to be respected. An economic activity is then considered as "Taxonomy-aligned" if it:

- Makes a substantive contribution to at least one of the 6 objectives according to activity-specific technical criteria
- Does no significant harm (DNSH) to other objectives according to the taxonomy's framework

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<sup>13</sup> This is also detailed on the commission's website. See [https://ec.europa.eu/commission/presscorner/detail/en/qanda\\_20\\_24](https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_24)

- Complies with the minimum social safeguards of the OECD Guidelines on Multinational Enterprises (OECD,2011) and the UN Guiding Principles on Business and Human Rights (United Nations, 2011)

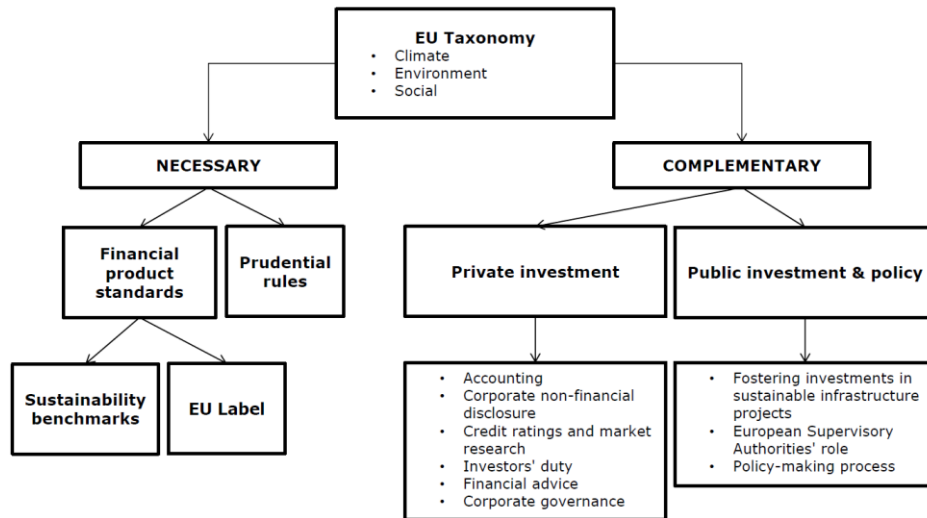


Figure 1 - The EU Taxonomy and the EU Action Plan on Sustainable Finance

Given the complexity of their task and the growing urgency of climate change action, the TEG first focused on what it considered to be the most urgent objectives of climate change mitigation and climate change adaptation (referred as Objective 1 and Objective 2).

In the Taxonomy report of March 2020, the technical expert group defined the technical criteria for 68 economic activities for both climate change mitigation and climate change adaptation. These 68 economic activities were selected amongst 8 economic sectors that together represented 93.5% of total European carbon emissions and were identified by the expert group as the most likely to substantially contribute to climate change mitigation in their respective sectors. These activities were specifically selected using the NACE classification system<sup>14</sup>.

### 5.1. Activity-specific Technical Criteria

For each of these identified economic activities, a specific set of technical criteria was defined by the expert group. These criteria have two distinct formats. (1) They can take the form of principles that have to be respected. The expert group’s definition of principles is the following:

“Principles: The underlying rationale for how the activity will result in a substantial contribution and/or avoidance of significant harm to the environmental objective in question.”

<sup>14</sup> The Statistical classification of economic activities in the European Community (abbreviated as NACE as the original name of the classification system was in French) is an industry standard classification system that uses four levels to categories economic activities in 21 sections (level 1), 88 divisions (level 2), 272 groups (level 3) and 615 classes (level 4).

(2) They can also take the form of metrics and thresholds. The expert group’s definition of metrics and thresholds is the following:

“Criteria: including both metrics and thresholds: The method(s) by which the environmental performance of the economic activity will be measured, including defining the boundary for this measurement and the qualitative or quantitative conditions which must be met to enable the performance of the activity in a way that is considered environmentally sustainable.”

If one of the firm’s economic activity is listed amongst these 68 economic activities, the company will need to disclose whether or not it is aligned with these different activity-specific criteria. If it is not able to demonstrate that it is, the firm’s economic activity is considered not to be Taxonomy-aligned. If the activity meets the expert groups criteria, the firm needs to further demonstrate that the activity does no significant harm (DNSH) to other objectives.

### *5.2. Activity-specific DNSH Criteria*

Once the technical criteria for an economic activity has been met, the firm still needs to demonstrate that its economic activity is not detrimental to other objectives. By analyzing the technical annex of the taxonomy, we understand that these criteria are also mostly activity-specific. Using the March 2020 taxonomy report as the source of our analysis, we also find that these are still mostly process-based approaches where no specific metric or threshold needs to be specifically respected. However, the expert group does mention that these may vary as further work is done on developing the technical criteria for the last 4 objectives of the Taxonomy.

### *5.3. Meeting minimal social safeguards*

The final required step for the activity to be Taxonomy-aligned is for it to comply minimum social safeguards. More precisely, these activities will have to be “in alignment with the OECD Guidelines for Multinational Enterprises and UN Guiding Principles on Business and Human Rights, including the International Labour Organisation’s (‘ILO’) declaration on Fundamental Rights and Principles at Work, the eight ILO core conventions and the International Bill of Human Rights”. The OECD Guidelines for Multinational Enterprises corresponds to a set of legally nonbinding recommendations providing a series of principles and standards encouraging responsible business conduct for multinational corporations operating in and from countries in the OECD (OECD, 2011). The UN Guiding Principles also represent a set of legally nonbinding principles encouraging better business conduct. It focuses more specifically on human rights and is addressed to businesses of all sizes and any sector throughout the world. Any firm that wishes to have one of its economic activities be taxonomy-aligned needs to conduct due diligence to show alignment with these principles.

### *5.4. General Remarks*

Interestingly, the distinction between these two types of approaches resembles that which currently exists in the literature on corporate environmental performance between the processed-based environmental

performance EMP approach that focuses on general firm policies and the outcome-based environmental performance EOP approach that focuses on measurable environmental outcomes.

This parallel is even more striking when looking at the difficulties that were faced by academics concerning the differences in industries and geographies of their studied samples. Looking at the literature and Table 3, it would seem that each industry and geography required different measures for environmental performance. This notion is confirmed by the approach taken by the European Commission and the technical expert group. Focusing on the geographical region it represents, the European Commission developed its 6 environmental objectives in accordance with the environmental priorities of its Member States, but also by taking the Sustainable Development Goals (SDGs) in consideration. Composed mostly of developed economies that had less stringent issues regarding purely social SDGs such as poverty or hunger, the European Commission chose to take the lead on environmental objectives which can more easily be addressed by developed economies. Its approach of environmental issues was then decomposed into different economic activities that all had a specific role in the climate and environmental urgency, and developed measures at the scale of these activities. Analyzing the March 2020 taxonomy-report is sufficient to understand the underlying objective of the European Commission: to create a clear classification system in which the participation of each individual economic activity in each of the six environmental objectives is identifiable and to create a transparent and precise link between economic performance and measurable, comparable corporate environmental performance (European Commission, 2020c). The European Commission is also progressively constructing a legal basis in order to enforce this new approach to finance. We explore this legal basis in the following section.

## **6. The Taxonomy Regulation**

Based on the technical expert group's previous work, the Taxonomy Regulation brings the EU Taxonomy into practice and enforces its use by three groups of users:

- Financial market participants offering financial products in the EU
- Large companies who are already required to provide non-financial statement under the Non-Financial Reporting Directive (Official Journal of the European Union, 2014) <sup>15</sup>
- EU and Member States when setting public measures, standards or labels

### *6.1. Financial Market Participants*

The regulation states that specified financial market participants will have to disclose, for each relevant product:

- how and to what extent they have used the Taxonomy in determining the sustainability of the underlying investments;

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<sup>15</sup> The Non-Financial Reporting Directive lays down rules on necessary non-financial disclosure that need to be performed by large companies in the European Union, and states that companies have to include non-financial statements in their annual reports starting from 2018.

- to what environmental objective(s) the investments contribute; and
- the proportion of underlying investments that are Taxonomy-aligned, expressed as a percentage of the investment, fund or portfolio. This disclosure should include details on the respective proportions of enabling and transition activities, as defined under the Regulation.

As it is mentioned in the TEG's report, Taxonomy-related disclosure will be included in the Regulation on Sustainability-Related Disclosures in the Financial Services Sector (commonly referred as the 'Disclosure Regulation'<sup>16</sup>). In this context, financial market participants will have to provide information on their alignment with the EU Taxonomy in pre-contractual disclosures, through their websites and in periodic reports. Information disclosed on websites are the most detailed: "Description of the environmental or social characteristics or objectives of the fund, information on the methodologies used to assess, measure and monitor the characteristics or impact of the underlying investments, data sources and screening criteria". The disclosure regulation goes even further by requiring that any financial product that has sustainable investment as an objective or promotes any form of environmental or social characteristic of an investment must complete Taxonomy disclosures. For any other type of financial product, financial market participants must either complete the Taxonomy disclosure or carry the following disclaimer "the investment(s) underlying this financial product do not take into account the EU criteria for environmentally sustainable investments". Any market participant that offers a financial product that has an environmental or social aspect to it will have to disclose to what environmental objective(s) the investment contributes and the proportion of the underlying investments that are Taxonomy-aligned, expressed as a percentage.

By December 31st, 2021, every specified financial product in the EU that addresses climate change mitigation and adaptation - objectives 1 and 2 of the Taxonomy - will have to disclose the specific percentage of the investment, fund or portfolio that is taxonomy-aligned. By December 31st, 2022, every specified financial product in the EU that addresses any of the taxonomy's objectives will have to disclose the specific percentage of the investment, fund or portfolio that is taxonomy-aligned.

## *6.2. Companies*

The Taxonomy will also require specified companies to report on the proportion of their activity that is taxonomy-aligned. This covers at the minimum large public-interest companies with more than 500 employees, including listed companies, banks and insurance companies that already had to disclose extra-financial information in the context the Non-Financial Reporting Directive. More specifically, these companies will have to disclose the percentage of their turnover that is aligned with the Taxonomy as well as the percentage of its capital expenditures and, in some cases, even operational expenditures, that is aligned with the Taxonomy. Disclosure on financial year 2021 will have to be performed in the course of financial year 2022.

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<sup>16</sup> The Disclosure Regulation was adopted by the European Union in 2019 and "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 (Official Journal of the European Union, 2019a).



The Taxonomy Regulation and the Disclosure Regulation are an attempt to create a transparent financial market in which each major actor is attributed a corresponding form of sustainability rating. This is done through the creation of a common framework for all these actors, that provides a common definition of sustainable investing, with common, industry-specific processes and metrics to respect. In the European Commission's framework, sustainability is transformed into binary concept in which activities are either aligned or not. There is no more room for grey areas and actor specific, subjective definition of what constitutes sustainable business practices.

This, in turn, could create a new market for sustainability in which companies can compare their taxonomy-alignment with that of their peers, within or outside their own industry. As the focus on climate mitigation and adaptation grows as global warming becomes an increasingly present and central systemic risk, there will undoubtedly be increasing pressure for actors to optimize their taxonomy-alignment. In Table 5, I show an example in which two companies perform similar economic activities but originate different proportions of their turnover from these activities. Both companies have similar taxonomy-alignment for their economic activities. However, one company is 11% taxonomy-aligned but is below the overall average alignment a company with similar structure should have, when the other is 9% taxonomy-aligned, which corresponds to the average alignment a company with similar structure should have. If both companies are equally profitable, would an investor prefer company A or company B? From this simple exercise, we can already understand how some investors would choose company A over Company B by favoring overall taxonomy-alignment when others would use industry averages to select their investments. Furthermore, we also understand how Company A would focus on improving alignment for Economic Activity 1 when Company would choose Economic Activity 3. Going one step further, we also understand how a financial market participant that offers a financial product consisting in an investment portfolio composed of these two companies could then weight its portfolio in order to optimize its taxonomy-alignment in different economic activities.

### *6.3. Pressure on financial-market participants*

Through its structure, the EU taxonomy puts pressure on financial market participants that offer financial products in the EU in two essential ways:

- Financial market participants will have to disclose the proportion of their financial products that are aligned with the taxonomy before underlying companies
- Not all companies will have to disclose information on their alignment with the Taxonomy, in which case financial market participants will have to gather this information themselves

This, in turn, should also put pressure on companies, as financial market participants will necessarily develop a preference for companies that provide the most information related to their taxonomy alignment to them. Furthermore, given the central role the EU Taxonomy will play for EU institutions and other public-entities, this will provide further pressure for companies to start working on their taxonomy-related disclosures, specifically given the fact that the EU plans to invest more than EUR 1 trillion in sustainable investment in the next 10 years.

**Table 5**

Company A

|                            | Economic Activity 1 | Economic Activity 2 | Economic Activity 3 |
|----------------------------|---------------------|---------------------|---------------------|
| Proportion of turnover     | 65%                 | 20%                 | 15%                 |
| Alignment with Taxonomy    | 10%                 | 15%                 | 7%                  |
| Industry Average           | 12%                 | 22%                 | 5%                  |
| Overall Taxonomy-alignment |                     | <b>11%</b>          |                     |
| Average Taxonomy-alignment |                     | <b>13%</b>          |                     |

Company B

|                            | Economic Activity 1 | Economic Activity 2 | Economic Activity 3 |
|----------------------------|---------------------|---------------------|---------------------|
| Proportion of turnover     | 10%                 | 20%                 | 65%                 |
| Alignment with Taxonomy    | 10%                 | 15%                 | 7%                  |
| Industry Average           | 12%                 | 22%                 | 5%                  |
| Overall Taxonomy-alignment |                     | <b>9%</b>           |                     |
| Average Taxonomy-alignment |                     | <b>9%</b>           |                     |

## 7. Implementation of sustainability measures in the rest of the market

The relationship between financial market participants and companies will be central to the development of the sustainable finance framework set out by the European Commission, and these actors will be the first to implement measures to align their activities with the Taxonomy. However, looking back at the Action Plan on Sustainable Finance and its 10 actions, it seems that all actors of the market will have to start adapting as well. As the European Commission adopted the ‘Taxonomy Regulation’ and the ‘Disclosure Regulation’ oriented at (1) establishing an EU Classification System for Sustainability Activities (4) Incorporating Sustainability when Providing Investment Advice (7) Clarifying Institutional Investors and Asset Managers’ Duties and (9) Strengthening Sustainability Disclosure and Accounting Rule-Making, other progress was made with other actions and actors.

### 7.1. The Benchmark Regulation

The Benchmark Regulation refers to another Regulation approved by the European Parliament and the Council in November 2019 to incorporate sustainability in EU Benchmarks. Two new benchmarks were created:

- EU Climate Transition Benchmarks that will consist in portfolios that are on a decarbonization trajectory.
- Paris-aligned Benchmarks that consist in portfolios that have a carbon emission trajectory aligned with the objectives of the Paris Agreement.

In addition, the regulation also states that:

- By the 30th of April 2020, benchmark administrators will have to provide ‘an explanation of how the key elements of the methodology (...) reflect ESG factors for each benchmark or family of benchmarks.
- ‘By 1 January 2022, administrators which are located in the Union and which provide significant benchmarks (...) shall endeavour to provide one or more EU Climate Transition Benchmarks.’
- ‘By 31 December 2021, benchmark administrators shall (...) include in their benchmark statement an explanation of how their methodology aligns with the target of carbon emission reductions or attains the objectives of the Paris Agreement.’

This means that, much like it will be the case for large firms in the European Union, benchmarks providers will have to provide financial market participants with information on the alignment of their products with climate objectives, and will create a new market for climate-aligned benchmarks that will also require firms to provide information regarding their carbon emissions and alignment with the EU taxonomy.

## *7.2. EU Labels*

The European Commission has been working on the creation of an EU Green Bond Standard (European Commission, 2019c), and the TEG has published a usability guide for the EU Green Bond Standard in March 2020 (European Commission, 2020c) to start providing some guidance on the use of the standard. As this article is being written, the Commission is exploring the possibility of a legislative initiative for an EU Green Bond Standard. The European Commission has also started to work on an EU Ecolabel<sup>17</sup> scheme for retail funds, savings and deposits.

## *7.3. EU initiatives to mobilize private investments*

In the context of the European Green Deal Investment Plan, the European Commission will dedicate 25% of the EU budget to Climate and Environment, which corresponds to €503 billion. Other EU funds will also participate in triggering investments, such as the EU Emissions Trading System (ETS) funds (€25 billion), national co-financing structural funds (€114 billion) and the Just Transition Fund (€143 billion over 10 years).

In addition, the EUInvest program will help mobilize private investments. The EUInvest program is the realization of the European Commission’s ‘Idea of establishing a single investment fund integrating all EU market-based instruments’, which it had communicated in the EU Action plan on Sustainable Finance in 2018. It brings together the European Fund for Strategic Investments and 13 other EU financial instruments and allows private investors that wish to perform sustainable investments in the EU to benefit from the InvestEU Guarantee. Through this mechanism, the European Commission plans to mobilize €279 billion in private sustainable investment.

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<sup>17</sup> See <https://ec.europa.eu/environment/ecolabel/>

#### *7.4. Credit Rating Agencies*

To date, no strict regulation on the sustainability disclosure of credit rating agencies has been discussed by the European Commission. The latest progress on the subject was made through guidelines published by ESMA in July 2019, and applicable starting April 2020. These guidelines require increased transparency on whether ESG factors were a key driver in the credit rating process and provide some guidance regarding what should be disclosed when a credit rating is issued (ESMA, 2019). The European Commission will perform a report on progress on this subject in 2021.

#### *7.5. Insurances*

The European Commission has also addressed the subject of integrating sustainability in the European insurance industry. The European Insurance and Occupation Pensions Authority (EIOPA) has been mandated to provide its technical advice on the integration of sustainability risk and factors in the Solvency II directive in the context of the 2020 Review of the directive. In September 2019, the EIOPA had already identified additional practices that should be adopted by insurance companies to guarantee that companies considered sustainability risk in their risk management approaches. As this paper is being written, the 2020 Review of Solvency II is meant to occur at the end of December 2020.

#### *7.6. Banking Prudential Framework*

Some actions were taken by the European Commission related to the integration of ESG risks in banks' capital requirements regulations. However, the European Commission stated in its consultation on the renewed sustainable finance strategy in April 2020 that "given the new objectives under the European Green Deal, it can be argued that the efforts in this area need to be scaled up in order to support a faster transition to a sustainable economy and increase the resilience of physical assets to climate and environmental risks. Integrating sustainability considerations in banks' business models requires a change in culture which their governance structure needs to effectively reflect and support." (European Commission, 2020b)

#### *7.7. Pension Providers*

Some measures relative to sustainability reporting and ESG integration by EU pension providers have been applied in 2016 and 2017. However, according to a stress test on Institutions for Occupational Retirement Provision (IORPs) ran by the EIOPA in 2019 only about 30% of IORPs in the EU manage ESG-related risks relative to their investments. Moreover, while most of these EU pension providers claimed to have taken appropriate steps to identify ESG risks relative to their investments, only 19% assessed the impact of ESG factors on investments' risks and returns. The European Commission plans to review the IORP II Directive by January 2023. In 2019, EIOPA published an opinion on the subject of ESG risks faced by the IORPs. The Commission has not communicated on any specific regulatory action on the subject.

#### *7.8. Corporate Governance*

In the context of its action plan on sustainable finance, the European Commission also focused on corporate governance and short-termism. In June 2019, it requested that the European Supervisory

Authorities – composed of the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA) each publish advice on “undue short-term pressure from the financial sector on corporations”.

The EBA did not find evidence of short-termism. It committed to assess whether a dedicated prudential treatment would be required for assets or activities that were aligned with the new European objectives. Its main recommendations included adding sustainability considerations into the European banking sector legislation, continue to develop a framework for disclosure on long-term risk that includes ESG-related information for both banks and corporations, and encouraged transparency and data availability between banks and corporations on sustainability-related issues (EBA, 2019). ESMA finds that there is short-term focus from financial analysts. ESMA’s recommendations addressed improving issuers’ ESG disclosures to allow for comparability and reliability and creating an international standard for ESG disclosures (ESMA, 2019b). Finally, EIOPA did not find evidence of undue short-termism for insurance and institutions for occupational retirement provision and recommended that a framework for long-term investments be created, along with the creation of long-term performance benchmarks that focus on long-term value creation (EIOPA, 2019).

Adding to these inputs from the ESA’s on short-termism, the European Commission has also performed a study on due diligence requirements to assess the “possible need to require corporate boards to develop and disclose a sustainability strategy” and “to clarify the rules according to which directors are expected to act in the company’s long-term interest.”<sup>18</sup> This study could possibly lead to the development of regulations by the European Commission on this issue, and provides different options that can be chosen by the commission. Overall, the options include “no policy change”, “new voluntary guidelines”, “new regulation requiring due diligence reporting” or “new regulation requiring mandatory due diligence as a legal duty of care”. The study does conclude that social, human rights and environmental impacts from this last option are expected to be most significant (European Commission, 2020d).

### *7.9. General remarks*

Much like it has communicated in its initial action plan on financial sustainable growth in 2018, it seems that the European Commission has focused its initial actions on two actors – large firms and financial market participants - it considered as central to its financial system. However, it seems that progress is also gradually being made to create a sustainable environment for other essential actors of the financial system to make their transition into a more sustainable approach to finance and growth. The EU taxonomy is still work in progress, and the Commission still has to develop criteria for 4 other objectives. It also mentions implementing social objectives as well as creating a “brown” Taxonomy in the context of which activities with negative environmental or social impact will also be identified and have to be disclosed. Though much work is yet to be done, and implementation of disclosure criteria for the 6 objectives will not be enforced in practice before the 1<sup>st</sup> of January 2023, regulation has been adopted on this subject in order for the

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<sup>18</sup> These citations originate from Action 10 of the European Action Plan on Financing Sustainable Growth

Commission to enforce its new vision of the European financial system. There is no reason not to believe that, given the growing urgency to mitigate and adapt to climate change and other environmental issues, this will not continue in the years to come.

## **Conclusion**

An analysis of the professional and academic literature on the subject of environmental performance of investments and firms provides interesting insight on the lack of commonly agreed definition of what constitutes environmental performance and sustainable investments. The professional industry represented by actors throughout the world that perform sustainable investing in its different forms and terminologies shows us the disparities and subjective aspects of the different approaches that are taken in this sector to date. As intergovernmental entities identified a growing need for large-scale investments in climate change mitigation and adaptation, the professional literature boasts the magnitude of an SRI industry that is still to a great majority composed of investment approaches that either do not strictly consist in investing in climate-oriented assets or projects that positively benefit the environment, or still lack clarity and transparency regarding the sustainable aspect of their investment process.

A study of the academic literature on the subject provides further insight on the puzzle that currently exists on the general subject of the extra-financial performance of investments. The terminology of authors varies greatly, as even central terms such as environmental, social and governance (ESG) factors, corporate environmental responsibility (CSR) and corporate environmental performance (CEP) are used interchangeably in some of the literature's most influential papers. As we investigate further into the specific study of corporate environmental performance, further challenges can be identified. As academics seem to agree on the overall terminology of this more specific literature, issues on the selected metrics as well as on the industries and geographies of corporations in sample arise. More recently, the validity of the different sources of ESG data is even questioned. The conclusion of this analysis is quite straightforward: it seems both practitioners and academics need a common framework to be able to have a common language on the different concepts, definitions and metrics that constitute sustainable finance.

With the clear intention of putting sustainability at the heart of its financial system, the European Commission has started to deal with these issues. Through its action plan on sustainable finance and the different measures that it is composed of, the Commission is making process in incorporating sustainability into the business practices of every type of actor in its financial system. At the center of its action plan, it has started to develop a classification system that clearly defines its central concepts for sustainability, as well as industry-specific metrics that need to be respected if any financial market participant wishes to offer sustainable financial products and any large firms wished to put forward its sustainability performance. Through this classification system, the Commission aims to answer the markets' need for a clear, common framework for sustainable finance in which actors can truly evaluate their extra-financial performance and be accountable for their actions in terms of sustainability.

The Commission is also creating a legal basis for this new framework, with strict regulation to enforce its implementation having been approved at the end of 2019. As this regulation - the Taxonomy regulation,

the Disclosure regulation and Benchmark regulation - mostly focus on large firms and financial market participants that offer financial products in the EU, it is made quite clear from the analysis of other actions currently taken by the European Commission and its different agencies that the entire financial system will in some way have to adapt to include sustainability in their decision-making process.

The Commission's work is providing one can be considered as the last key element needed by the sustainable finance industry in order to be recognized as a separate financial industry, the first with an extra-financial purpose. As global warming is showing no signs of deceleration, clear, impactful and efficient investments in climate change mitigation and adaptation need to increase exponentially if the climate risk is to be dealt with seriously. In this matter, creating a true sustainable finance industry would be an essential stepping-stone towards true climate change mitigation. In that sense, the innovation work on creating a classification system for sustainable economic activities oriented towards financial market participants, along with the surrounding work to create an efficient environment for a strong sustainable finance to develop could well be interpreted as a new sustainable finance paradigm for both practitioners and academics alike.

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