UNIVERSITY OF PIRAEUS
DEPARTMENT OF INTERNATIONAL AND EUROPEAN STUDIES

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# Thesis: "The Political Economy of the EU Taxonomy for Sustainable Investments."

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# Abstract

This thesis examines the political economy of the Taxonomy for Sustainable Investments, a European Union binding legal act intended to direct private capital toward economic activities that are environmentally sustainable. As a key pillar of the EU's broader climate and sustainable finance strategy - and in alignment with the objectives of the EU Green Deal - the EU Taxonomy is a central tool in the Union's efforts to reduce carbon emissions and build a climate-friendly and environmentally sustainable economy by 2050.

The EU Taxonomy's six environmental objectives, the four sustainable investment principles and the Delegated Acts that implemented it are the main elements of the Taxonomy and the core of this framework. Particular attention has been given to the Climate Delegated Act, which provided insight into the screening criteria used to categorize the climate economic activities as sustainable, and the Complementary Climate Delegated Act, which controversially included natural gas and nuclear energy as sustainable sources of energy.

Through a political economy lens, this thesis examines how institutional actors, Member States, the financial sector, environmental NGOs, and science expert bodies have shaped, supported, and opposed the Taxonomy. Their different stances on natural gas and nuclear power and environmental and climate policy resemble and foreshadow their different takes on energy security and economic development.

After analyzing all the stakeholders that have influenced and are being influenced by the Taxonomy, the changes that were implemented, the reasons why its content was reformulated and how the current market structure received it, this thesis reaches a conclusion. The EU Taxonomy aims to protect the climate and the environment – as was intended – but it is also being used to fulfill geopolitical goals, economic growth and industry lobbying.



**Keywords:** sustainable finance, EU taxonomy, climate neutrality, European Commission, environmental objectives, natural gas, nuclear power, DNSH, decarbonization, greenwashing

# 1. Introduction

With only a quarter of a century left to the European Union's 2050 goal of climate neutrality, the dichotomy between economic expansion and environmental preservation is becoming more apparent. The European Union (EU) has responded to this requirement by implementing a set of legislative acts to reorient financial flows toward businesses that are environmentally friendly.

The Union's ambitious agenda of reform to a sustainable climate-neutral economy acknowledges the environmental toll our previous practices and lack of policies created. Following the breakthrough environmental initiatives that were the Green Deal and the Paris agreement, it has been apparent that the direction of public and private capital needs to be refocused towards sustainability-related goals and environmentally friendly investments (European Commission. (n.d.). Public funding alone will be insufficient to achieve the objective of becoming the world's first climate-neutral continent.

Enacted through Regulation 2020/852, the EU Taxonomy for Sustainable Investments classifies the activities that are sustainable by determining if they correspond to the EU's six environmental priorities. It is a relatively new regulatory tool to steer the private sector's funds in the direction of environmentally sustainable economic activities. Its overarching purpose is to combat greenwashing and enable investors, companies, and policymakers in selecting projects consistent with the EU's climate and environmental ambitions - most notably, carbon neutrality by 2050 (Wendt, 2024).

The European Commission's attempt to control where the private sector invests its funds based on a particular aspect of the project, even if that is for the greater good of the environment and climate, received mixed political and financial reactions. As a result, various stakeholders affected by its regulations have tried to shape its rules to suit their own goals. The European Commission's later decision to incorporate and categorize natural gas and nuclear power as sustainable investments (Regulation (EU) 2022/1214) added to the attention it was receiving. It raised questions by some about the consistency of the EU's decarbonization plans and the political motives behind the change of course, while it greatly pleased others.

These events prompt a closer look at the Taxonomy not just as a legal framework but also from a political economy perspective, to consider the hidden interests, how power and funds are distributed, and the priorities of those that determined its content and will use it in the future. This thesis investigates how far the EU Taxonomy actually contributes to Europe's climate-neutrality ambitions; It also asks whether the Taxonomy was reformulated to satisfy the energy aspirations of its Member States and whether it genuinely channels investments toward low-carbon and sustainable projects.

The main research questions of this research are:

● Why did the EU decide to 'rebrand' nuclear and gas as 'green' investments? What goals or pressures were behind that decision and how have they justified incorporating these fuels in a sustainability-centered Regulation?

● Who are the central actors in the Taxonomy's drafting process and its implementation, and how have their roles influenced the changes that were made in the years after its enactment?

● Is the EU's sustainable finance policy supported by other same-goal legal instruments, and how do these tools interconnect and interact with the Taxonomy?

● Is the EU truly moving toward sustainability? Are the EU's sustainability goals that were officially announced in the Green Deal being compromised by economic or political considerations?

## 1.1. Methodology

This thesis adopts a qualitative research method supported by document analysis and literature review. The study is based on a detailed analysis of Official EU documents (e.g., Regulation (EU) 2020/852, Delegated Acts, Technical Expert Group reports), academic journal articles and working papers on sustainable finance, political economy, environmental policy and EU Taxonomy evaluations, as well as statements from international organizations such as the OECD and UNEP and non-governmental organizations such WWF, Greenpeace et cetera.

The analysis was conducted using concepts from political economy theory, particularly focusing on stakeholder influence (Pavlov, 2018). A particular focus will be placed on analyzing the Delegated Acts that revised the Taxonomy to the point of including more traditional carbon-emitting fuels to its sustainable scope. The political background of this decision will be assessed to study the connection between environmental objectives and competing economic or geopolitical interests in Chapter 4.

### 1.2. Structure

The analysis consists of six chapters. The first chapter is the basis of this thesis, explaining the methodology used to tackle the subject, the texts that were analyzed and the contribution of the thesis.

The second chapter lays the groundwork of this research by defining the taxonomy, explaining its six environmental objectives, and describing the three

delegated acts that support it. It also discusses which are the principles of sustainable investment that need to be upheld by all actors involved as the taxonomy is put into practice.

The third chapter provides context on the broader system of EU governance and sustainable finance that underpins the taxonomy. It discusses the connection of the Taxonomy with the EU Green Deal, sustainability-related disclosure standards and EU law, both binding and voluntary.

Chapter Four introduces the political economy perspective and contains the essence of this research. It identifies who the major and minor actors are affected by and influence the taxonomy's course and content, why these actors wish to be involved, and what they can gain from using the taxonomy. It also analyzes the positions of the Member States on nuclear energy and natural gas and how they were detrimental to the inclusion of these fuels in the Taxonomy. It concludes with a discussion on the greenwashing accusations that the Taxonomy has faced and how the Taxonomy could both validate and disprove them.

The fifth Chapter follows with an analysis of the challenges that limit the scope of this classification system and suggests recommendations for strengthening it. A list of recommendations was not included in the first draft of this thesis but after analyzing the existing material on the EU taxonomy, it became apparent that there are several measures that could make the Taxonomy more effective and applicable. Chapter 6 contains the conclusions of the research followed by the References section in Chapter 7.

## 1.3. Contribution

Previous studies mainly focused on the legal and practical sides of Taxonomy. This study uses political economy theory to focus on the power dynamics behind it and the economic advantages that could come with it.

One of the major contributions of this text, and the motivation for selecting the EU Taxonomy for this thesis, is the step-by-step analysis of the inclusion of natural gas and nuclear energy in the Taxonomy. The polarization it triggered and the disputes that took place over an energy matter work as a simulation of the political and economic frictions of Europe's energy transition and energy security. This thesis also analyzes all the major stakeholders in the Taxonomy's network in conjunction with their roles and their contribution.

Moreover, this thesis considers how the Taxonomy can target greenwashing and how it could pave the way towards more sustainability in the energy industry and other heavily carbon-oriented sectors. It underscores the central role of energy production and security in how the EU makes decisions. Finally, in addition to

the theoretical chapters, the thesis offers policy recommendations to improve the taxonomy's usability and reputation as the EU continues on its path toward climate neutrality.

# 2. The EU Taxonomy: Definition and Context

## 2.1. Introduction

The EU's Taxonomy of Sustainable Investments establishes a sustainable finance framework that distinguishes between environmentally sustainable and non- sustainable economic activities. The Regulation is part of a broader energy-centered effort to reduce emissions of greenhouse gases to zero by 2050. This goal requires to realign capital flows from traditional operational models to energy resources that are not actively destroying the environment. The struggle is that the EU, as well as the entire world, currently relies on fossil fuels not only to grow economically but to simply maintain its current standards of operation. The continent will utilize the Taxonomy to transition gradually to the next era of economic environmentally neutral activities (European Commission, n.d.).

To direct public and private funds towards the same goal, a common language between all the different stakeholders needed to be established. Thus, the taxonomy was born. The Taxonomy established clear benchmarks for an activity to be deemed sustainable and aims to target greenwashing by improving transparency in investment decision–making. It is structured around six environmental objectives and guided by four key principles that determine the sustainability of economic activities (Wendt, 2024).

The Taxonomy operates within the EU's broader Sustainable Finance Agenda, which also consists of the Sustainable Finance Disclosure Regulation (SFDR) and the Corporate Sustainability Reporting Directive (CSRD). The Taxonomy came into force in mid-2020 (Regulation (EU) 2020/852). It marked an important change in how Europe viewed green investing.

## 2.2. The Six Environmental Objectives

The essence of the Taxonomy of Sustainable Investments is the six environmental objectives that the Regulation is supposed to enhance throughout its course. An economic investment that fails to have positive impact on at least one of them cannot be treated as environmentally sustainable by EU law. Each of the six objectives outlined in Article 10 of the Regulation (EU) 2020/852 corresponds to a distinct environmental priority. This is the foundation for evaluating whether an activity qualifies as sustainable and allocating capital to

it. Collectively, they represent the environmental priorities of the European Union and international climate commitments that were made through the Paris Agreement. They were selected under one broad idea- to tackle the pressing ecological and climate challenges of our time employing a science-based and systemic methodology (Regulation (EU) 2020/852).

### 2.2.1. Climate Change Mitigation

The most apparent and anticipated objective is for the activity to require none or at least substantially lower carbon fuel generation. Possible related activities are renewable energy generation like wind farms, energy efficiency improvements, and carbon capture technologies (European Commission, 2020), (Regulation (EU) 2020/852, Art. 10 (a)). Under the Taxonomy low-carbon activities such renewable electricity generation are required to stay withing strict lifecycle emission thresholds - below one hundred grams of $CO_2$ equivalent per kilowatt hour - to be substantially contributing to climate mitigation (European Commission, 2021, Article 10(a)).

The Intergovernmental Panel on Climate Change (IPCC) is a United Nations body of experts that conducts scientific research on climate change. It has reported that global $CO_2$ emissions must be cut in half by 2030 to remain inside the 1.5 °C warming limit of the Paris Agreement (IPCC, 2022). The numerical objectives render the emissions criteria of the Taxonomy crucial.

### 2.2.2. Climate Change Adaptation

This objective focuses on tackling the current or future climate impacts, such as natural disasters, with activities that include resilience planning, infrastructure adaptation, or climate-resilient agriculture, etc. (European Commission, 2020; Regulation (EU) 2020/852, Art. 10(b)). The United Nations Environment Programme finds that progress on climate adaptation is slowing down at a time when it needs to be speeding up to keep up with the effects of climate change (UNEP,2023). UNEP's Adaptation Gap Report 2023 indicates a substantial lack in funding of activities related to climate change adaptation, projected to be over US$160-340 billion per year by 2030. This is the reason it is important to attract private investors. The Taxonomy can direct the larger funds of the private sector toward sustainable activities and eventually close this gap.

### 2.2.3. Sustainable Use and Protection of Water and Marine Resources

An activity related to water management could fit the taxonomy criteria if part of its operations contributes to marine ecosystem preservation, wastewater treatment, etc. (European Commission, 2020; Regulation (EU) 2020/852, Art. 10(c)). According to an EEA Report 07/2024, only about 37% of Europe's surface waters achieve a good enough ecological status, and a sizable portion of the EU's aquatic habitats remain in poor conservation conditions. Chemical pollutants released in the water from coal energy-production emissions and pollution from agricultural practices are lowering the quality of the EU's waters. Using fertilizers and pesticides to this degree has made agriculture dangerous. Technological advances in agriculture can lead to sustainable marine ecosystems and help ensure a long-term water supply (European Environment Agency, 2024a).

### 2.2.4. Transition to a Circular Economy

The circular-economy model supports the decoupling of economic growth from resource extraction by recycling, reusing, and repairing, all in a closed-loop production model (European Commission, 2020; Regulation (EU) 2020/852, Art. 10(d)). The concept of the circular economy moves past traditional waste management. It focuses on preserving the materials by extending how long they last. This reduces reliance on resources that have an expiration label (European Environment Agency, 2024b). In other words, the circular economy is not about managing waste but about rethinking the lifecycle of products.

To achieve a circular economy, new production models must be developed which include replacing raw materials with sustainable options, promoting collective use schemes, extending product durability and usability, reintegrating waste into the production as a secondary raw material and ultimately providing services rather than products. (EEA, 2024). The entire supply chain can be redesigned. Installing a circular economy approach is necessary to secure the planet's resources but also build a resilient, sustainable economy (OECD, n.d.).

### 2.2.5. Pollution Prevention and Control

The heavy industry sector needs to follow the emission limits set by the EU. These standards resemble existing EU law, especially the Industrial Emissions Directive 2010/75/EU (IED) and the Best Available Techniques (European Commission, 2017). If the EU wishes to effectively prevent pollution, it is necessary to target the operations that emit the largest amounts of carbon such

as power plants. Millions of people die every year due to air pollution. (World Health Organization, 2021). Installing carbon filtration systems and setting up effective waste management techniques on heavy industry operations will have a major impact in controlling the pollution that these projects produce (European Commission, 2020; Regulation (EU) 2020/852, Art. 10(e)).

The carbon emissions coming from power plants are much more polluting than the straws the European citizens are using. Major pollutants need to be addressed before moving to citizen consumption and pollution. The Taxonomy's role is to direct larger funds towards projects that respect the environment and do not produce more pollution.

### 2.2.6. Protection and Restoration of Biodiversity and Ecosystems

This objective focuses on conserving our natural habitats, restoring ecosystems that have been altered or destroyed by carbon emissions and using land sustainably (European Commission, 2020; Regulation (EU) 2020/852, Art. 10(f)). These projects have definitely not been a priority in our current agriculture and economy models.

If food production remains unchanged, feeding the global population will become increasingly difficult. IPBES (2019) emphasizes that transforming food management and land-use is necessary to protect natural ecosystems and ensure long term human survival. These changes include introducing responsibility in food networks, cutting down food waste and moving toward more sustainable diets.

Overhauling an outdated supply chain system is a very expensive task. The amount of money needed to protect nature and biodiversity is nearly US$700 billion per year (Secretariat of the Convention on Biological Diversity, 2024). The fact that this money is not currently provided underscores the relevance of a tool like the Taxonomy, which can steer investments towards closing this gap.

## 2.3. Sustainable Investment Principles

Under Regulation 2020/852, an economic activity is deemed sustainable only if it meets four key conditions. Together, these four investment principles are to always be respected in full to qualify for sustainable investing.

### 2.3.1. Substantial Contribution to at Least One Environmental Objective

It is not necessary for activities to fulfil all the previous environmental objectives, which would be nearly impossible, but it is imperative that they fulfill at least one substantially (European Commission, 2020; Regulation (EU) 2020/852, Art. 15). The level of contribution is clarified by the delegated acts that followed the Taxonomy, supplementing its content.

### 2.3.2. Do No Significant Harm (DNSH) to Other Objectives

This principle is clear. An activity that contributes to one of the objectives must not undermine any of the other goals. Progress in one domain cannot compromise another. This principle, known as "Do No Significant Harm" (DNSH), ensures a balanced transition to sustainability and prohibits possible trade-offs between objectives that would undermine the sustainability factor. Therefore, if an investment generates a high amount of gas emissions (contravening the first objective), causes severe impact on the current or future climate, harms people or the natural environment (violating the second objective), leads to pollution or excessive water waste or deduces ecosystem resilience, it cannot be considered sustainable (Gortsos, Kyriazis, 2024) The DNSH conditions require a holistic environmental risk assessment to ensure the activity is harmless (European Commission, 2020; Regulation (EU) 2020/852, Art. 17).

### 2.3.3. Minimum Safeguards

Activities must comply with the social goals that are outlined in Article 18. Labor rights and ethical business practices should take precedence in all sustainable activities (European Commission, 2020), (Regulation (EU) 2020/852, Art. 18). A project that violates human rights could never be sustainable.

### 2.3.4. Technical Screening Criteria

Compliance with the technical screening criteria set forth by the Delegated Acts is required to evidence substantial contributions and DNSH alignment. The TSC set activity-specific thresholds, best practices, and risk-management measures that will produce standardized measurable data on each activity. They are mainly

quantitative and set different performance aspects for different activities. For example, renewable electricity generation fulfills the substantial contribution principle only if its lifecycle greenhouse gas emissions are below 100g $CO_2e$/kWh. (European Commission, 2021). The TSC are constantly revised by policy changes, discoveries and new delegated acts and have been a subject for contention about the Taxonomy in general because of their rather abstract nature.

## 2.4. The Delegated Acts Under the EU Taxonomy

### 2.4.1. The Climate Delegated Act

From the first publication of the Taxonomy Regulation, confusion arose on what is considered a substantial contribution and how to apply the technical screening criteria. Companies, financial institutions, and auditors faced uncertainty that stemmed from the vague phrasing of the regulation and the absence of guidance and technical thresholds that would function as a tangible basis for the stakeholders to begin their sustainable journey (European Commission, 2023).

Thus, the **Climate Delegated Act** (Reg. 2021/2139) was published in 2021, and a series of complementary delegated acts followed attempting to clarify and translate TSC into more comprehensible guidelines with clearly set performance rates. The role of the CDA is to support climate neutrality, transparency and reduce greenwashing (Schütze and Stede, 2021). Delegated acts are secondary legal instruments issued by the European Commission, allowing technical or procedural adjustments to existing legislation without reopening the full legislative process (EUR-Lex, n.d.).

The CDA focused on climate change mitigation and adaptation and set specific benchmarks for each sector that participates in climate-related activities. These metrics define when an economic investment "substantially contributes" to preventing or adapting to climate change while also making sure it does not significantly impair any of the other environmental goals. The Platform on Sustainable Finance and its experts' consultations made sure that the TSC stood on solid scientific ground and made sense economically (European Commission, 2021).

Despite these clarifications, the CDA still faced criticism for how complex it was. According to the PSF, small companies that have a low budget or low expertise struggle to comply with the technical criteria (PSF, 2022). Across Europe, firms are pushed to transform their operations and introduce sustainability without the means to achieve such an overhaul. For many, this means changing all of their supply chain processes and how they manage their resources. Even investors who have the funds but seek a profitable and quick investment might be deterred because of the cost of a more sustainable operation.

An important element of the CDA is looking beyond the environmental aspect of an activity. It is also important that the activity supports other important European Union goals. These goals could be encouraging innovation in technology, keeping the industry competitive, and ensuring a reliable energy supply. Energy security is a massive concern when it comes to the transition out of greenhouse gas emissions (Busch et al., 2024). Decarbonizing the EU affects all these different areas, which means that it is not simply an environmental challenge but a market competitiveness issue, a technology issue, an energy security issue and so on.

Another challenge comes from how the CDA keeps shifting its provisions along with the taxonomy in general. For a feasible success, the taxonomy framework needs to be more standardized, clear, and useful to each sector and for that to happen it is imperative for the taxonomy to maintain an adaptable ongoing legislative and consultative process. This is both a strength and a weakness: adaptability is necessary to reflect scientific progress and market developments, but it also introduces uncertainty for investors and businesses, necessitating continuous adaptation to evolving standards and definitions of sustainability (Schütze & Stede, 2020). Partial alignment to the taxonomy is also a struggle as many companies only have a fraction of revenue investment that qualifies.

The range of investments of the CDA spans one hundred economic activities- from the structuring of green financial products to promoting low-carbon technology to energy generation and transmission, manufacturing, transport, construction and real estate, water and waste management, and ICT. New buildings are considered to mitigate climate change only if they are highly energy-efficient (European Commission, 2021). Renovations of buildings qualify only if they lead to at least a 30% improvement in energy performance. Electric vehicles and supporting infrastructure are also some of the activities included, while traditional vehicles are not part of the taxonomy unless they meet strict emission thresholds. It is expected that in a few decades, traditional cars will cease to be manufactured in the EU. That will be a direct consequence of the Taxonomy for Sustainable Investments. The scope of activities is rapidly expanding as energy is used in every process of economic growth and entrepreneurship. These activities were selected based on their potential climate impact and their capacity for applying sustainability criteria.

Supplementary FAQs and guidance documents, which were given to the public in December 2021 and last updated in October 2023, have further enhanced the CDA's content. These documents helped to clarify sustainability metrics, data standards, and disclosure formats to an even greater extent across sectors (European Commission, 2023). The EU Taxonomy Navigator is another user-friendly way in the form of a website that helps users better comprehend the EU Taxonomy with web tools like the EU Taxonomy Compass or the EU Taxonomy

Calculator, which support companies in their reporting obligations (European Commission, n.d.).

Complex or not, fostering investments in activities that will help the EU meet its climate objectives are its number one priority. Low carbon emissions and energy efficiency are the future of this economy.

### 2.4.2. The Complementary Delegated Act

After Regulation (EU) 2021/2139, certain Member States and policymakers criticized the Climate Delegated Act from excluding energy strategies based on gas or nuclear energy, arguing that the transition out of coal energy resources needs to be facilitated through them. Extensively relying on renewable sources will breach energy security. After resisting with the CDA, the Commission responded with the Complementary Climate Delegated Act (CCDA). It was formally adopted in March 2022 and enacted at the beginning of 2023 (Commission Delegated Regulation (EU) 2022/1214).

The Complementary Climate Delegated Act expanded the Taxonomy to include nuclear power and gas-related activities, mainly those connected to electricity generation for heating and cooling purposes. The new categories covered nuclear technologies with closed fuel cycles, the construction of nuclear facilities for producing electricity, heat, and hydrogen, and efficient gas energy production. Heating systems powered by gaseous fuels were also incorporated, provided they meet strict sustainability criteria. It emphasized transitional energy production excluding any operations related to gas and oil extraction (Commission Delegated Regulation (EU) 2022/1214). Many nuclear and gas activities may fit under these categories if they fulfill the four investment principles.

The CCDA introduced activity – specific TSC. For nuclear power generation, the TSC mandates that new nuclear energy plants must secure a construction permit prior to 2045 and adhere to high safety standards. Operators have to draw plans of sustainably managing fuel and radioactive waste in a disposal facility by 2050 (Commission Delegated Regulation (EU) 2022/1214). For gas-fueled energy generation, eligibility requires lifecycle emissions below 100 grams CO2 equivalent per kilowatt hour or under strict restrictions, provided a construction permit is obtained by 2030. Such facilities are required to transition to renewable or low-emission resources by the year 2035 (Commission Delegated Regulation (EU) 2022/1214).

Overall, the CCDA temporarily connects the gap between sustainability and energy security as well as the one between environmental ambition and economic realism. The addition of these resources and the political economy behind this decision will be analyzed in Chapter 4.

### 2.4.3. The Environmental Delegated Act

In June 2023, the European Commission issued the Environmental Delegated Act formally titled the Commission Delegated Regulation (EU) 2023/2486. The Act came into effect in January 2024 and focused on non-climate-related objectives. It provided the technical screening criteria for activities connected to the circular economy, marine resources, pollution management and biodiversity (Commission Delegated Regulation (EU) 2023/2486).

The EDA's role is similar to the role of the aforementioned delegated acts and it involves clarifying which activities are sustainable in accordance with Articles 3 and 19 of the Taxonomy, supporting the implementation of the framework and guiding investors and companies in choosing environmentally conscious projects (European Commission, 2023)

The Platform on Sustainable Finance, which is a major factor in the climate neutrality agenda, heavily influenced the content of the EDA, ensuring the scientific and technical integrity of the screening criteria (Platform on Sustainable Finance, 2022). The EDA amended earlier versions of the Climate Delegated Act. The goal was to enhance coherence and eliminate confusion as well as standardize reporting obligations (European Commission, 2023).

The EDA provided thresholds specific to each sector to assess sustainability. An example is the construction sector, where buildings qualify for sustainable investments only if they exhibit large reductions in resource consumption, pollution, and do not disrupt the ecosystems they are built on (Commission Delegated Regulation (EU) 2023/2486). Enforcing the Environmental Delegated Act involves Member States, regulatory bodies, and market stakeholders working closely together. The framework calls for regular feedback that will enable the Commission to update its conditions (European Commission, 2025).

## 2.5. The Platform on Sustainable Finance

The Platform on Sustainable Finance is an advisory committee created specifically by the EU Taxonomy to support its own implementation. It was established through Article 20 of Regulation 2020/852 to help revise the Taxonomy on all ongoing cases and help guide the Commission on sustainable governance and finance issues (Regulation (EU) 2020/852).

The Platform, comprised of NGOs, think tanks, academic experts, and representatives of the business sector, was formulated to access multiple perspectives and dimensions and stay in touch with market standards and scientific data. (European Commission, n.d.). Shortly after the establishment of the Taxonomy, the European Commission launched a call for any individual or organism that wanted to apply to be a Member of the Platform

(Directorate-General for Financial Stability, Financial Services and Capital Markets Union, 2022) resulting in twenty-eight successful applications. An additional seven institutional Members were decided by the Taxonomy directly, some of them being the European Environment Agency, the European Investment Fund, the European Investment Bank, and basically major stakeholders in the finance sector.

By uniting the best expertise and leading voices on matters of sustainability and finance, the EU aims to improve understanding and usability of the Taxonomy, provide information on the TSC, and oversee fund allocation towards sustainable projects.

### 2.5.1. Key Contributions and Outputs of the PSF

The Platform contributed mainly to refining the Taxonomy. Its initial contribution was towards bridging the gap between the EU's ambitious climate objectives and the practical realization of those goals, linking real-world activities with the Taxonomy of Sustainable Investments. The Platform of Sustainable Finance is an intermediary between the European Commission and external entities. Its goal is to ensure the scientific validity of the sustainability demands and their alignment with trade obligations and market practices in the EU (Wendt, 2024), (Platform on Sustainable Finance, 2025). The Platform plays an essential role in implementing the Taxonomy. Although the Platform lacks legislative authority, it is a scientific foundation for regulation updated and delegated acts, which are ultimately ratified by the European Commission. On a regular basis, since its founding, the Platform releases Independent Reports on the Taxonomy of Sustainable Investments, reporting on its impact, ongoing updates and anything that might be relevant to its implementation.

The PSF worked closely with the European Commission on the shaping of the CDA, which focused on the TSC and provided recommendations for climate-related environmental objectives. The Platform published draft reports and made consultations to provide better definitions on what is a substantial contribution and what is significant harm (European Commission, 2020).

In 2022, one of the reports cited compliance costs, the complex reporting rules and the burdens on smaller firms. They noted that small companies might be left behind because they could not provide the same deliverables as larger ones (Busch et al., 2024). The Platform proposed transitional timelines and provisions to enable SMEs to develop their capacity for compliance. Proportional to company size rules were not part of the solution (Platform on Sustainable Finance, 2022).

In 2024, the Platform released a compendium with a study on cases of companies successfully aligning their investments to the Taxonomy's sustainability standards, essentially providing other companies with a guidebook of market

practices, financial products, and peer-to-peer knowledge on how to achieve the same goal themselves. The Report stresses that these practices do not represent market standards but are an early indication of what the Taxonomy can be for large enterprises, banks, investors, insurance companies, the public sector, auditors and consultants, and SMEs. For example, it highlighted how the utilities sector used the Taxonomy to structure their transitioning, how auditors are integrating verification checks for Taxonomy KPIs and how banks are transitioning towards sustainable green loans (Platform on Sustainable Finance, 2024). The Compendium concludes by remarking the need for constant guidance to support smaller companies in their transition.

In April 2025, the Platform published a Report titled "Advancing Sustainable Finance". Its aim was to develop new TSC for new activities that were previously unregulated, review data and recommend updates on transitional economic activities and enhance DNSH conditions. Existing 'Do No Harm' criteria were found to be ambiguous. Wendt (2024) notes that clear regulatory language is important for successfully applying the Taxonomy. Lengthy legal texts only serve to confuse the market actors (Wendt, 2024, p. 112). The study proposes specific changes in linguistic clarity and removal of scientific or technical assumptions that were used in the last TSC, including those for nuclear and gas, and the creation of new TSC based on new discoveries Platform on Sustainable Finance, 2025).

Feedback collected through the stakeholder request mechanism emphasizes how important it is to balance the science with its practical application in the real world. By revisiting and improving the DNSH and TSC principles for the better based on received feedback, the Taxonomy can become more flexible and eventually a reliable and usable tool (Platform on Sustainable Finance, 2025).

Alexander, K., Gargantini, M., & Siri, M. (2025) recommend that the Taxonomy should be reviewed often, to reflect technological progress. They note that "*A taxonomy that is systematically reviewed and adapted ensures scientific relevance and protects against regulatory obsolescence" (*Alexander et al., 2025, p. 56).

## 2.6. Conclusion

The EU Taxonomy for Sustainable Investments was a necessary move from the Commission who is in charge of Europe's sustainable transition. There is a clear lack of money invested in sustainable practices and no motives to attract investors towards them. These two variables combined with Europe's bold commitment to becoming the first climate-neutral continent were the reasons for developing the Taxonomy.

Its foundation is its environmental objectives and sustainable principles that are translated into technical screening requirements. The TSC should be upheld but

can also be changed if that is something that will benefit the taxonomy's overall success. They are measurable standards for the businesses and investors that will use the Taxonomy, more so than abstract environmental texts of the past that pushed for sustainability without actually paving the way.

Ultimately, the Taxonomy is a legal act trying to protect the environment, change traditional operational models, review supply chains, and cater to the economic interests of both small investors and big firms. As the following chapters will discuss, its effectiveness will depend on the actions of other institutional actors, market participants, financial stakeholders and, above all else, Member States themselves.

# 3. The Connection between the EU Taxonomy and Other EU Sustainable Finance Institutions.

## 3.1. Introduction

The EU Taxonomy does not operate in isolation. It is part of a wider system that consists of several international agreements, policies, instruments, directives, and regulations. The commitments and ambitions of the EU Green Deal, the advisory role of the PSF, and this chapter's key policy tools - including the CSRD, the EU Green Bond Standard and the Eco-label – are the basis of securing funding for sustainable projects and making sure that those investments are actually sustainable and will conform with the EU's future zero carbon emissions goals.

## 3.2. The EU Green Deal

The launch of the EU Green Deal back in 2019 generated intense discussions across academic, political and business circles. It was a turning point in the Union's pathway to being climate-neutral by 2050 and to reducing greenhouse gas emissions by 55% by 2030 (European Commission, 2019). In order to meet those goals, it would require a complete transformation of the energy sector, the transport sector, tax policy, and numerous other areas.

From the start, the European Commission recognized the financial side of this transition - projected to exceed €1 trillion over the next decade - cannot be met solely through public funds (European Commission, 2019). The EU Taxonomy configured these magnanimous ambitions by linking science-based thresholds to the related investment activities, thereby directing capital towards projects aligned with the decarbonization roadmap of the Green Deal (Wendt, 2024).

The Green Deal will eventually redesign the Union's environmental and economic systems, a strategic goal under the Von Der Leyen Commission and the Taxonomy will provide a mutual understanding of what sustainable investing is by setting the market standard (Wendt, 2024). According to Wendt, the Deal alters the prices of environmental externalities which are unintended side effects of economic activities that impact the environment and are not reflected in market prices (Pearce, D., Turner, R. K.,1990). The alteration in prices comes from a carefully designed combination of carbon pricing, industrial policy, and transparency requirements. The Taxonomy is the link that binds the financial system with those climate goals. The addition of the legally binding Delegated Acts gives the EU Taxonomy regulatory standing, which lowers the risk of "policy drift" as economic and political interests change (Alexander et al, 2025).

The subsequent legislative packages - *Fit-for-55* and *REPowerEU* - added to the Green Deal, further embedding the taxonomy's vision into sector-specific measures (European Commission, 2021). The legislation's interlocking parts show how the EU runs or wishes to run its government: environmental, industrial, and financial rules all work together to bolster each other, creating a feedback loop that slowly lines up private sector incentives and capital with the Union's climate goals. Four main policy instruments fundamental to the EU's sustainable finance action plan are discussed in the next subsections.

The Green Deal's ultimate success depends on creating a policy environment that encourages sustainable investment in all heavy industry sectors as well as everyday life and consumerism. The EU Taxonomy plays the part of bringing in cash flows and focusing it on sustainable practices while also avoiding greenwashing that puts obstacles in the transformation that the EU wants to achieve. (European Commission, 2019).

## 3.3. The Sustainable Finance Disclosure Regulation

The Sustainable Finance Disclosure Regulation (SFDR) was enacted in March of 2021. It is another legal binding regulation that keeps companies accountable and attracts private investors that are capable of financing large-scale economic activities. Under Regulation (EU) 2019/2088, investors have to explain how their products relate to taxonomy-aligned assets – meaning investments that are environmentally friendly. This makes sure they operate with transparency and accountability of their actions.

The SFDR categorizes financial products into three groups based on how much they prioritize sustainability. *Article 6* financial products must show whether they consider sustainability risks or explain why these risks might be irrelevant concerning their product. *Article 8* products are more sustainability focused and actively promote environmental and/or social factors, which might be investing in clean energy of better labor practices. *Article 9* products are the most

ambitious. They are focused on achieving a specific sustainable-investment goal such as reducing carbon emissions of preserving biodiversity.

This labeling system – reminiscent of the taxonomy classification- helps investors understand the level of a product's sustainability ambition and thus the level of disclosure obligations they will take on. For example, Article 8 managers must describe how promoted ESG characteristics are met, whereas Article 9 managers must quantify the sustainable-investment share of the portfolio and report on impact.

All the affected market participants – asset managers, insurers, advisers and pension funds- must provide disclosures publicly on their websites explaining sustainability risk integration, ESG characteristics or objectives pursued and the associated metrics to prove them, in a language "concise, clear and fair." The market participants must report on the percentage their activity has a part in greenhouse-gas emissions, energy efficiency, biodiversity impacts, gender pay gap, and exposure to controversial weapons. Standardized presentation tables aim to increase comparability and to help data users assess and aggregate information across portfolios and providers (Regulation (EU) 2019/2088).

The SFDR does not itself define "environmentally sustainable." However, it cross-references the EU Taxonomy Regulation for that definition. From January 1st, 2023, Article 8 and 9 products must disclose the proportion of investments aligned with the Taxonomy's technical-screening criteria (Regulation (EU) 2019/2088). This ensures coherence across the EU's sustainable-finance rules and allows investors to see at a glance how much of a portfolio contributes to taxonomy environmental objectives.

## 3.4. Corporate Sustainability Reporting Directive (CSRD)

The Corporate Sustainability Reporting Directive (CSRD) was adopted in 2022. It is reaffirmed the connection between corporate transparency and the EU Taxonomy. The CSRD replaced the Non-Financial Reporting Directive (NFRD) and expanded the margin of corporations that are obliged to disclose sustainability information. Those include around 50,000 companies throughout the EU, large private corporations and small or medium companies (Directive (EU) 2022/2464).

Firms must report how much of what they do is actually environmentally sustainable. This encompasses the turnover and expenditure associated with Taxonomy-aligned and Taxonomy-covered activities (Directive (EU) 2022/2464). Companies are expected to report both on how sustainability impacts their operations and how their investment impacts individuals and the environment (Directive (EU) 2022/2464, Art. 19a (1) to Dir. 2013/34/EU). This

dual focus supports the objective of the Taxonomy Regulation in directing capital toward truly sustainable economic activities.

## 3.5. EU Green Bond Standard

The EU Green Bond Standard (EU GBS), adopted in 2023, is a non–mandatory framework aiming to find the assets needed to finance environmentally sustainable investments and direct that capital towards projects that are consistent with the EU Taxonomy (European Commission, n.d).

The EU GBS is fundamentally aligned with the EU Taxonomy Regulation. To qualify under the standard, a bond's proceeds must be solely directed towards economic activities that adhere to the technical screening criteria and the minimum safeguards of the taxonomy as well as substantially advance one of the environmental objectives outlined in the Taxonomy, without causing substantial harm to one or all of them (European Commission, n.d., Marcos & Castrillo, 2021).

The strong connection guarantees that green bonds issued under the EU GBS maintain a high standard of environmental integrity, effectively addressing issues related to greenwashing, mislabeling and transparency. The green bond standard required reporting and external verification obligations (Flammer, 2021). The pattern of requiring reporting is visible in every sustainable finance instrument. Before issuing the bond, issuers are required to publish a factsheet with sustainability-aligned data, and after the issuance, they publish annual allocation reports to maintain transparency for investors. The EU GBS enhances the Taxonomy by implementing it in capital bond markets.

This helps investors understand which bonds are in line with the green transition and which are not. This leaves no room for doubt for how the bond will be invested and inspires the trust of the investors (Točelovska & Meinerte, 2025).

## 3.6. EU Ecolabel

The EU Ecolabel is one of the European Union’s oldest – since 1992 - and most widely recognized environmental initiatives – resembling a green flower. It literally places an identifying label on services and products that satisfy elevated environmental requirements throughout the life of the product (European Commission, n.d.).

Although the Ecolabel and the Taxonomy focus on different areas, they still work together under the sustainability umbrella. Both aim to prevent greenwashing. The Ecolabel’s rules on energy efficiency, resource use and pollution control match the TSC of the taxonomy. This helps the EU’s sustainability policies work better together. It ensures that comparable criteria apply across areas such as

energy production and emission thresholds, whether the focus is on sustainable investment projects or on products that carry the eco-label (Cantillo et al., 2020) In simple terms, it ensures that everything that the EU sells or invests in, from financial investments to beauty products, follow the same sustainability standards, sending a unified message on what 'sustainable' means inside Europe.

The EU Ecolabel redirects consumers to the environmentally friendly option and ensures its environmentally protective products stand out when they shop. This raises public interest in adopting more sustainable behaviors. The EU Taxonomy and the EU Ecolabel together create a framework that supports sustainability in investment, production, and consumption (Cirrincione et al., 2020).

### 3.7. Conclusion

These initiatives are all designed to work in tandem with the EU Taxonomy to create a comprehensive, all-encompassing policy framework. The Taxonomy sets sustainability standards while the CSRD ensures that companies disclose sustainability data. The SFDR plays a significant role by ensuring that market actors disclose their integration level and actions on being sustainable. The EU Green Bond Standard raises the funds while customers and retail investors are protected through the Ecolabel. This is the European ESG system to bring new concepts of low emissions, environmental consideration and accelerated sustainable growth into the fold of the union's operations. These tools harmonize sustainability standards, improve data reliability, protect consumers, and guide capital flow - all in support of the EU's climate goals.

## 4. Political Dynamics and Stakeholder Influence in the EU Taxonomy

### 4.1. Introduction

It has already been established in this thesis that the EU Taxonomy for Sustainable Investments is a fundamental element of the EU's 'financing sustainability' action plan (Regulation (EU) 2020/852). It would be wrong to categorize the Taxonomy as a mere technical classification tool – it is also a politically embedded tool that influences and is influenced by various economic and political actors. The taxonomy functions as a market oversight mechanism by establishing a standardized language to be used by all to define the "sustainability" in economic activities. Beneath this objective language and classification system exists a complex political economy of competing stakeholders, institutional interests, power dynamics and negotiations (Gortsos, Kyriazis, 2024).

This chapter analyzes how and why political dynamics and stakeholder influences shaped the taxonomy to its current form, with a high probability of continuing to do so in the future. Since the taxonomy is a way to control the flow of money, it is natural that many actors are involved.

The inherent character of the taxonomy makes it a focal point for political interest and lobbying. As a result, its TSCs are subject to debate and always contested, depending on which side the attack is from and what is to be gained, as well as the different opinions of what sustainability should mean in practice. The inclusion of a traditional energy source and a controversial one in the Taxonomy raised the political stakes. It was a decision vehemently supported by the energy sector and Member States who have a special interest in keeping these fuels in the sustainable investment category and strongly fought by environmental organizations (Laidlaw, 2022)

## 4.2. Stakeholders Impacted by and Shaping the EU Taxonomy Framework

### 4.2.1. EU Institutions

The **European Commission** is the primary architect of the Taxonomy with the help of the **DG FISMA,** an advisory body which the Commission created to contribute to the Union's policy on financial services with a consideration of sustainable development. DG FISMA is in charge of monitoring the Taxonomy and ensuring it is usable (European Commission, 2024). The Commission aims to support the Green Deal's ambitious environmental goals with legal binding power while maintaining the EU's market competitiveness.

The **European Parliament** reviews and amends the Commission's proposals-including the Taxonomy from its inception to implementation - negotiates changes and is explicitly influenced by the Parliament's Members individual interests. The Parliament holds budgetary powers and legislative authority, whose legislation process has often been hindered by political negotiations and divisions among MEPs rooted in ideological differences and national interests (European Parliament, n.d.). The Parliament was instrumental in the addition of gas and nuclear energy in the Taxonomy to fuel new investments. When the Commission proposed the inclusion, 278 MEPs supported the proposal while 328 opposed it and 33 abstained. Since the majority is required to veto the Commission's draft, the proposal ultimately stood (European Parliament, 2022).

The **European Central Bank** (ECB) is not directly involved in legislative processes. However, it has published a guide on climate-related and environmental risks for financial institutions. It finds the integration of sustainability into monetary policy and financial supervision to be essential as it

will help keep prices and banks stable. The ECB seeks to enhance financial stability in relation to climate risks through the endorsement of taxonomy-aligned disclosure and risk assessment (European Central Bank, n.d.). Nevertheless, public communication on their official website remains understated when browsing, indicating that the integration of sustainability into central banking is still evolving.

The **Joint Research Centre (JRC)** has supplied scientific and technical expertise to support the Taxonomy framework by ensuring that its technical criteria are grounded in scientific evidence and are in line with the green transition. In 2021, after being tasked by the Commission to do so, the JRC conducted a technical assessment of the use of nuclear energy as a power source and its waste management procedures in light of the 'DNSH' principle. The report was affirmative to the addition of nuclear energy in the Taxonomy (Konings et al, 2021).

In contrast, **the Technical Expert Group on Sustainable Finance (TEG),** another advisory forum that was set up to assist in designing the Taxonomy, the EU Benchmarks, the Green Bond, and CSRD (European Commission. (n.d.) did not reach a definitive conclusion on whether nuclear energy met sustainability requirements. It simply noted the need for further consideration and evaluation of the DNSH aspect associated with nuclear energy. This is why the Commission resorted to asking the Joint Research Centre to conduct their assessment (Konings et al, 2021).

### 4.2.2. Member States

EU member states have a large hand in shaping EU law and, by default, in shaping the EU Taxonomy. In this case, they were divided. Their separate national energy strategies, industrial sectors, and political priorities led to significant disagreements - particularly around the identification of natural gas and nuclear power as transitional energy sources. Energy dependency, energy security and energy fuel preference are vastly different from Member State to Member State. Some were concerned about the taxonomy being incorporated in their national energy strategies. Some feared the TSC could disadvantage their energy industries and potentially impact their trade transactions. Some were pro-nuclear power, and some were pro-gas (Egres & Sarlós, 2023).

Member states influence the taxonomy through the Council of the EU, where decisions are most often indicative of the Member States' preferences. After the Parliament voted not to object to the integration of natural gas and nuclear power, the decision was in their hands (European Parliament, 2022). Through negotiating and alliance-building with states that shared the same energy interests, they eventually agreed to classify them as sustainable. Thus, the Complementary Delegated Act was adopted.

### 4.2.3. Financial Sector

The financial sector includes banks, asset managers, institutional investors, and credit rating agencies. Those are both affected and influential over the taxonomy and face disclosure obligations under the SFDR and the CSRD. European banks and financial institutions, which manage substantial portfolios of SME lending and household mortgages, seek to categorize these products as 'green,' thereby making them eligible for sustainable investment flows (Sautner, 2022).

A non-mandatory classification system was promoted by associations like the European Fund and Asset Management Association (EFAMA) as well as the Association for Financial Markets in Europe (AFME). These organizations have employed lobbying to shape the Taxonomy's scope and metrics (InfluenceMap, 2019). EFAMA (2021) underlined several challenges created because of the Taxonomy. These include the tight timelines, the data costs, and the assets not covered by the taxonomy. The organization suggested periodic reporting and templates for products pursuing social objectives, which are also part of the Taxonomy. These associations get privileged access to regulatory discussions because of their active role in capital markets.

### 4.2.4. Industry and Corporations

Corporations in sectors such as energy, manufacturing, transport, and agriculture face major challenges due to the Taxonomy. It affects their access to green finance and loans, shapes their perception of them to their investors, and ruins their reputation with the general public and their customers, who nowadays view sustainability as an important characteristic of the products and services they invest in. Firms must assess and disclose the percentage of their turnover and expenses that is taxonomy aligned. This often comes with a high administrative cost (Baser, Saleh, Abdullah, 2022), (Regulation (EU) 2019/2088). Disclosure obligations impact both their corporate strategies and how investors perceive them.

Several oil and gas sector groups and industry associations have coordinated to influence technical screening criteria that would label their products as green. Some examples among them are Eurogas, GasNaturally, the International Association of Oil and Gas Producers and FuelsEurope. Most advocated heavily for the addition of natural gas and nuclear power to the Taxonomy and asked for lenient thresholds (Midttun et al, 2022). It is almost redundant to note that these organizations asking for leniency do not have 'green' investments in mind.

### 4.2.5. Environmental NGOs

Environmental NGOs, including Greenpeace, WWF, and the Climate Action Network (CAN), have vehemently opposed the adoption of gas and nuclear. In contrast to the oil and gas sectors, they have advocated strict, science-based criteria. Public campaigns and legal action have been carried out. They argue that the Complementary Delegated Act violates the EU's climate commitments (Egres & Sarlós, 2023). Even though these organizations do not have a direct role in lawmaking, they influence how people think and talk about the environment and the connected policy decisions. Since their perspectives on the Union's decisions can shape public views, EU officials certainly feel or at least should feel the pressure to back their legislation with solid scientific evidence.

Greenpeace characterized the initial 2020 Taxonomy Regulation as a significant opportunity to align Europe with a Paris-compatible trajectory and pointed out all the delegated acts that came after it drive the taxonomy in the opposite direction. It named the addition of natural gas and nuclear energy "institutional greenwashing," stating that this development would actually redirect capital away from truly renewable sources of energy. Greenpeace along with ClientEarth, initiated legal proceedings at the Court of Justice of the EU, arguing that categorizing gas and nuclear energy as "sustainable" bypassed the DNSH provision of the Taxonomy (Greenpeace European Unit, 2022).

WWF argued that emissions thresholds for gas were excessively lenient and that nuclear power presents waste management issues that are still unresolved. WWF initiated consumer-oriented campaigns, such as the "No gas in green Taxonomy" social media initiative. The campaigns urged investors to refrain from promoting nuclear- or gas-heavy portfolios as "environmentally sustainable," despite the allowances of the Taxonomy (WWF, 2021)

These NGOs intensely fought to control the narrative on the EU Taxonomy The outcome constitutes an ongoing assessment on how legitimate the Taxonomy really is. However, the adoption of the CDA reveals their lack of power to influence formal institutions that make the decisions. On the other side, recent surveys based on the preferences of asset managers reveal a reluctance to promote gas or nuclear products as ESG, indicating that pressure from NGOs still has some impact. Greenpeace, WWF, and same field NGOs can potentially counterbalance industry and specific member-state lobbies, ensuring the Taxonomy's long-term credibility and its scientific foundations remain subject to ongoing public evaluation.

### 4.2.6. Technical Experts and Science-Based Bodies

The Platform on Sustainable Finance and the academics and experts of the Intergovernmental Panel on Climate Change (IPCC) hold the primary role in

defining the technical criteria of the taxonomy. This network of experts makes the taxonomy scientifically credible.

However, their input has not always carried the final word in the shaping of the taxonomy's conditions and thresholds. Political compromises have sometimes overridden their recommendations, revealing the gap between political negotiations and scientific grounding. Some would argue that this is what happened with the Joint Research Centre's (JRC) affirmative report on the DNSH principle of nuclear power and natural gas (Konings et al, 2021), the scientific grounding of the experts was not enough to overrule the Commission's decision.

Lots of international scientific groups support nuclear power's role in climate change mitigation. Some of these are the IEA, IAEA, and IPCC, all of which play a role in shaping global energy strategies. The IPCC and the IAEA jointly created INPRO, a model for assessing the sustainability potential of nuclear energy (Elsner, 2024). The Technical Expert Group on Sustainable Finance recognized that nuclear is an energy source with reduced carbon emissions. This view aligns with the approaches of international organizations mentioned above, such as the Organization for Economic Cooperation and Development (OECD) and the UN Economic Commission for Europe. Both consider carbon emissions produced by nuclear power plants to be on the same level or even lower than those generated from renewable energy (OECD, 2019). These high-profile groups with high-level scientists in their cast of contributors provide legitimacy to the Complementary Delegated Act and, by association, to the Commission's decision to expand the scope of sustainable investments.

### 4.2.7. General Public

While the general public is not involved in the policymaking process, citizens are directly affected. The taxonomy influences which products are marketed as environmentally conscious. Citizens can shape the taxonomy indirectly by voting or supporting environmental movements. This dynamic influences the choices consumers make and their trust in green finance. Public awareness is growing through the work of environmental organizations. Controversies around greenwashing and the 'green' investments in gas and nuclear power have gained media attention.

In regard to nuclear power, it is safe to point out that the general public still views nuclear power as a threat and its overall perception of the Taxonomy is laced with distrust and skepticism (Norang et al., 2023). The idea that it could serve as a climate change mitigation fuel has not been widely accepted by EU citizens in part due to media coverage (Vossen, 2020) and nuclear disasters like Fukushima or Chernobyl but also due to concerns on greenwashing and the possible exploitation of the Taxonomy for corporations to become richer and no more sustainable.

After a research survey was conducted in four EU countries with the leading energy production capacity - Germany, France, Norway, and the UK - it was revealed that the citizens' disapproval over nuclear energy is expected to remain predominantly negative. (Sonnberger et al., 2021). This disapproval directly influences their view of the Taxonomy. Public opinion on nuclear power, the taxonomy and even sustainability is still evolving. Transparency and more communication strategies are necessary to educate the EU citizens on issues that inherently affect them, even if they do not yet know it (Tonnarello et al., 2025).

### 4.2.8. Summary: Power and Interest Alignment

The EU taxonomy framework is a contested political arena where stakeholders interact for their own gain, whether that is economic, political or environmental. As illustrated from Table 1, there are varying degrees of power and interest between these actors that determine their overall contribution to the Taxonomy's evolution. The European Commission and Member States occupy naturally dominant positions as they shape the framework's legal and political direction. The Financial Sector and Industry Actors exert their influence at an economic level which is an inherent factor in ensuring the Taxonomy's success. Comparatively, environmental NGOs and technical experts hold mainly advocacy roles with high interest levels on environmental protection, though their influence remains at a low level. The general public, most affected by the policies implemented by its leaders, remains the least influential stakeholder group. Below is a visual representation of interest and influence levels of various stakeholders.

**Levels of Stakeholders' Interest and Influence on the EU Taxonomy**

| Stakeholder Group | Interest in Taxonomy | Influence Level |
|---|---|---|
| **European Commission** | High | High |
| **Member States** | High | High |
| **Financial Sector** | High | High |
| **Industry** | Medium to High | Medium to High |
| **Environmental NGOs** | High | Low |
| **Technical Experts** | High | Medium to Low |
| **General Public** | Low | Low |

*Table 1, Ownership of the Author*

There are different relationships formed across these groups. A pro-taxonomy side - without natural gas and nuclear power - including environmental NGOs, progressive investors, and climate-focused EU officials, advocates for science-

based implementation and a far more traditional block - including certain member states, heavy industry, and conservative financial actors.

The stakeholder landscape surrounding the EU Taxonomy demonstrates that sustainable finance in Europe is and will continue to be a political struggle. All these stakeholders have competing interests and hidden power dynamics between them. The political economy dimension of the Taxonomy, where geopolitical interests influence legislation, is clearly visible here.

In this sense, the EU taxonomy reflects a wider problem: the struggle to decide what a truly sustainable economy will look like and to confront how challenging it will be to even fulfill half the environmental and sustainability commitments that have been made by the EU. The following chapter explores the political negotiations that led to the Complementary Climate Delegated Act (CDA) in 2022. This Act classifies the above-mentioned energy sources as sustainable.

## 4.3. The Inclusion of Natural Gas and Nuclear Power in Sustainable Investments

The debate over whether natural gas and nuclear power should have been incorporated in the Taxonomy for Sustainable Investments has been one of the most politically sensitive cases in the entire green finance market. Labeling them as sustainable revealed the limits of scientific input in EU policymaking.

National energy strategies, economic dependencies, and institutional power within the EU were the key factors in altering the taxonomy. It is safe to state that the inclusion resulted from political negotiations and compromises among EU member states, who were conscious of their energy security interests, with the added motive of the Russian invasion of Ukraine (Elsner, 2024).

Natural gas and nuclear energy are seen by some as transitional tools essential for decarbonization, and by others as environmentally unacceptable. Their addition to the Taxonomy transformed it into a competition for Europe's energy future. EU Member States were divided. Some states were Pro-Nuclear Inclusion, some were Pro-Gas Inclusion, some supported both, and some neither (Truhchev, 2022).

### 4.3.1. Pro-Nuclear Inclusion Arguments

Nuclear energy is fuel that has almost zero carbon dioxide emissions. The IPCC (2022) considers it to be a good solution to decarbonize the economy, complementary to the renewables. Nuclear power can help the phase-out of coal and offer a reliable energy source for domestic use, that burns fossil fuels excessively (Simon, 2021).

While energy sources like wind and solar depend on unpredictable weather conditions, nuclear power can provide electricity continuously. This means that retaining nuclear energy in the transition's energy mix will make the phase out from fossil fuels more stable (Abousahl et al, 2021). Another one of nuclear power's advantages is that much of the infrastructure already exists. Many EU member states already have nuclear power plants with trained personnel. These circumstances make nuclear expansion more logical in the short term (Abousahl et al, 2021).

Research from European Commission's JRC (Joint Research Centre) supports the above positions. JRC claims that nuclear energy poses no greater environmental or health harm to people or the environment than other sustainable technologies (Abousahl et al, 2021).

### 4.3.2. Pro-Gas Inclusion Arguments

Natural gas can be the bridge fuel that will ease the transition toward renewable energy. When burned, gas emits approximately half the carbon dioxide of coal. This is why it is thought to be a necessary interim solution to transition out of coal (European Commission, 2022). It has lots of similarities to the fuel that supported the Industrial Revolution but is not as environmentally destructive. The infrastructure is already in place without the added cost of new facilities. Pipelines, storage facilities, and functional distribution networks run smoothly without the immediate expense of building new ones.

The taxonomy only includes gas plants that meet low $CO_2$ emission thresholds. Even so, it expects them to transition to low-emitting alternatives by 2035 (European Commission, 2022). Supporters also underline the gas's role in supporting energy security. It will guarantee the existence of a stable and affordable energy source during the transition and not leave the EU nations vulnerable to external sources (Truhchev, 2022).

### 4.3.3. Anti-Nuclear Inclusion Arguments

Opponents argue that including nuclear power undermines the 'Do No Harm' principle. The unresolved environmental harm that was produced by nuclear waste management and nuclear accidents in general cannot be foregone (Platform on Sustainable Finance, 2022). The handling and storage of radioactive waste are still long-term safety hazards. The EU has yet to find a permanent solution to dispose of them. Nuclear disasters such as Chernobyl and Fukushima only fuel the public's opposition to nuclear energy (Vossen,2020).

In addition, countries such as Germany, Austria, and Luxembourg have openly opposed nuclear inclusion and even filed legal action against this decision (Elsner, 2024). This controversy also raised concerns about the credibility of the

Taxonomy, if its goal really is 'sustainable investment'. Environmental organizations such as WWF and Greenpeace argue that labeling nuclear power as "sustainable" undermines the taxonomy's scientific integrity and its perception (Greenpeace, 2022).

### 4.3.4. Anti-Gas Inclusion Arguments

Critics of natural gas have a number of concerns. They point out that continued fossil fuel dependence slows the progress towards decarbonization. It does not allow focus on alternative sources of energy because the energy supply is a given. Aside from its climate toll, environmental groups warn that labeling gas as sustainable is in fact greenwashing. This jeopardizes the Taxonomy's credibility and misleads investors about its true environmental value (World Wildlife Fund, 2021).

Meanwhile, gas continues to add to the climate change toll through $CO_2$ emissions without a plan to phase out of it (Platform on Sustainable Finance, 2022). Many opponents claim that gas violates the DNSH principle. Its environmental and climate impacts as well as the new long-term infrastructure plans lock in future emissions (Greenpeace, 2022). Finally, the issue of geopolitical vulnerability has become increasingly relevant. Recent events, particularly the war in Ukraine, exposed the EU's reliance and vulnerability because of imported gas. Ultimately, depending on natural gas might not be as safe as gas supporters think it is, and the EU might find itself without a viable alternative at the last minute (Elsner, 2024).

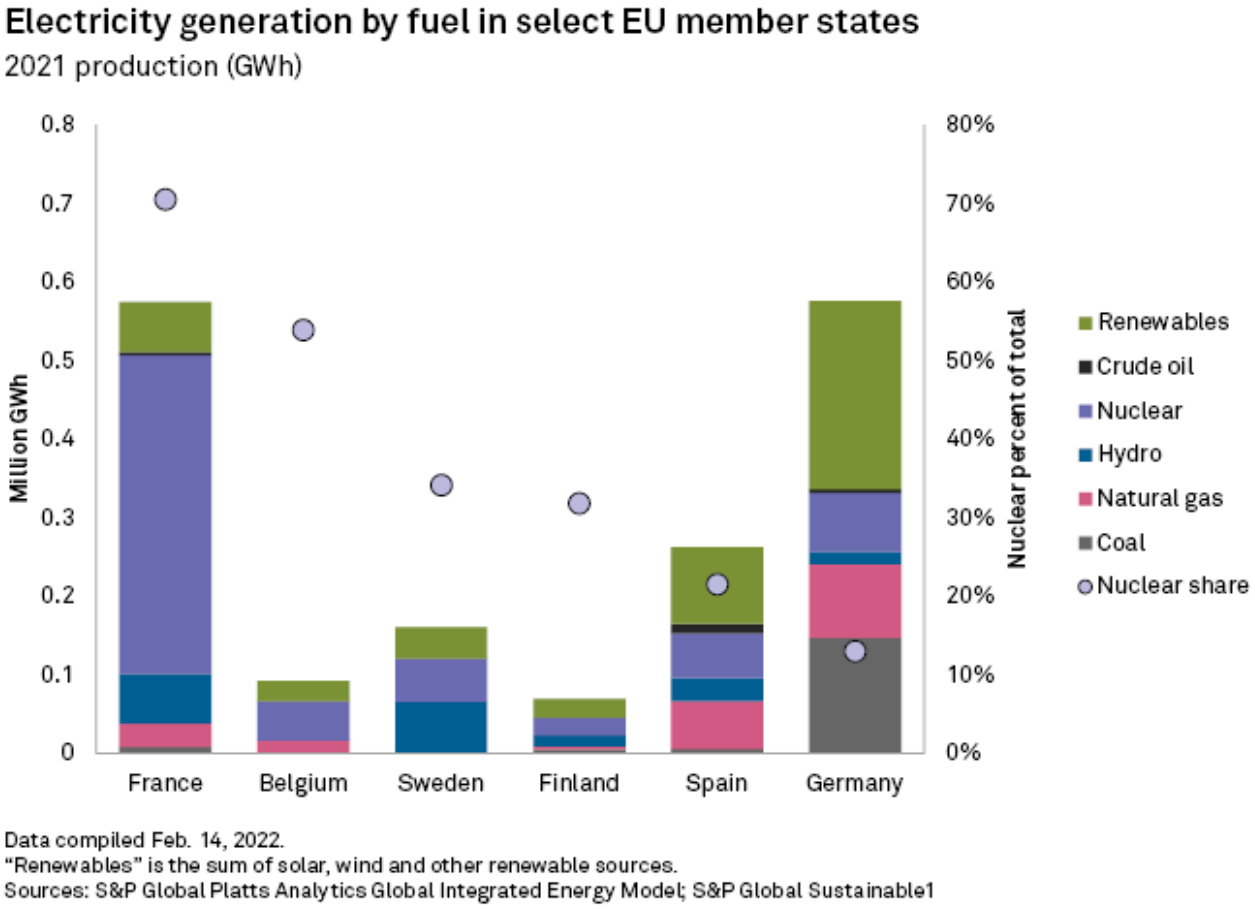
### 4.3.5. Political Negotiations on the Inclusion of Natural Gas and Nuclear Power

In the preliminary stages of drafting the Complementary Delegated Act, regarding the addition of more traditional energy sources to the mix of the Taxonomy, the most vocal Member States were France and Germany. France depends on nuclear power for over 60% of its electricity and has a quantifiable interest in nuclear inclusion in the Taxonomy (International Energy Agency, 2022). The French base their nuclear preference on the fact that nuclear power emits the lowest percentage of carbon emissions, thus not adding to climate change and the carbon footprint.

Bulgaria, the Czech Republic, Hungary, Slovakia, Romania, Slovenia, Croatia, Finland and Poland collectively backed France's preference, all arguing that decarbonizing Europe necessitates the transition out of carbon-heavy economic activities and nuclear power is one of them. This group of countries published a joint opinion piece arguing that nuclear must be considered in the climate crisis (Simon, 2021).

Central & Eastern Europe Member States are still heavily reliant on coal energy, the highest carbon-emitting resource fuel, and saw an opportunity in nuclear power that will help them transition from one source to another, effectively achieving decarbonization, but with security that renewables cannot provide at the moment. According to researchers Kratochvíl and Mišík (2020), the Czech Republic and Poland are countries with great confidence in the supply and reliability of nuclear power, a notion supported by their citizens, which use it domestically.

As illustrated in Figure 1 taken from S&P Global' s, the diverse ways that EU Member States generate electricity highlight the structural energy differences that are the foundation on which their political positions are built on. France's reliance on nuclear power heavily contrasts with Germany's gas-centered energy mix and both reflect the reasons why they assumed opposing stances at the beginning of this debate. These variations in national energy structures provide insight into Member States' alliances or lack thereof when national interests demand it.




*(S&P GLOBAL, 2022)*

*Figure 1*

Germany's reaction to the European Commission's plan to add nuclear and gas in the Taxonomy's portfolio was negative to the first and positive for the latter. Under Angela Merkel's rule, Germany closed a substantial number of its nuclear power plants, attempting to distance itself from nuclear power. Merkel also opposed the characterization of nuclear power as sustainable and pushed for nuclear power abdication throughout her tenure (Rinke, 2021) (Hernández, (2022).

Germany, along with EU Member States Austria, Luxembourg, Denmark, and Spain, criticized the inclusion of nuclear power through their environmental officials, dismissing it as a high-risk energy fuel and harmful to the Taxonomy's credibility (Elsner, 2024). Their argument was that if these fuels are included, then investors will continue to finance projects in those energy industries and not in renewables like wind or solar, which was the goal in the beginning. They were not wrong. Austria and Luxembourg took it further, threatening to file a lawsuit to the European Court of Justice against the insertion of nuclear power in the Taxonomy (Elsner, 2024). After it was decided for both fuels to be included, Austria actually filed it (IPE, 2022)

Another interesting argument, spoken from a Green German party Member at the time of great polarization over the inclusion of nuclear power and gas was that the exclusion of them would still not stop any Member State or industry to use these fuels in their economic activities, nor would it weaken their financing. These investments could still take place, so why do we need to call them sustainable to take part in them? (Elsner, 2024). Despite the pushback of the green party in Germany, the country's nuclear phase-out combined with the underdeveloped renewables sector left Germany searching of an energy resource to fulfill its energy needs. Germany picked natural gas to mitigate its energy security risk (ISPI, 2022).

The last deciding factor in the Commission's resolution to extend the Taxonomy to gas and nuclear was the new war between Ukraine and Russia. Considering the great dependency that the EU has on Russia's energy and in the midst of Europe's attempt to redirect its energy mix towards renewable solutions, the war changed the geopolitical and energy battleground. Nuclear power seemed like a necessity to EU leaders to protect their energy security, and along with its low-carbon nature, nuclear power was added to the EU Taxonomy (Elsner, 2024).

Between Germany and France, two of the most powerful Member States of the European Union, announcing their preference for natural gas and nuclear power accordingly, a political compromise emerged: gas inclusion would keep Germany invested and secure, while nuclear appeased France and its allies Despite vocal resistance and threats of legal action from Austria, Luxembourg, and others, the Act was formally adopted in May 2022 (Hernández, 2022).

The parliamentary vote in July 2022, in which the majority voted in favor of inclusion, and the Council vote (European Parliament, 2022) underscored how deeply national energy interests influenced the final legislation. The Member States ignored the report on nuclear energy and gas that listed concerns on potential harm from these fuels (Platform of Sustainable Finance, 2022). This fact adds to the claims that the taxonomy is heavily influenced by EU energy interests. The EU's problem is balancing its climate commitments with the energy preferences of its Member States.

Nuclear power and natural gas are compared in Table 2 on a political, economic and scientific level. EU Member States support or oppose natural gas and nuclear energy according to their national priorities. These contrasts reveal how different energy interests make it difficult to reach a mutual decision on what is sustainable within the EU framework. The conflicting positions listed below led to the 2nd Delegated Act.

**Energy Fuels in the EU: Nuclear vs Gas**

| Aspect | Nuclear Power | Natural Gas |
|---|---|---|
| **Main Argument In Favor** | Low carbon emissions | Transitional fuel that enables a faster exit from coal.<br>Provides energy stability |
| **Supporting EU Member States** | France, Slovenia Finland, Czech Republic, Romania Slovakia, Bulgaria, Hungary | Germany, Poland, Italy, Greece, Czech Republic, Hungary, Romania |
| **Opposing EU Member States** | Germany, Austria, Luxembourg, Portugal, Denmark | Austria, Luxembourg, Sweden, Netherlands (undecided) |
| **Scientific Backing** | Recognized by the IPCC as a low carbon fuel | Lower emissions than coal |
| **Main Criticism** | Long- term radioactive waste, has caused great disasters (e.g., Chernobyl, Fukushima) | Fossil fuel that emits $CO_2$, continues carbon dependence |

| | | |
|---|---|---|
| **Lifecycle Emissions** | Extremely low $CO_2$ but only in operation | High carbon emissions throughout |
| **Economic Considerations** | High initial costs | Lower initial costs but rising gas prices and volatility of gas supply |
| **Do No Significant Harm (DNSH)** | Undecided: unresolved waste management and DNSH principle | Fails DNSH unless strict emissions thresholds and transition plans are applied |
| **Geopolitical Risk** | dependency on non-EU suppliers | Increases reliance on imported gas (Russia, Algeria, U.S.). energy security risk |
| **Support on the Green Deal** | Divisive: some argue it supports decarbonization, others say it violates clean energy principles | Generally seen as incompatible with long-term climate neutrality goals |
| **Public Perception** | Highly controversial: supported in some countries, opposed in others due to safety concerns | criticized by environmental groups and climate advocates but also seen as a necessary choice |

*Table 2, Ownership of the Author*

## 4.4. Greenwashing and the Role of the EU Taxonomy

One of the reasons Europe created this system that classifies sustainable activities was to end greenwashing. Greenwashing refers to the practice of misrepresenting products and operations as environmentally sustainable when they are not. It is a malpractice of the private sector that has grown rapidly over the last few years when sustainability discussions increased in the market.

This deceptive marketing technique has spread largely because there were no clear standards for what counts as a sustainable investment in the market. The EU Taxonomy addresses this gap by standardizing the criteria for sustainability. It has created metrics based on science and required companies and market participants to disclose their sustainability results before they can market their activities as 'green' (Ma et al, 2024).

However, the idea that the Taxonomy opposes greenwashing was weakened by the incorporation of nuclear energy and natural gas. It raised concerns, especially from environmental organizations, on the Taxonomy's vulnerability to influences from powerful corporate lobbies and EU Member States.

Unfortunately, transitioning to a more sustainable era of operations has been accompanied by greenwashing at every turn, with companies misrepresenting or falsely amplifying the environmental protection provisions of their procedures and their environmental, sustainable, and social governance strategies. Greenwashing significantly undermines the credibility of actual sustainable finance projects, making it seem like a laughable or impossible alternative. It diminishes investor confidence and skews capital allocation by redirecting funds from truly sustainable projects to those that only superficially resemble them (Delmas & Burbano, 2011).

Many claim that this tactic has also been the case with Taxonomy and this notion is gaining momentum. The Taxonomy, under the circumstances discussed in the previous section, categorized as sustainable investments those that involve nuclear power, which has caused great environmental destruction, and natural gas, which is widely known as a fossil fuel with serious carbon emissions. In a European Union that is trying to decarbonize and be the first continent to reach full decarbonization by 2050, this decision does not seem on par with the endorsement. In general, the thresholds of the TSC are too low and are called out for being inefficient for change to happen (Schütze et al, 2020).

On the other side, those that support the Taxonomy claim that it is the best tool to combat greenwashing, as it was designed to actually uncover those unethical misrepresenting strategies by setting strict criteria for accountability and transparency. The TSC makes it impossible for covered activities not to enhance one of the climate or environmental goals and significantly impair others (Regulation (EU) 2020/852, 2020, Art. 3).

By setting science-based thresholds that were discussed previously, the Taxonomy rules out the impostors, eliminates ambiguity, and reduces the risk of misleading environmental claims (European Commission, 2021). Furthermore, the Climate Delegated Act and Environmental Delegated Act translate these thresholds into legally binding requirements, reinforcing transparency and comparability across industries (European Commission, 2023). In the Frequently Asked Questions published about the Complementary Delegated Act, which

introduced nuclear power and natural gas in the taxonomy, it is stated clearly that the goal of the EU Taxonomy and the rationale it was created on is to mitigate the risk of greenwashing and support investors in assessing if the economic activities are aligned with the environmental objectives. However, the EU needs to secure dependable sources to accelerate its transition to climate neutrality (European Commission, 2022).

The disclosure obligations are another way to stop greenwashing. Large companies and financial market participants cannot endorse on their websites how sustainable and environmentally friendly they are without offering real data to prove these claims. They are required to report the proportion of their turnover that aligns with the Taxonomy's principles (European Commission, 2022). Greater transparency in has made it harder for businesses that want to appear "green" without convincing proof to back up their claims.

Even so, greenwashing continues to be relevant. Critics point out that updating the Taxonomy constantly blurs what is sustainable and what is not. The insertion of controversial fuels such as nuclear energy and natural gas under certain conditions only strengthened this claim. As a result, the confusion over sustainability opens a new way for potential greenwashing (Schütze et al, 2020). In this regard, platform-based expert review is the defining factor to maintaining the integrity of the Taxonomy.

The European Commission has also designed a few helpful online tools, such as the EU Taxonomy Compass and the Taxonomy Navigator, which provide support, updates, and user-friendly accessibility to the TSC for users, companies and investors (European Commission, 2023).

The EU Taxonomy represents a major regulatory milestone in the fight against greenwashing. It is the foundation for a credible, transparent, and standardized system for sustainable finance in Europe. However, there is still room to close the gap between sustainable classification and greenwashing.

## 4.5. Conclusion

The integration of natural gas and nuclear power has been a very controversial issue that reflected the energy sector's inner conflicts and overpowering national interests. Germany supported natural gas (Elsner, 2024), whereas France, a proponent of nuclear energy, promoted its inclusion of it. (Truhchev, 2022). Ultimately, the Commission influenced by the war in Ukraine included both (Elsner, 2024). The fact that this was a compromise on what two of the most major and powerful EU Member States wanted cannot be ignored.

Public opinion on nuclear energy remains deeply divided. Supporters underline its low carbon emissions and potential contribution to climate change mitigation.

The latter remains one of the EU's primary priorities. On the contrary, critics cannot overlook radioactive waste and possible environmental destruction. This debate over the EU Taxonomy shows the difficulties of shaping policies for the energy sector. Different perspectives and evolving conditions that shift those perspectives are guaranteed in any energy and political matter (Egres & Sarlós, 2023). The fact remains that the taxonomy does not prevent investors from financing activities that are not sustainable.

# 5. Implementation Challenges and Policy Recommendations

## 5.1. Introduction

The Taxonomy's aim is to assist the European Union in transitioning its economic activities into a low-carbon regime. All the EU Member States, the financial institutions and the stakeholders analyzed previously are impacted by this shift. The Taxonomy's effectiveness ultimately depends on whether these actors are prepared to use and apply it to their operations. Even if they are willing to follow the Taxonomy's rule, they will face several challenges until they are successful. These challenges might be practical like the complex terminology of the framework, the screening criteria, the lack of infrastructure. However, they might also be nefarious like the actors that will use the Taxonomy to commit greenwashing or the Member States that will try to hinder its effectiveness on purpose.

From the day it came into action, the Taxonomy has been criticized over a number technical, operational, political, and economic issues. This chapter critically evaluates the primary implementation challenges faced by the Taxonomy and proposes policy recommendations to support it.

## 5.2. Implementation Challenges

### 5.2.1. Complexity of Technical Screening Criteria

The biggest hurdle in implementing this classification framework is the complex character of the TSC. The criteria have been set by the scientific groups working on the Taxonomy to sort out the eligible activities that do not effectively advance one of the environmental objectives and/or adversely undermine one or all of them. Most of them, across sectors and economic activities, exhibit a strong level of technicality. Small and medium-sized firms often find these criteria difficult to understand and apply to their daily operations. Regular updates to these criteria add a new layer of uncertainty and complexity. Many companies are

concerned that next year their economic activities will not comply with the TSC, even if they have not personally made any changes to their activities or facilities (Ostojic et al., 2024).

The extensive criteria involved and the more extensive field of activities across energy, manufacturing, transport and several other sectors make enforcement and universal applicability even more difficult and complex. To be labeled sustainable, companies need to be energy-efficient, with reduced emissions and environmental impact. Those energy goals are measured by strict performance standards, not by a mere expert evaluation. Collecting the 'sustainability' data, reporting by the book and planning suitable practices is not easy for everyone involved (European Commission, 2023).

The case of natural gas shows how complex this challenge can be as the rules that determine in which context it is sustainable remain unclear. The lack of clarity complicates decision-making for investors (European Commission, 2022). As a result, some investors may be discouraged and choose to allocate their funds to markets with less stringent regulations.

### 5.2.2. Limited Availability and Quality of Data

Companies must disclose which of their activities are covered by the taxonomy. However, many still lack the data infrastructure, the funds or even the internal systems to carry this task properly. This process is not easy for small companies that do not have large funds or knowledgeable staff (EFRAG, 2023). There are firms that operate across different countries with different environmental laws and reporting methods. Their challenge is even greater. When data methods are inconsistent, it is more difficult for companies to be compliant. Hence, the credibility of the entire is jeopardized (OECD, 2021).

### 5.2.3. Greenwashing and the Risk of Over-Compliance

The Taxonomy was created to prevent greenwashing by setting clear rules on what qualifies as a sustainable investment. Unfortunately, one of the primary problems with the Taxonomy's implementation is greenwashing. The framework has not been successful in eliminating the phenomenon. There is still high chance that companies will fabricate or exaggerate their disclosures without actually meeting the environmental requirements. Their wish to appear sustainable is because of the pressure they are under to attract investors in today's very competitive market (Pacces, 2021). It is also because they want to market themselves as "green" companies to gain customers and profit. Such false claims have the power to ultimately undermine the Taxonomy's foundational goal of directing financial flows toward genuinely sustainable activities and mislead investors in placing their money in a project that does not respect our environment (Zetzsche & Bodellini, 2024).

At the same time, businesses that want to follow the Taxonomy can become frustrated with this heavy reporting system and monitoring rules. In response, some might over comply or comply on paper without making meaningful contributions to the sustainability objectives (E3G, 2023).

### 5.2.4. Political Resistance and Divergent National Interests

As was previously discussed, the Taxonomy was transformed into a political issue from certain Member States and industry groups. Each nation operates according to its energy mix and geopolitical strategies. Naturally, there was much discussion and interest over the potential of adding natural gas or nuclear energy to the Taxonomy. These two energy sources are already supported by functioning infrastructure across the EU. Some countries consider them essential for EU energy security. Others argue that they compromise their long-term climate goals (European Parliament, 2023). Maintaining a uniform sustainable energy framework throughout the Union is challenging due to political disagreements.

Eastern and Central European States prefer nuclear energy due to its low-carbon emissions. They also note its independence from external suppliers within the EU (Simon, 2021) They do not need to import nuclear energy, they can produce it themselves. In contrast, Germany, Austria, and Luxembourg are against it because they are concerned over its dubious safety and potential hazards. Waste management and negative public opinion are also issues that these nations do not find easy to overcome. They even took legal action against its inclusion in the Complementary Delegated Act (European Commission, 2022a).

On the natural gas side, Germany chose to promote natural gas as a transitional fuel due to its extended domestic use and low affordability (Rinke, 2021). The political economy of energy in Europe is reflected in this debate. Member States tend to protect the energy fuels that are already part of their energy mix. This preserves their existing economic advantages and shields them from potential losses. They do not wish to find themselves dependent on another nation that will provide their energy to operate. In this context, political and economic profit is prioritized over long-term climate objectives.

The industries that mostly rely on fossil fuels dislike the Taxonomy for similar reasons. They are not prepared to handle the economic costs or the disruption of their operations in place. Many have asked to be exempt from it or given transitional periods to comply. Flexibility is reasonable in this massive transition but leniency might limit the Taxonomy’s capacity to boost the transition to sustainability.

## 5.3. Policy Recommendations

This thesis makes a number of suggestions to improve the effectiveness, credibility, and overall impact of the EU Taxonomy. Over the next years, the framework will continue to face the above-discussed challenges. That is why it is important for the European Commission to act and address these concerns with practical, technical, and political solutions. The following proposals involve reporting methods, taking, technical clarity in data and stakeholder engagement. Taking it one step further will be introducing penalties for non-compliance and financial incentives for successful compliance.

### 5.3.1. Simplify the Reporting Procedure

For small businesses that might not have the administration skills or the staff to follow the system, a good solution would be simpler reporting requirements. The European Commission should create a simple, straightforward reporting system and consider exempting smaller firms that cannot comply with the current reporting process and do not have a high involvement in carbon activities. According to Lucarelli et al. (2023), the instructions that will help companies navigate the criteria should be more straightforward and focused on minimizing unnecessary administrative work.

The CSRD already demands high administrative effort from companies. When it comes to small firms this workload should be relative to their size and their environmental impact (Ostojic et al, 2024). The EU could provide a tiered disclosure system, with simple performance indicators and less frequent reporting. This would reduce costs, maintain the necessary transparency element to the procedures and encourage overall participation.

### 5.3.2. Improve technical clarity of the TSC

For many businesses, the TSC and Delegated Acts of the Taxonomy are difficult to comprehend, which makes it impossible to implement them to their procedures. To ensure that the regulation is applied correctly, The European Commission should continuously provide guidance and examples. Fixing all the unclear, ambiguous parts of the regulation and then, once those problems are fixed, reducing the repetition of these changes will give stakeholders more stability when planning their activities. (Ostojic et al, 2024, Lucarelli et al., 2023; Schuetze & Stede, 2020).

### 5.3.3. Engage stakeholders and ensure inclusiveness

The European Commission can and should collaborate more closely with the rest of the EU Taxonomy stakeholders. That can be achieved through seminars,

roundtable talks, and consultations. Facilitating communication among regulators, businesses, NGOs, and the financial sector will ensure the Taxonomy is up to date with the market and the economy in general. It will support its effectiveness and adaptability to the challenges it faces (Lucarelli et al., 2020; Schuetze & Stede, 2020). Without cooperation and constructive dialogue from all, the Taxonomy cannot be successful. Energy-intensive industries and small to medium-sized enterprises may require extended periods for transition or are disproportionately impacted by the regulatory changes. The Union cannot support them if its advisory groups are not aware of their struggles (OECD, 2021).

### 5.3.4. Offer Financial and/or Tax Incentives to Comply with the EU Taxonomy

The adoption of sustainable practices can also be influenced by financial products. Loans offering an interest rate discount as long as the capital is employed for projects in alignment with the EU Taxonomy are a very attractive solution to investors. Bonds and mutual funds that consider ESG criteria when selecting companies or projects are also emerging in investment markets (Edenhofer et al., 2022). The EU will accelerate the shift to a climate–neutral future by linking financial incentives to sustainability objectives. Rewarding businesses that are taxonomy aligned with low-rate loans or even giving them tax discounts will increase the market's interest in sustainable investments.

On the other side, those that do not conform with the Taxonomy and commit greenwashing with no regard for the environment will not only lose the financial premiums but could also be charged environmental fines. Europe should legislate penalties for non-compliance to hold businesses accountable for their carbon activities and possible attempts at greenwashing (EFRAG, 2023).

### 5.3.5. Guarantee the Scientific Autonomy of Criteria

The technical screening criteria cannot be influenced by political influence of industry lobbying. On a larger scale, any additional fuels to the Taxonomy should be added if the scientific community does not unilaterally approve of them as sustainable fuels. For the Taxonomy to maintain its legitimacy, the EU must ensure its scientific independence and not be hindered by external tensions. This can happen by giving the Platform on Sustainable Finance and associated expert bodies their independent authority on the science. Their recommendations should be considered and not discarded when the political landscape calls for it. The Commission should be required to justify why it is deviating from expert recommendations. For example, when the Commission was preparing to add gas and nuclear power to the Taxonomy, the EU simply moved on to the next expert body for another opinion to back its decision, ignoring an important scientific report (Konings et al, 2021).

The incorporation of carbon emitting and previously environmentally destructive fuels introduced distrust on the scientific standards of the Taxonomy. Future decisions concerning sustainable finance in general should be based on impact assessments that evaluate emission levels and other impacts throughout the duration of an economic activity. It does not make sense to prefer "transitional fuels" that remain part of the problem the EU is trying to extinguish. Political motives must not override environmental rules without substantial reasons (Lucarelli et al., 2020; Zetzsche & Bodellini, 2024).

### 5.3.6. Incorporate Emerging Technologies

The Taxonomy should include new relevant activities, especially in sectors such as construction or transportation. These industries have a significant energy footprint and will help Europe's achieve its carbon-neutrality goals or be the reason it never succeeds. These additions should be rigorously evaluated and given clear boundaries (Tonnarello et al., 2025). New industries should be monitored to grow in an optimal way. The mistakes of the past should not be perpetuated in the practices of the future.

### 5.3.7. Harmonize the Taxonomy with International Standards

The Taxonomy's alignment with global sustainability standards will only make it more credible. The EU wants to be a leader in carbon neutrality but to achieve that it is necessary for its sustainable finance initiatives to maintain the same sustainable values and fuels as the global ones. The EU should work closely with global groups and initiatives that have expertise on sustainable growth, such as UN Sustainable Development Goals (SDGs) (OECD, 2021).

The Taxonomy must be compatible with other classification systems – such as those being developed by China, Canada, and the International Platform on Sustainable Finance (IPSF), in order to function withing international financial markets. Reducing market fragmentation and obtaining consistency will gather more green capital (Petersen, Herbert, & Daniels, 2022).

### 5.3.8. Conclusion

There is serious gap between the EU's climate commitments and the realities of the energy sector. The effectiveness of the Taxonomy is limited due to the complex technical criteria, the lack of available data and the possibility of greenwashing. The politically tense background only adds to these problems, which reflect the diversity of Europe's economies and the Member States' conflicting interests. If these issues are not addressed quickly, the Taxonomy's role as a compass for sustainable investment will lose credibility.

# 6. Conclusions

This thesis explored how the EU Taxonomy has been influenced by political and economic factors and accessed its capacity to direct financial resources towards sustainable, climate-friendly activities. It also considered how the Taxonomy fits inside the Union's governance system that aims to achieve its climate-neutrality goals. The political economy dimensions of the Taxonomy were also examined with particular focus on nuclear energy and natural gas that were later added to the system, along with the ramifications of these choices.

The findings of the study show that a variety of stakeholders have an impact on this regulation and influence its course. From the Union's side, there has been an attempt to move away from carbon dependence but with a hesitant preference for conventional energy resources. The Taxonomy is a major step towards changing how financial markets and investors see sustainability. It changes the current status quo on new investments and energy projects that previously never considered sustainability in the designing or structing process of their projects. It has improved transparency in investing and taken initiative against greenwashing. It has also sent a clear message to investors that the EU is serious about eliminating carbon and coal and asks for their participation in this effort.

However, the more recent updates of the Regulation do not align with the low carbon goals mentioned above. Environmental NGOs whose number one priority is to protect and preserve the environment and climate, strongly objected against the Complementary Delegated Act received serious backlash from environmental NGOs. The classification of nuclear energy and especially natural gas as sustainable placed the Taxonomy's scientific ground and environmental motives under doubt. How could the European Union name a carbon emitting fuel sustainable?

These decisions were intentional. After reviewing Europe's political and economic background and the events of the inclusions, it is safe to say that they influenced the Taxonomy on a very high level. The current state of the Taxonomy reflects the influence of powerful Member States that prioritize energy security above all else. They wish to maintain in their energy mix the fuels that will provide their countries with a stable energy output and in most cases, energy fuels that they have the infrastructure to produce. Similarly, the energy industry is eager to maintain its investments in oil, natural gas, and nuclear power and the profits they make from them without having to branch out to new unstable sources of energy that might not have the same return.

These circumstances show why it is nowadays difficult to protect the environment, even though we now have the means and the knowledge that we are actively destroying our world. We are aware that the next generations will

not be able to have the same lifestyle as we do and environmental refugees will only grow in numbers. Geopolitical concerns and energy dependence take precedence over all else and certainly outweigh climate objectives. Rather than directing funds toward carbon-neutral solutions and strictly sustainable practices, the Taxonomy has been compromised to reflect the energy mix and lobbying pressures of Member States and the Industry.

From a political economy perspective, the Taxonomy reflects the difficulties of creating a supranational sustainable finance framework. The stakeholders involved in an energy and economic matter of this caliber are multiple and diverse. National governments and corporate lobbies, non-governmental organizations and financial institutions have played a decisive role in expanding the scope of sustainability beyond renewable energy sources. More often than not, this happens at the expense of environmental priorities. The high economic gains and political dynamics behind energy matters underline the need for transparency and more effective oversight. This is to ensure that environmental standards are not weakened under political or economic pressures.

According to initial evidence, the addition of carbon-emitting, environmentally controversial energy sources to the Taxonomy has weakened its credibility and by default its effectiveness. It remains too early to judge the Taxonomy's long-term success in redirecting capital toward low-carbon activities. As the technical screening criteria continue to change and implementation timelines vary across sectors, its overall impact remains to be seen over the next two decades, leading up to 2050.

Greenwashing is still a relative concern. The Taxonomy is at a crossroads between supporting a real transition towards sustainable development and reinforcing the carbon dependence it was meant to overcome. The Taxonomy's role is completely at odds with the second scenario.

In conclusion, the EU Taxonomy's success in supporting the EU's environmental and climate aspirations will depend on quite a variety of factors. The most important of those factors are maintaining the scientific accuracy of the regulation, resisting political interference in its content and listening to the scientific groups involved in upholding its environmental restrictions. This is the only viable path to ensuring a coherent, just, and transparent sustainability transition. To that end, the EU must continue to strengthen the Taxonomy's credibility, enhance stakeholder accountability, and prioritize environmental integrity over short-term political compromises. This is the only way that the EU Taxonomy can still fulfill its potential to increase sustainability in investments and be a model for sustainable finance regulation around the world.

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