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THE EU TAXONOMY: FINANCING THE TRANSITION THROUGH SUSTAINABLE INVESTING

The EU Taxonomy is the cornerstone of the European Sustainable Finance Strategy. It is a robust, science-based transparency tool for determining environmentally sustainable economic activities. It plays a crucial role in enabling informed investment decisions and driving additional investments towards a climate-neutral and sustainable economy. But the Taxonomy is, first and foremost, a tool for companies to access the capital they need to finance their transition to net zero and green their activities.

La taxonomía europea: una herramienta clave para financiar la transición a una economía cero emisiones netas y sostenible

La taxonomía de la UE es la piedra angular de la Estrategia Europea de Finanzas Sostenibles. Es una herramienta de transparencia sólida y con base científica para determinar las actividades económicas sostenibles desde el punto de vista medioambiental. Desempeña un papel crucial a la hora de permitir decisiones de inversión informadas e impulsar inversiones adicionales hacia una economía climáticamente neutra y sostenible. Pero la taxonomía es, ante todo, una herramienta para que las empresas accedan al capital que necesitan para financiar su transición hacia la neutralidad climática y la ecologización de sus actividades.

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Introduction to the European Sustainable Finance Package

The European Commission's Sustainable Finance regulatory package, launched in March 2018 and one of the pillars of the European Green Deal (European Commission, 2019), is an unprecedented effort to harness the potential of the financial sector in supporting the transition to a net zero, circular and sustainable economy.

Only in this decade, the EU needs to reduce greenhouse gas emissions by 55% and reach our environmental objectives, particularly those related to the nature and water crises, by 2030. To achieve its goals, the EU will require significant investments. Overall, additional investments of over EUR 620 billion annually will be needed to meet the objectives of the Green Deal and RepowerEU (European Commission, 2023, p. 7). The bulk of these investment needs will have to come from private sources.

The strategy aims to leverage the power of private finance given that public sector resources alone are insufficient to meet the investment needs. Further, the Sustainable Finance Strategy is a response to the realisation that there is no transition feasible without a significant contribution by the financial sector.

While the financial sector has the potential to be a force for good, the financial sector faces challenges that need to be addressed. These challenges include financing fossil fuel projects, lack of transparency and disclosure, short-term focus, and the need for capacity building.

As regards the climate change, the financial sector needs to set its own transition pathway and align its investments and credit portfolios with the objective of limiting global warming to 1.5 °C above pre-industrial levels, as recommended by scientific bodies like the Intergovernmental Panel on Climate Change (IPCC) and International Energy Agency (IEA).

This requires aligning its investment and credit strategies with sustainable and climate-friendly approaches such as renewable energy, energy efficiency, clean

transportation, and sustainable infrastructure, in parallel to reducing exposure to carbon-intensive assets.

By gradually but fully decarbonising its investment and credit portfolios, addressing the challenges and leveraging the financial sector's influence and resources, we can unlock its transformative power to drive sustainable investments, support the decarbonisation of the economy, and ultimately achieve the goal of net-zero emissions.

Less talked about but of equal importance, the package also aims to position European capital markets as the global centre of sustainable and green finance. Given the substantial growth experienced in sustainable-related finance in recent years, the European strategy recognises the competitive edge that Europe has in this area and seeks to capitalise on that opportunity.

By establishing itself as a global leader in sustainable finance, Europe can attract investments, promote sustainable economic growth, and drive the transition to a more sustainable and climate-friendly economy. This ambition reflects the recognition of the potential and importance of sustainable finance in shaping the future of financial markets and the global economy.

This paper first introduces the core regulatory components of the Taxonomy, including the sustainability corporate and sustainable finance disclosures. It then delves into a fictitious example to illustrate why the Taxonomy is the centrepiece of a gear system. Each component of this system has been meticulously designed to assist the Taxonomy in achieving its primary objective: mobilizing capital towards sustainable economic activities.

2. The foundations of the EU sustainable finance strategy

In 2018, the Commission introduced its initial action plan on financing sustainable growth, laying the foundation for a sustainable financial framework in the EU (European Commission, 2018). This plan included three fundamental building blocks to support sustainable finance.

The first building block is the development of a classification system known as the 'taxonomy' of sustainable economic activities. The second building block focuses on establishing a comprehensive disclosure framework on sustainability-related information for both non-financial and financial companies; and the third one encompasses various investment tools and instruments, including the EU climate benchmarks¹ and standards (e.g. EU Green Bond Standard).²

Together, these three building blocks form the core elements of the EU's sustainable financial framework, promoting transparency, facilitating informed decision-making, and fostering the integration of sustainability considerations into the entire value chain of the financial sector. In this way, it creates an enabling environment for private sector resources to align with sustainability objectives.

By mobilising private financial flows into relevant economic activities, the strategy aims to drive sustainable development at scale. The Taxonomy, as the cornerstone of this strategy, identifies and categorises these «relevant economic activities.»

3. The EU Taxonomy

The EU Taxonomy is a scientific classification system that aims to provide a harmonised and uniform approach to identifying sustainable economic activities.

The Taxonomy Regulation³ lays out six EU environmental objectives: climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, and protection and restoration of biodiversity and ecosystems.

It also sets out four conditions that an economic activity has to meet to be recognised as Taxonomy aligned:

- making a substantial contribution to at least one environmental objective;
- doing no significant harm to any other environmental objective;
- complying with minimum social safeguards;
- complying with the technical screening criteria.

The Taxonomy measures the significant contribution of activities to the EU's targets for transitioning to a climate-neutral, circular, and more sustainable economy, including climate change mitigation and biodiversity preservation. For each of the environmental objectives, the EU has developed a strategy with concrete targets.

For example, the EU Circular Economy strategy focuses on reducing waste generation, promoting recycling and reuse, and fostering the design and production of products that are durable, repairable, and recyclable. It has set ambitious targets to achieve a circular economy, including a 65 % municipal waste recycling target by 2035, a ban on landfilling of recyclable waste by 2030,

¹ The Regulation on the EU Climate Transition Benchmarks (Regulation (EU) 2019/2089 of the European Parliament and of the Council of 27 November 2019 amending Regulation (EU) 2016/1011 as regards EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks, OJ L 317, 9.12.2019, pp. 17-27) introduces two distinct categories, or labels, for climate-related benchmarks. The first one, the EU climate transition benchmark (EU CTB) aims to steer the benchmark portfolio towards a trajectory of decarbonisation; the second benchmark, the EU Paris-aligned benchmark (EU PAB) endeavours to align the benchmark portfolio's carbon emissions with the target outlined in the Paris Climate Agreement. This target seeks to limit the global temperature increase to 1.5 degrees Celsius compared to pre-industrial levels. To ensure consistency and reliability, a Delegated Regulation (2020) outlines the minimum standards for the methodology of these two benchmarks. For further information, please see https://finance.ec.europa.eu/sustainable-finance/disclosures/ eu-labels-benchmarks-climate-esg-and-benchmarks-esg-disclosures en

² The European Green Bond Standard (EUGBS, Proposal for a Regulation of the European Parliament and of the Council on European green bonds, COM/2021/391 final, 6.7.2021) is a voluntary high-quality standard for green bonds. This standard will be open to companies and public entities seeking capital market funding for their environmentally friendly investments, provided they meet stringent sustainability criteria. Notably, EUGBS issuers will be required to allocate a minimum of 85% of the bond's funds to economic activities that align with the Taxonomy Regulation. This measure aims to enable investors to evaluate, compare, and trust the sustainability of their investments more easily, consequently mitigating the risks associated with greenwashing. For more information, please see https://commission.europa.eu/business-economy-euro/banking-and-finance/sustainable-finance_en

³ Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088, OJ L 198, 22.6.2020, pp. 13-43.

and measures to promote the use of recycled materials in various sectors.

To determine whether an economic activity is sustainable, it must make a significant contribution to one of the EU's environmental objectives while avoiding significant harm to the other five objectives. The concepts of «substantial contribution» (SC) and «do no significant harm» (DNSH) are operationalised through specific criteria, which are quantitative where possible. This means that thresholds and measurable indicators are established to assess the sustainability of an activity. However, due to the complex nature of some objectives, such as biodiversity, qualitative criteria may be used in cases where quantitative thresholds are not yet feasible. The aim is to ensure that sustainable activities meet defined criteria and contribute positively to environmental objectives while avoiding significant negative impacts.

The technical screening criteria are developed in delegated acts adopted by the European Commission. The technical screening criteria for 'substantial contribution' to an environmental objective ensure that the economic activity either has a substantial positive environmental impact or substantially reduces negative impacts on the environment, e.g. substantially reduced levels of greenhouse gas emissions. The technical screening criteria for 'do no significant harm' ensure that the economic activity does not impede on the other environmental objectives from being reached, i.e. it has no significant negative impact on them. Both sets of criteria together ensure coherence between the objectives in the EU Taxonomy and guarantee that progress towards one objective is not made at the expense of another. The criteria will be updated as technology evolves in order to take into account, the latest scientific and technological developments, and therefore mobilise private investment towards ever-cleaner energy solutions.

The technical screening criteria are based on the input of independent advisory expert groups, namely the Technical Expert Group on Sustainable Finance and the Platform on Sustainable Finance. In accordance with Better Regulation Rules, before adopting the delegated

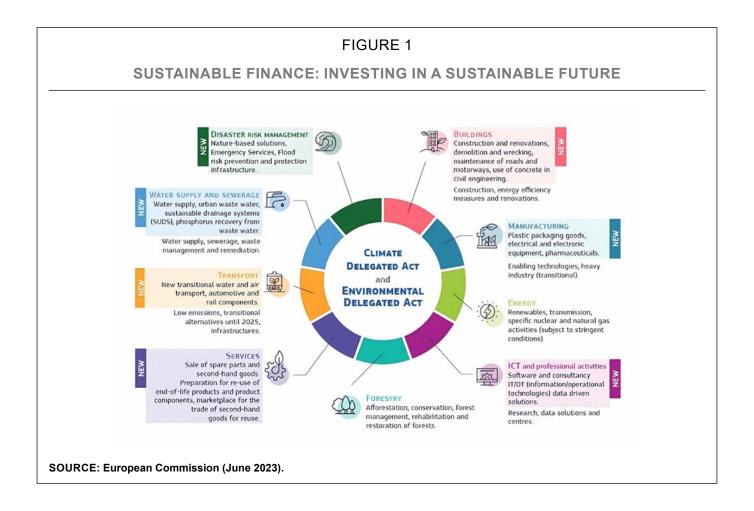
acts setting out the technical screening criteria, the Commission publishes the draft delegated acts for public feedback a four-week scrutiny period. After adoption by the Commission, the delegated acts are subject to a scrutiny by the European Parliament and the Council, for a period of four months which can be extended by additional two months. The co-legislators can object the delegated acts but cannot modify their content.

The Commission has so far adopted several delegated acts setting out the criteria for different economic activities:

- the Taxonomy Climate Delegated Act of June 2021, amended in March 2022 and in June 2023, setting out criteria for economic activities that can make a substantial contribution to climate change mitigation and climate change adaptation;
- the Taxonomy Environmental Delegated Act of June 2023, setting out criteria for economic activities that can make a substantial contribution to sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, and protection and restoration of biodiversity and ecosystems.

The EU Taxonomy already covers more than 100 activities in the following sectors (Figure 1):

- Forestry
- Environmental protection and restoration activities
- Manufacturing
- Energy
- Water supply, sewerage, waste management and remediation
- Transport
- Construction and real estate activities
- Information and communication
- Professional, scientific and technical activities
- Financial and insurance activities
- Education
- · Human health and social work activities
- Arts, entertainment and recreation
- Services
- Accommodation



Disaster Risk management

Economic activities can make a substantial contribution through the specific means listed in Articles 10 to 15 of the Taxonomy Regulation. Based on these provisions, the draft Delegated Act contains a number of activities that can make a substantial contribution and defines criteria for those activities to qualify as green under the EU Taxonomy. Activities can make a substantial contribution when:

- they have a low impact on the environment and have the potential to replace high impact activities (e.g. renewable energy);
- they reduce impact from other activities (e.g. wastewater treatment); or
- they make a positive environmental contribution (e.g. restoration of wetlands).

These are not types of activities explicitly listed in the Taxonomy Regulation. Instead, they are ways to understand and frame the concept of 'substantial contribution', based on Articles 10 to 15 of the Taxonomy Regulation. Thus, for example, besides energy production from renewable sources, activities recognised for climate change mitigation include, for example, low carbon transport solutions, construction of energy efficient buildings, and the manufacture of transformative technologies such as hydrogen and its value-chain.

In addition, the Taxonomy Regulation explicitly recognises two specific types of activities that also make a substantial contribution. First, for the climate change mitigation objective, it recognises 'transitional activities'. These are activities for which low-carbon alternatives are not yet available and that have greenhouse gas

emission levels that correspond to the best performance in the sector or industry. For example, this might include best-in-class cement manufacturing and other best preforming technologies in the area of economically vital heavy industries, energy, transport and buildings. Nevertheless, there are two conditions: (i) they should not hamper the development and deployment of low-carbon alternatives and (ii) they should not lead to a lock-in of carbon-intensive assets, considering the economic lifetime of those assets.

The second specific type of activity recognised as making a substantial contribution is referred to as 'enabling activities'. These are activities that directly enable others to make a substantial contribution to an environmental objective. For example, this could include manufacturing of renewable energy technologies, installation of energy efficiency equipment in buildings, research into materials for stronger flood defences, or use of cover crops that reduce the risk of flooding for an area.

Last, but not least, Article 3 of the Taxonomy Regulation establishes as a requirement for environmentally sustainable activities to be «carried out in compliance with the minimum safeguards». These minimum safeguards, as outlined in Article 18 of the Taxonomy Regulation, require companies to establish procedures that comply with the OECD Guidelines for multinational enterprises and the UN guiding principles on business and human rights. The purpose of these minimum safeguards, as established by the Taxonomy Regulation, is to ensure that activities and investments are not considered «sustainable» if they violate essential social principles, human and labour rights, or fail to align with the minimum standards of responsible business conduct.4

Taxonomy reporting and the Corporate Sustainability Reporting Directive (CSRD)

The Corporate Sustainability Reporting Directive (CSRD)⁵ aims at improving and harmonising sustainability reporting standards for companies operating in the European Union.

Companies will be required to disclose information on their sustainability performance, policies, risks, and targets following explicit harmonised standards and indicators known as the European Sustainability Regulatory Standards (ESRS). The reporting requirements will cover a broad range of ESG topics, including climate change, biodiversity, social matters, and anti-corruption efforts.

Companies that fall under the scope of the CSRD have to report in their annual reports to what extent their activities are covered by the EU Taxonomy (Taxonomy-eligibility) and comply with the criteria set in the Taxonomy delegated acts (Taxonomy-alignment). Other companies that do not fall under the scope of CSRD can decide to disclose this information on a voluntary basis to get access to sustainable financing or for other business-related reasons.

Any undertaking subject to the CSRD needs to disclose how, and to what extent, its activities are associated with activities that are considered as environmentally sustainable. Within that group, non-financial undertakings will need to disclose: the proportion of turnover derived from the Taxonomy activities; and the proportion of their capital expenditure and operating expenditure associated with Taxonomy activities.

The reporting obligations and timelines for undertakings are set out in the Disclosures Delegated Act supplementing

⁴ For more information on the implementation and the interpretation of minimum safeguards, please see the Commission Notice on the interpretation and implementation of certain legal provisions of the EU Taxonomy Regulation and links to the Sustainable Finance Disclosure Regulation (C/2023/3719, OJ C 211, 16.6.2023, pp. 1-5) and the Platform's Final Report on Minimum Safeguards (October 2022). https:// finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance/ platform-sustainable-finance_en#activities

⁵ Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting, OJ L 322, 16.12.2022, pp. 15-80. For further information, please see https:// finance.ec.europa.eu/capital-markets-union-and-financial-markets/ company-reporting-and-auditing/company-reporting/ corporate-sustainability-reporting_en#legislation

Article 8 of the Taxonomy Regulation.⁶ The Disclosures Delegated Act specifies the content, methodology and presentation of information to be disclosed by financial and non-financial undertakings concerning the proportion of environmentally sustainable economic activities in their business, investments or lending activities.

The CSRD expands the scope of sustainability reporting by extending the reporting obligations to a broader range of companies, including listed and private large companies, and listed small and medium-sized enterprises (SMEs). The CSRD will also affect non-EU companies with EU-based subsidiaries or securities listed on EU-regulated markets with a net turnover of over €150 m.

Around 50,000 organisations will be required to comply with the CSRD. The European Commission has planned a phased rollout to ensure compliance. This means that all those companies will have to report the Taxonomy-alignment (turnover, Capex and Opex) of their activities.

The CSRD introduces a new requirement for independent assurance of sustainability information disclosed by companies. It initially mandates limited assurance, which will later transition to mandatory reasonable assurance with the adoption of an assurance standard by no later 1 October 2028. This aligns the level of assurance for sustainability reporting with that of financial reporting, ensuring greater credibility and reliability of sustainability information.

It is important to highlight that Taxonomy reporting can involve up to three layers of verification. Firstly, the verification of specific technical screening criteria, methodologies, and performance level calculations outlined in the Climate and Environmental Delegated Acts. Secondly, the assurance of Taxonomy-alignment and eligibility reporting under Article 8 of the Taxonomy Regulation

as mandated by the CSRD. Lastly, the non-mandatory but recommended assurance of financial product reporting under Article 5 and 6 of the Taxonomy Regulation as part of SFDR disclosures for Article 8 and 9 disclosure products, as well as the verification of financial instrument issuances on a voluntary basis (except for EU Green Bonds Standard issuances for which verification is mandatory).⁷

The Taxonomy and the Sustainable Finance Disclosure Regulation (SFDR)

The Sustainable Finance Disclosure Regulation (SFDR)⁸ introduces new requirements for sustainability-related disclosures at both the entity and product levels for financial market participants, including asset managers, investment firms, and advisors.

At the entity level, the regulation aims to provide asset owners with relevant information to make informed decisions when selecting asset managers. At the product level, SFDR improves the comparability of financial products in terms of sustainability and enhances the transparency of environmental, social, and governance (ESG) disclosures. Managers are required to disclose how they integrate sustainability risks into their investment policies and describe the likely effects of these risks on fund returns.

The goal is to ensure investors have the necessary information to assess the sustainability characteristics and risks of the funds they invest in. It also aims at preventing divergent national disclosures and fostering a level playing field for ESG products.

SFDR distinguishes between financial products that promote environmental or social characteristics (Article 8 disclosure products), financial products with sustainable investment objectives (Article 9 disclosure products), and

⁶ Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation C/2021/4987, OJ L 443, 10.12.2021, pp. 9-67.

For more information on verification of Taxonomy-related, reporting see Part IV of the *Platform's Data and Usability Report* (March 2022).

⁸ Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector, OJ L 317, 9.12.2019, pp. 1-16. For more information, please see https://finance.ec.europa.eu/sustainable-finance/disclosures/sustainability-related-disclosure-financial-services-sector en

products that do not fall under the transparency requirements of Articles 8 or 9 are often referred to as Article 6 products.

SFDR scoped entities will need to disclose information on Taxonomy-alignment of their products. Any product that is classified as an Article 8 or 9 product manufactured in Europe or distributed to European clients, would need to explain the environmental sustainability of the product using the Taxonomy.

This is known as Article 5 and Article 6 Taxonomy disclosure. The disclosure will cover how and to what extent the investments underlying the financial product are in economic activities that qualify as environmentally sustainable under the Taxonomy Regulation.

For financial products that do not consider the EU criteria for environmentally sustainable economic activities, the entity must make this statement in its disclosure. This is known as Article 7 Taxonomy disclosure.

It is worth highlighting that this classification should not be interpreted as a sustainability certification. The classification of a product into one of the sustainability categories under SFDR determines the specific disclosures that need to be made for that product. Instead, it serves as a tool to provide insight into the degree of sustainability of the product. The ultimate assessment of a product's sustainability is the responsibility of the investor, who can use the disclosed information to evaluate the product's alignment with their sustainability preferences and goals. The SFDR aims to enhance transparency and enable investors to make informed decisions based on the disclosed sustainability characteristics of financial products.

Finally, it is important to note that separate regulatory steps have also been taken to ensure that sustainability risks are considered within fiduciary duties in asset management, (re-) insurance, and investment sectors.9

Purpose of the Taxonomy

The Taxonomy has two main objectives

Firstly, the Taxonomy is a science-based tool to help companies and investors make sustainable investment decisions. It also serves as a common measurement tool against which green financial products can be benchmarked. It provides clarity to the market, puts an end to greenwashing and enables end investors to make informed decisions about sustainable investments. By measuring the turnover and expenditures associated with sustainable economic activities defined by the Taxonomy, companies can assess the sustainability of their operations, and investors can evaluate the environmental sustainability of their investments. This promotes consistent reporting and comparability as everyone uses the same definitions and metrics for measuring sustainability.

Secondly, the Taxonomy aims to stimulate additional investments in green, enabling, and transitional activities required for Europe's transition to a sustainable economy. It helps redirect capital flows towards more sustainable activities and addresses the investment gap referred above.

In Europe, the Taxonomy has become the official reference for benchmarking the «greenness» or sustainability level of green funds and financial products. Market participants are required to report the percentage alignment of their products with the Taxonomy, ensuring consistency in reporting and allowing for market comparability.

The EU Taxonomy does not constitute a mandatory list for investors to invest in; nor does it set mandatory requirements on environmental performance for companies or for financial products. Neither does it mandate investors to invest in any particular financial product or instrument, nor does it set a minimum percentage of alignment.

But if there is no legal obligation to invest in a or b, and the only obligation linked to the taxonomy is one of

⁹ The Commission adopted six amending Delegated Acts on fiduciary duties, investment and insurance advice which will ensure that financial firms, e.g. advisers, asset managers or insurers, include sustainability in their procedures and their investment advice to clients. The Delegated Acts on sustainability preferences, fiduciary duties and product governance were published in the Official Journal of the EU in August 2021 and are also available at https://finance.ec.europa.eu/publications/ sustainable-finance-package en

reporting, how does the Taxonomy aim to address the investment gap, provide companies with the capital they need and help decarbonise portfolios?

7. The Taxonomy in practice

The corporate perspective

Imagine a utility company that has four power generation plants. Only one of the three plants meets the Taxonomy criteria, for simplification reasons given that it is an example, we will concentrate on the key metric of SC which is 100grCO₂e/kWh.¹⁰ It is important to note that the Taxonomy is technology neutral (Article 19 of the Taxonomy Regulation).

The company management is very conscious of the need to drastically reduce its emissions if it wants the company to remain competitive and gain market share (facing a high-carbon price likely to rise, increasing demand for low-carbon electricity from its clients base and fierce competition among others). They have decided to commit to net zero by 2050 the latest in line with the EU climate objectives, but hope to do so, a decade earlier.

For that, the company has developed a detailed transition plan following the recommendations of the UN Secretary General's High level expert group on Net Zero pledges of non-state actors.¹¹

The utility company has devised a comprehensive transition plan to achieve net zero emissions by 2050, with an ambitious target to reach carbon neutrality by 2040. The plan involves transforming its power generation

The company has deconstructed its overall transition plan into four activity-level transition plans: one for each plant.

The company calculates that the transformation of its second plant will require an amount representing roughly 70% of its capital investments. During this first fiscal year of reporting, the company has calculated that indeed it spent 70% of its Capex in the transformation of the plant. The company has made an investment of 15% to adapt its second plant against the risk of flooding following a physical risk assessment that identified the material risk that plant was facing given that it is placed in a high flooding risk area.

Each plant today generates 25 % of the business turnover (Figure 2).

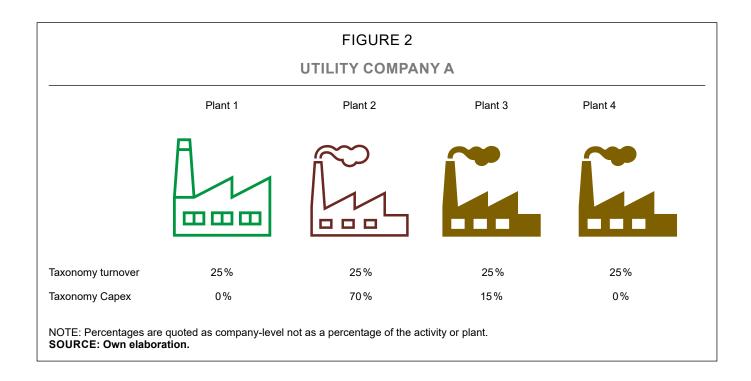
In its inaugural taxonomy reporting, the company disclosed a 25 % alignment of turnover and 85 % alignment of Capex with the Taxonomy. To secure funding for the transformation of the second plant and adaptation of the third plant, the company intends to issue a green bond fully aligned with the Taxonomy. All proceeds from the bond issuance will be exclusively directed toward the designated transformation and adaptation projects. The company aims to capitalise on the growing demand for green bonds and the associated *greenium* in the primary market. 12 It will adhere to the rules established

plants to align with the Taxonomy criteria. Short, medium, and long-term emission reduction targets have been set in line with IPCC's net zero GHG emissions pathways, aiming to limit global warming to 1.5 °C with limited overshoot. As the first plant has already achieved the environmental performance levels aligned with climate neutrality, the company aims to transform its second plant by 2030, followed by the third plant, and then the fourth. Additionally, the company plans to invest in non-aligned plants outside the EU, anticipating a longer transformation period but aiming for completion by 2040.

To the purpose of this exercise, we have assumed that the Company complies with the minimum standards established in Article 18 of the Taxonomy Regulation. This means the Company has implemented due diligence and remedy procedures to ensure alignment with the standards for responsible business conduct mentioned in the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights.

¹¹ United Nations' High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities (November 2022), Integrity Matters: Net Zero Commitments by Businesses, Financial Institutions, Cities and Regions. https://www.un.org/en/climatechange/high-level-expert-group

¹² «Market intelligence suggests that green bonds were issued in primary markets at lower interest rates and with larger order books than conventional bonds in 2019 and 2020» (Belloni *et al.*, 2020). Also, see the latest Climate Bonds Initiative study. https://www.climatebonds.net/2021/09/greenium-remains-visible-latest-pricing-study



by the EU Green Bonds standard, even though formal implementation is slated for 2025. The company recognises the significance of taxonomy-alignment, impact reporting, and independent verification in attracting institutional investors.

Additionally, the company plans to seek a loan from a bank, which will be classified as green, as it will be exclusively used to align one plant with the Taxonomy and adapt another plant following the guidance of the adaptation taxonomy. Credit institutions have a vested interest in green bonds and loans due to substantial demand in the European capital markets, enabling banks to securitise green debt and offer it to institutional clients. The bank is also obligated to annually report the sustainability of its credit and investment portfolios using the Taxonomy, measured through the Green Asset Ratio.¹³

The company knows that its shares or general-purpose debt instruments traded in the European capital market will now be associated with two key figures: 25 % turnover alignment and 85 % Capex alignment with the Taxonomy. All financial products with sustainability investment objectives or promoting environmental, social, or governance characteristics must disclose the percentage of taxonomy-alignment based on turnover and Capex alignment. Higher alignment levels enhance attractiveness to investors seeking sustainable investments while mitigating concerns related to greenwashing. Institutional investors or part of larger groups subject to the CSRD must disclose their overall performance against the Taxonomy (Green Investment Ratio). They should also consider that their Green Investment Ratio (GIR) or Green Asset Ratio (GAR) can influence the decision of financial market participants interested in investing in their financial institutions for their green and sustainable financial products.

Taxonomy reporting from the first year of application shows that the taxonomy is increasingly being used by companies to signal their sustainability performance

¹³ Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation C/2021/4987, OJ L 443, 10.12.2021, pp. 9-67.

and efforts. Data shows that companies in the STOXX Europe 600 index that reported some alignment with the taxonomy, on average reported taxonomy alignment of around 23% for capital expenditure, 24% for operational expenditure and 17 % for revenues. 14 At the initial stage of the transition, taxonomy alignment levels in terms of revenue will be lower, especially for certain companies and economic sectors. However, alignment levels are already expected to be higher in terms of capital expenditure. This is confirmed by first data showing that a large number of companies are reporting taxonomy-aligned capital expenditure that is materially higher than their aligned revenue, especially in high-emitting sectors where transition finance is most needed, and that average taxonomy alignment for certain sectors is significantly higher in terms of capital expenditure compared to revenue. For instance, in the utilities sector a 70% average aligned capital expenditure compared to 40 % aligned revenue and in the energy sector a 23 % average aligned capital expenditure compared to 7% aligned revenue, signalling transitional investment.15

Finally, the Taxonomy represents a bottom-up analysis necessary to have a full picture of a company.

Traditionally, company disclosures have focused on average or overall performance metrics, such as average carbon intensity or total emissions. The Taxonomy introduces a shift by requiring companies to calculate and report performance at the activity or even asset level, such as the carbon intensity of specific plants measured in grCO₂e per kWh. This bottom-up approach allows companies to contrast their performance against the technical criteria set by

Investors value both entity-level (top-down) and activity/asset-level (bottom-up) indicators. Entity-level indicators offer an overview of a company's overall environmental performance, while the Taxonomy provides a zoomed-in perspective, allowing investors to identify the proportion of a company's operations that meet the environmental criteria of the Taxonomy.

The EU's sustainable finance toolbox not only supports companies with the highest sustainability records, but also companies with different starting points that have clear sustainability targets and / or credible transition plans. It also allows smaller companies to raise finance for their transition in a proportionate way.

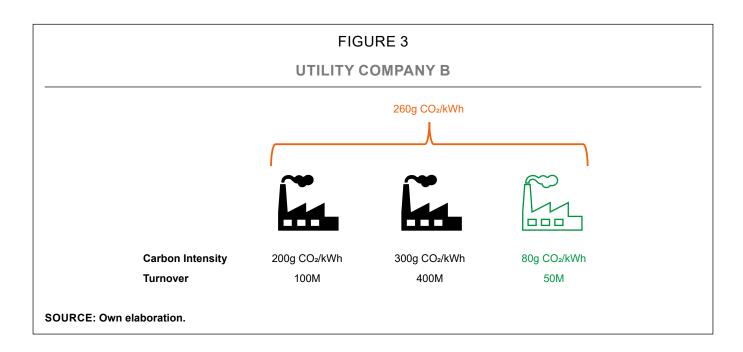
In June 2023, the Commission adopted and published a set of recommendations¹⁶ providing guidance as well as practical examples for companies and the financial sector participants on how they can use the various tools of the EU sustainable finance framework to support their transition efforts. For those purposes, the EU Taxonomy, as well as credible transition plans can be used to support the definition of transition targets and articulate specific transition finance needs at the level of the undertaking and at the level of economic activities. Transition finance can then be raised through green— or sustainability linked bonds, loans, equity financing or specialised lending.

the Taxonomy. For example, a utility company B may have multiple plants, and their carbon intensity levels may vary. When reporting against the Taxonomy, the company will consider the carbon intensity of each plant and calculate the portion of revenues generated by plants that meet the Taxonomy's technical screening criteria. This provides an opportunity for companies to claim revenues generated from green operations and be rewarded at the asset or activity level. In contrast, the company's average carbon intensity does not meet the Taxonomy threshold of 100grCO₂e/kWh (Figure 3).

¹⁴ Data based on FY 2022 disclosures up to 17 May 2023; source: Bloomberg; Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, «A sustainable finance framework that works on the ground», COM(2023) 317 final, 13.6.2023.

Data based on taxonomy-alignment reporting of 455 companies up to 16 May 2023; source: GS SUSTAIN Goldman Sachs Global Investment Research; Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, «A sustainable finance framework that works on the ground», COM(2023) 317 final, 13.6.2023.

¹⁶ Commission Recommendation (EU) 2023/1425 of 27 June 2023 on facilitating finance for the transition to a sustainable economy, C/2023/3844, OJ L 174, 7.7.2023, pp. 19-46.



The Financial Market Participant perspective

Let's now look at the asset manager side. 17 FMP B is an asset manager. FMP B has a Climate fund with a committed objective of 10 % Taxonomy-alignment based on revenues according to its pre-contractual disclosures; and a Transition fund with a committed objective of 50 % Taxonomy-alignment based on capex according to its pre-contractual disclosures.

FMP B wants to see if they can include our utility company in their portfolios:

- The Utility Company meets their Taxonomy requirements for both funds, but in order to include the company in the portfolio, the FMP B needs to verify that it meets the DNSH and good governance requirements of the SFDR (Art 2 (17)).
- FMP B has set their maximum tolerance levels to Principal Adverse Impacts (PAI) indicators. 18 In

Table 1 below, under FMP B rules, their rules for three of the PAIs are displayed.19

- FMP B checks that Company A performance for the 14 +2 indicators comply with their set rules for each indicator i.e., do not exceed the tolerance levels. The table below illustrates how it will work in practice using three of the 14 mandatory PAIs plus 2 optional.
- FMP B needs to assess if Company A has good governance practices following the SFDR definition, even though it meets the Taxonomy minimum safeguards that apply at entity-level.

FMP B chooses to include Company A in their portfolio. When (re) calculating the alignment of their portfolio, FMP B will only consider the portfolio weighted turnover and Capex-alignment figures of the company, 25% for turnover-based alignment and 85% for Capex-alignment.

The PAIs serve to ensure that the non-aligned part of Company A causes no significant harm to social and environmental objectives. They act as a «minimum safeguard» on environmental, social and governance

¹⁷ The author based the example on the one portrayed in the Data and Usability Report of the Platform, which she co-authored.

¹⁸ FMPs need to set performance or tolerance levels for the 14 mandatory indicators for investee companies (not sovereign, not real estate) and two optional criteria.

¹⁹ Three for illustrative purpose but the same exercise ought to be done for all 14 + 2 optional.

TABLE 1	
ILLUSTRATIVE PAI FOR COMPANY A	

	Company A	FMP B rules
Activities negatively affecting biodiversity-sensitive areas	No sites or operations located in or near to biodiversity areas where activities of those investee companies negatively affect those areas	Zero
GHG intensity of investee companies	Carbon intensity (gr CO₂e/ton of product) 262g CO₂e/kWh	In line with Taxonomy DNSH thresholds when existing; otherwise follow EU ETS when applicable or IEA SDS thresholds
Gender pay gap	2.5 %	Maximun of 5 %

NOTE: Please note that both the company performance and the FMP tolerance levels are fictitious for the purpose of providing an example. **SOURCE: Own elaboration.**

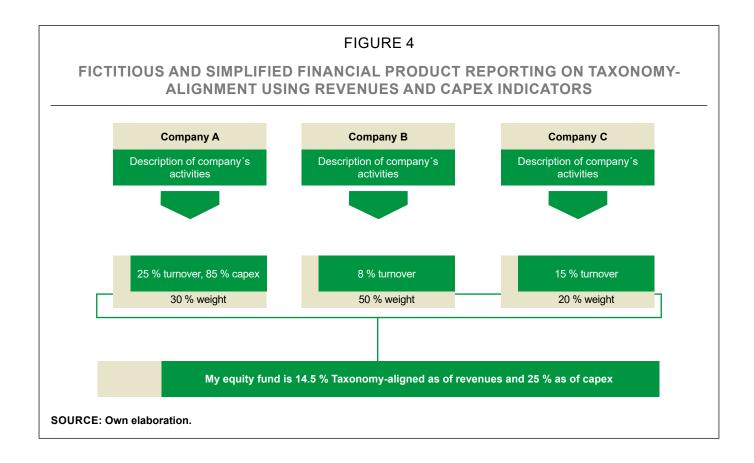
issues for the entire company. It is worth noting that the regulatory requirement is to disclose the mandatory PAIs indicators as well as any relevant opt-in indicators (Figure 4).

For its transition fund, FMP B might use two variables to select companies: a minimum of 50 % capex-alignment with the Taxonomy and a credible and detailed transition plan. By requiring companies to disclose their Capex-alignment, the Taxonomy, for the very first time, allows investors to use capex as a key variable in constructing their portfolios.

While FMPs need to choose in their pre-contractual disclosures which KPI they will use to determine alignment, they ought to disclose alignment calculated in all three KPIs (revenues, Capex and Opex).²⁰

Until now, green funds have relied on revenue indicators to evaluate companies for inclusion in their portfolios. However, the Taxonomy allows for shifting towards considering capital expenditures (Capex) as a forward-looking indicator. While revenue alignment provides insights into a company's sustainability performance today, it is a retrospective measure. In contrast, Capex represents the investments companies make towards implementing their transition plans, making it a valuable tool for assessing their commitment to net zero and sustainability. By aligning Capex with the Taxonomy, companies demonstrate their dedication to achieving net-zero and other environmental targets. This integration of Capex in the evaluation of companies for green, sustainable, and ESG funds enables investors to identify businesses that allocate their resources towards greening their operations and are actively pursuing the realisation of their transition plans. The reliability and accuracy of Capex reporting are essential for securing funding and facilitating the successful implementation of sustainable strategies. Overall, Capex plans play a

²⁰ Please note that the EU Platform on Sustainable Finance has called for the elimination of the justification required for the use of Capex/Opex by deleting Article 15 (3a), and of the requirement for FMPs to calculate taxonomy-alignment of their portfolios using Opex in line with financial institutions entity-level disclosures, given that the information will not be readily available (*i.e.* they cannot include in the calculation any financial undertaking) and adds little value to end-investors.



crucial role in shaping companies' transition plans and attracting investment to finance their transition.

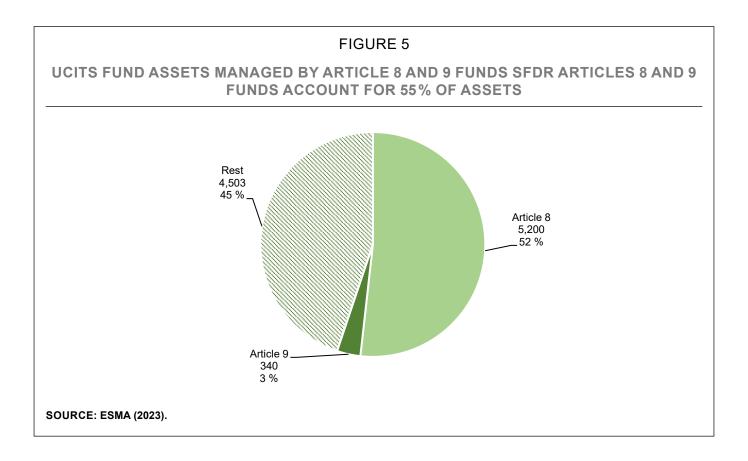
Following the implementation of the SFDR in March 2021, there has been a significant increase in the offering of financial products that have either a sustainable investment objective or possess environmental, social or governance characteristics (Article 9 and Article 8 disclosure products) in Europe. In the fourth quarter of 2022, 38% of UCITS funds were disclosing under Article 8, indicating their focus on promoting sustainability characteristics. Additionally, 4% of UCITS funds were disclosing under Article 9, signifying their specific objective of sustainable investment. Combined, these Article 8 and Article 9 funds managed 55% of UCITS fund assets (Figure 5).

The rise in the offering of these products reflects the increasing importance of sustainability in European capital markets and confirms that, despite the need

for greater clarity and consistency with other regulations²¹, the regulation is starting to work in the market. It also means that more than half of the market has a vested interest in gradually increasing the proportion of Taxonomy-alignment of their portfolios.

As the demand for highly aligned securities, such as taxonomy-based use-of-proceeds instruments, revenue or Capex-based equity and general-purpose debt, increases, it is expected that the cost of capital for

²¹ Please see the Platform's Final Report on Data and Usability, available at https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance/platform-sustainable-finance_en#activities, and the Commission Staff Working Document «Enhancing the usability of the EU Taxonomy and the overall EU sustainable finance framework» accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions «A sustainable finance framework that works on the ground», SWD/2023/209 final, 13.6.2023.



companies seeking to green their activities or expand and maintain those that are already green will decrease.

In the future, the integration of the Taxonomy into the narrative of every financial product should be a standard practice, showcasing the level of alignment with existing (turnover) or future (capex) investments. Long-term minimum mandatory ESG reporting requirements should encompass all financial products, including those not classified as Article 8 or 9 (commonly known as Article 6 under SFDR). These requirements should encompass reporting on taxonomy alignment and GHG emissions.

Such a mandated reporting requirement for all financial products would bring attention to the superior performance of Article 8 or 9 products in terms of Taxonomy metrics compared to products categorised as Article 6 under SFDR. It would also facilitate the gradual decarbonisation of portfolios by financial market participants.

The Taxonomy and ESG preferences

Demand for Taxonomy-aligned financial instruments and products is also expected to rise in response of the inclusion of «Sustainability Preferences» in MiFID II and the Insurance Distribution Directive.²² The inclusion of sustainability preferences allows clients / retail investors to express their preferences / choices regarding the degree of sustainability and/or negative impact on sustainability of their investments.

The Commission adopted six amending Delegated Acts on fiduciary duties, investment and insurance advice which will ensure that financial firms, e.g. advisers, asset managers or insurers, include sustainability in their procedures and their investment advice to clients. The Texts Amending Delegated Acts on sustainability preferences, fiduciary duties and product governance were published in the Official Journal of the EU in August 2021 and are also available at https://finance.ec.europa.eu/publications/sustainable-finance-package_en

Firms collect information on clients' preferences, including alignment with the Taxonomy, proportion of sustainable investments, and consideration of sustainability impacts (through the consideration of principal adverse impacts). These preferences enable retail investors to align their investments with their values and contribute to the transition to a sustainable economy.

8. The Taxonomy looking forward

Significant progress has been achieved to date, and many companies and investors are embracing the opportunities of sustainable finance and the EU Taxonomy in particular. At the same time, companies are also facing challenges with complying with the new disclosure and reporting requirements, as the first reporting cycle for companies have raised implementation and usability questions.

To support stakeholders in their implementation efforts and maximise the potential that the EU Taxonomy offers, the Commission has been providing regular guidance on the interpretation and application of certain criteria and disclosures. In addition, the Commission has launched a series of online tools and guides to help users navigate the criteria and fill their reporting templates. These should save stakeholders time and resources when assessing and reporting their taxonomy alignment. These documents and tools are gathered on the new EU Taxonomy Navigator website.²³

The Commission reiterated that continuing to enhance the usability of Taxonomy will be now its key policy priority. The Platform on Sustainable Finance will continue to play a crucial role to support these efforts and prepare the ground for future regular updates of the Taxonomy, including broadening its scope by including additional economic activities over time, to ensure that Taxonomy keeps up with the latest technological developments. The Platform will also work on developing market practices to

better understand how stakeholders are currently using the Taxonomy and identifying relevant opportunities and challenges.

9. Conclusion

The EU Taxonomy, along with the sustainable finance package, creates a ground-breaking measurement system that bridges the gap between financial metrics and environmental performance. The Taxonomy helps financial market participants and institutions make informed investment decisions, allocate capital efficiently, and transition away from stranded assets. It serves as a tool for companies and economic actors to access capital at a lower cost, supporting their transition to net zero and more sustainable practices.

The implementation of the sustainable finance framework is underway, with companies and financial entities beginning to adopt the tools and disclosure standards for their economic and financing activities. As this implementation progresses, there will be improvements in the quality and availability of disclosures and data, enabling market actors to make more informed investment decisions, align with sustainability objectives, and secure financing for the transition to a sustainable economy. While there is still work to be done to finalise the Taxonomy and address any gaps or areas for improvement, the framework is advancing and paving the way for a more sustainable financial system.

Efforts are being made to prioritise the access of small and medium-sized enterprises (SMEs) to green finance, recognising their importance in the transition to sustainability. Measures are being taken to ensure that the Taxonomy and sustainable finance initiatives do not create undue burdens for investments in developing countries, taking into account their specific needs and challenges. Additionally, there is a focus on promoting the interoperability of the EU Taxonomy with non-EU actors and with other taxonomies, aiming to establish a common understanding and alignment on sustainable finance globally. These efforts reflect a commitment to

²³ For more information, please see https://ec.europa.eu/ sustainable-finance-taxonomy/

inclusivity and collaboration in advancing sustainable finance beyond the borders of the European Union.

The EU Platform on Sustainable Finance plays a crucial role in advising the Commission to achieve these goals and create a user-friendly toolkit for the Taxonomy and the wider sustainable finance regulatory framework.

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