European Union’s Green Deal and Sustainable Finance

Dr. Burcu Sakız 0000-0001-8026-4775
Prof. Dr. Ayşen Hiç Gencer 0000-0001-9556-9416

Abstract

The European Union (EU) unveiled the European Green Deal (EGD) in the year 2019 with the aim of transforming the union into a climate-neutral economy by 2050. The European Union’s Green Deal aims to mobilize private capital toward sustainable investments in this regard, and to ensure that the financial system is resilient to environmental risks. Hence, sustainable finance is a crucial part of the deal. This paper explores the EU's Green Deal and its sustainable finance agenda. The first two sections provide a comprehensive overview on the background and the significance of the EU’s Green Deal and its sustainable finance agenda, while underlining the theoretical and the practical ramifications of directing private money toward sustainable investments and making sure that the financial system is resistant to environmental threats. The Taxonomy Regulation, the Green Bond Standard, the Sustainable Finance Disclosure Regulation, and the Non-Financial Reporting Directive are a few of the regulatory tools and data sources for the EGD’s sustainable financing framework, and these are covered in the third section of this study. The fourth section discusses the conditions for a sustainable finance agenda for required for implementing the EGD, and the fifth section elaborates on the challenges to be faced along the process. The paper's key conclusions, which are presented in the final sixth section, include the necessity of harmonizing and standardizing sustainable finance processes, the significance of high-quality environmental, social and governance (ESG) data, and the implications for the financial sector, businesses, and investors.

1 Introduction

Climate change has been predominantly caused by humankind activities for more than two centuries, especially due to utilization of fossil fuels such as gas, petroleum, and coal (Kapan, 2022, p.7). Unfortunately, these human-related emissions still continue to grow today, as depicted in Figures 1 and 2. Climate change has lately emerged as one of the biggest issues facing the world as a result of the acceleration of global warming, and numerous nations worldwide are now putting forth effort to lessen the threat of climate change and to preserve the viability of the planet. It is necessary to look for answers simultaneously in several fields relating to this problem, because the environmental precautions that had been taken up until this point are insufficient. By adhering to environmental regulations in their operations and creating products that prioritize the environment, financial institutions can raise awareness to the climate change problem. The entire globe should work together to completely prevent climate-related tragedies, to ensure the health of all earth's inhabitants, and to produce long-lasting, sustainable effective results in the direction of these objectives. In order to stop the environmental harm and address the climate change problem, which is harming an ever-increasing number of people worldwide, several innovative “green” concepts have sprung up (Selwyn, 2021). The European Green Deal (EGD), which is the European Union's (EU) plan for addressing the climate change problem, is one of these initiatives (Ecer, et al, 2021).

The term “green economy” refers to an economic framework that prioritizes environmental preservation to achieve sustainable development, resource efficiency and social well-being. A green economy is one that is low in carbon emissions, resource-efficient and socially inclusive. The “Green New Deal” was first proposed during the 2008 Global Financial Crisis, at a time when the green economy concept was beginning to gain traction (Aşıcı, Şahin, 2017). The “Greens” offered the Green New Deal as a solution to the climate change problem, defining the current situation as a “triple crisis” having economic, social, as well as ecological elements. A report entitled the “Global Green New Deal” was released in 2009 by the United Nations Environmental Program (UNEP)'s “Green Economy Initiative”. This report suggested many environmental actions with respect to economic stability and alleviating poverty, keeping ecological damage to a minimum and mitigating carbon emissions for the purpose of accelerating the recovery from the crisis and of boosting the world economy (UNEP, 2009).

It is clear that, since the 1990s, the EU has adapted cutting-edge decarbonization strategies to tackle the climate change problem. In 2005, with the collaboration of several economies, the EU developed the first “Emission Trading System” (ETS) in order to reduce the greenhouse gas (GHG) emissions. The first coordinated package “20-20-20”, which the EU adopted in 2009, established the foundation for the union to monitor the energy transition. However, the green goals that guide the EU legislation in basic fields such as agriculture, industry, trade, transportation, investments, competition, digitization did not start to emerge until the late 2010s. The Paris Climate Agreement in 2015 had a significant impact on the development of the EU's Green Deal. In order to comply with that, new and legally binding objectives, known as “A Clean Planet for all”, were adopted by the European Commission together with the "Clean Energy for all Europeans" initiative. These goals state that by 2050, the EU must have net-zero GHG emissions while also increasing everyone's competitiveness, inclusion, fairness, and prosperity (Kapan, 2022, p.10). Unfortunately, GHG emissions levels in the atmosphere are still increasing today, as depicted in Figure 2.

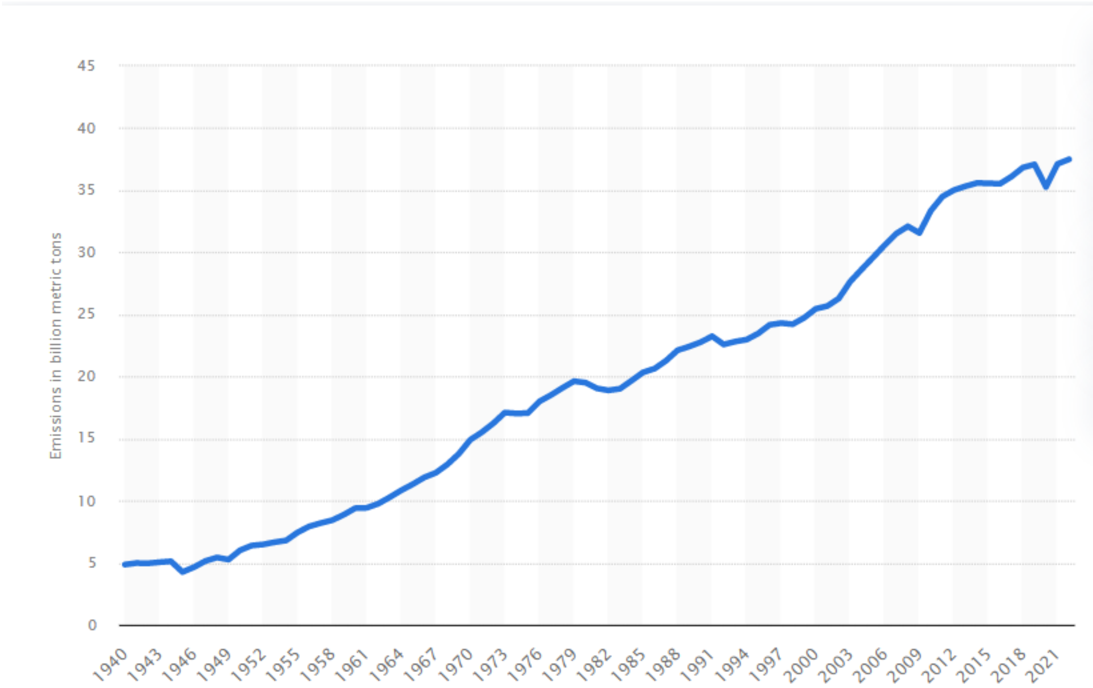

Figure 1: *Worldwide annual carbon dioxide (CO2) emissions from 1940 to 2022 (in billion m. tons)* ***Source****: Statista, Url-1, 2023*

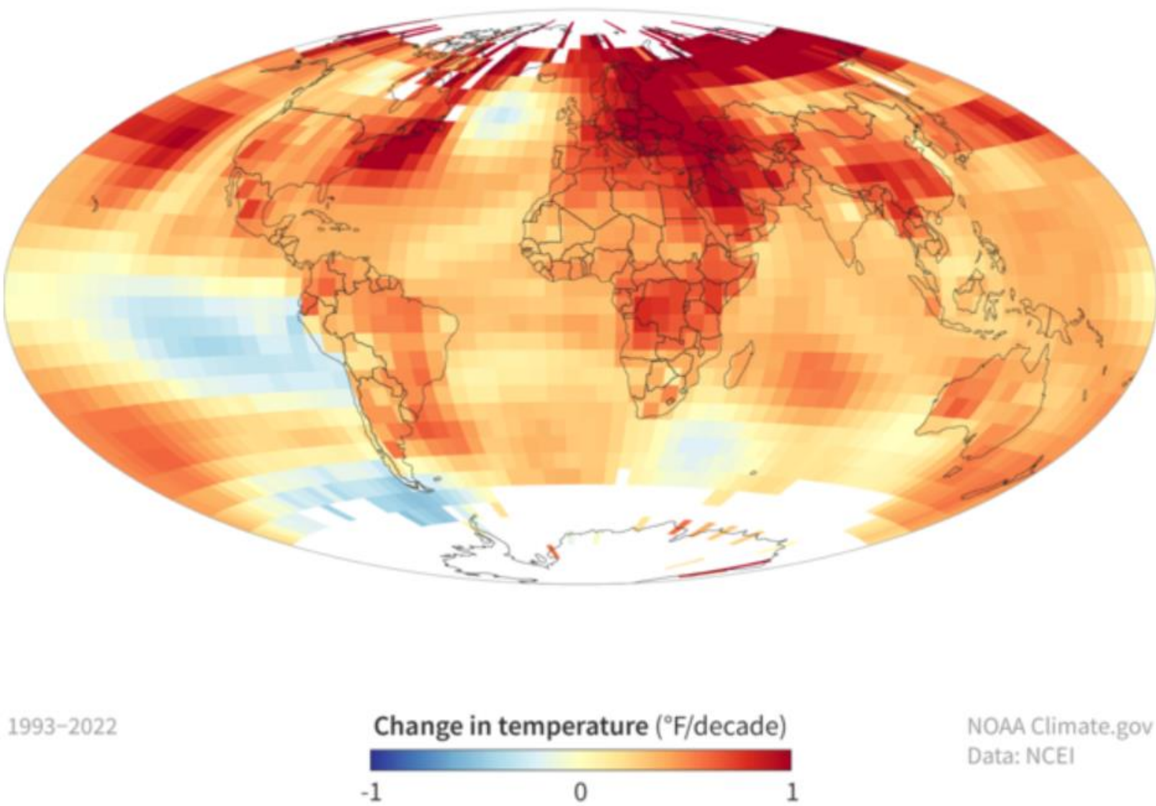

Figure 2: *Global increase in the average surface temperature for 1993 to 2022* ***Source:*** *Climate Change Committee, 2022 – Url-2, 2023*

Launched in 2019, The European Green Deal (EGD) is a comprehensive policy framework designed to tackle the climate change problem, as well as to promote sustainable economic growth within the EU. The EU regards the EGD as its primary new growth strategy for transforming its economy to being more environmentally friendly. Cleaner air, affordable energy, smarter transportation, and hence, additional jobs and an overall greater standard of living would result from this goal. Moreover, greenhouse gas (GHG) emissions would be significantly reduced, and the economy would be transformed to a more environmentally sustainable model (Url-3, 2023). The EGD targets to cut the GHG emissions by at least 55% by 2030, and to make the EU totally carbon-neutral by 2050.

The EGD proposes a number of ambitious policy measures, including sustainable agriculture, sustainable industry, sustainable building and renovation, sustainable transportation, sustainable finance, and biodiversity preservation. Additionally, the EGD seeks to separate economic growth from resource use and to make the EU an equitable and prosperous society with a vibrant economy (Bongardt & Torres, 2020). The theoretical and the practical ramifications of directing private money toward sustainable investments suggest that sustainable finance has the potential to generate positive environmental, social, and economic outcomes.

Overall, the EGD represents a comprehensive policy framework that aims to solve the pressing environmental issues posed by the climate change problem, as well as the underlying economic and social injustices that worsen these issues. Governments should play a more active role in re-shaping the economy, and directing public investments towards green infrastructure that is necessary to address the climate change problem (Mazzucato, 2018). The EU's sustainable finance agenda is a critical component of the EGD, which aims to ensure that the financial system supports the transition to a sustainable economy by directing private capital towards sustainable investments. The key steps of the EGD are described in Figure 3.

***Figure 3:** Key steps of the EGD (2019-2050) **Source:** European Commission, Delivering the European Green Deal Key Steps (Url-4, 2023).*

This paper explores the EU's Green Deal and its sustainable finance agenda. In order to facilitate the shift to a sustainable economy, it concludes with policy recommendations for regulators and decision-makers, including the creation of common standards and labels for sustainable finance products, promotion of ESG data providers, and standardization of ESG reporting. Regulators and decision-makers may actively promote the transition to a sustainable economy and guarantee the effective achievement of the EGD's goals by putting these policy measures into practice.

2 Major Policy Initiatives

In practically every area, climate change has detrimental effects, but mainly in the areas of economy, agriculture, natural environment, human health, and food safety. The European Green Deal (EGD) is a set of legislative ideas put out by the European Union (EU) with the goal of facilitating the shift to a low-carbon, more sustainable economy. The EGD puts out a wide range of projects with the purpose of meeting the sustainability and climate goals of the EU. These initiatives were put forth in accordance with suggestions made by several academic publications and scientific research. Overall, the EGD offers a wide range of programs designed to advance sustainability in numerous economic sectors. By creating a clean, circular economy, the EGD proposes a strategy to lower pollution, restore biodiversity, and boost resource efficiency. Additionally, it includes the spectrum of policies, as shown in Figure 4.

Figure 4: *Policy areas of the EGD* ***Source****: Switchtogreen, 2022*

The EU has introduced a number of tools and data sources to promote sustainable finance, including the Taxonomy Regulation, the Green Bond Standard, the Sustainable Finance Disclosure Regulation, and the Non-Financial Reporting Directive. These measures are essential for creating a thorough framework for sustainable finance and for encouraging accountability, transparency, and comparability in sustainable investments. A classification scheme for sustainable economic activities is provided by the Taxonomy Regulation, which was enacted in June 2020. By establishing a consistent language for sustainable investments, the taxonomy seeks to decrease market uncertainty and green-washing. Six environmental goals are outlined in the regulation, including;

- combating and adjusting to climate change,
- sustainably preserving marine and freshwater resources,
- moving toward a circular economy,
- preventing and controlling pollution,
- preserving and restoring biodiversity and ecosystems (European Commission, 2020).

Both member states of the EU and nations that export goods and services to the EU are impacted by the EGD. One of the six objectives of the "Green Deal Action Plan," the shift to a circular economy, is crucial to ending the resource-dependent economic paradigm. Some of the major projects including sustainable finance outlined in the EGD are:

• Climate action: According to the EGD, we should become climate neutral by 2050, which entails a complete halt to greenhouse gas production. The EU intends to assist the adoption of new, low-carbon technologies, encourage energy efficiency, and raise the proportion of renewable energy in the energy mix in order to accomplish this aim (European Commission, 2020a). Such actions are required, according to research, to avoid the worst effects of climate change and keep global warming below 2°C (IPCC, 2018).

• Sustainable mobility: The EGD aims to promote sustainable transport, by increasing the use of electric vehicles, improving public transport infrastructure, and promoting walking and cycling. The global issue of climate change is accompanied by significant challenges in lowering carbon dioxide (CO2) emissions. Reducing CO2 emissions is particularly challenging for the transportation sector. Research has shown that such measures can reduce greenhouse gas emissions, public health issues, and air pollution-greenhouse gas emissions (Hickman et al., 2020).

• Clean energy: The EGD proposes to use more renewable energy sources, i.e. wind and solar electricity, to change the EU's energy system into a cleaner, more sustainable one. Renewable energy sources accounted for the lion's share of the increase in electricity output due to widespread legislative support and falling technical costs. Additionally, the usage of renewable energy for heating and transportation increased slightly. According to research, these actions can lower greenhouse gas emissions, generate jobs, and increase energy security (IEA, 2019).

• Circular economy: A circular economy is what the EGD seeks to advance, in which waste is minimized and resources are reused and recycled. This includes initiatives to reduce plastic waste and promote sustainable product design. The circular economy is gaining popularity as a means of separating expansion from resource limitations. It reveals strategies for balancing the prospects for economic expansion and participation with those for environmental responsibility and justice. Research has shown that a circular economy can reduce resource consumption, create jobs, and reduce pollution (WEF, 2014).

• Biodiversity: The EGD aims to protect and restore biodiversity, by increasing the use of sustainable farming practices, protecting forests and other natural habitats, and promoting the conservation of endangered species. Every need for achieving the 2050 Vision for Biodiversity calls for a considerable departure from "business as usual" across a wide spectrum of human endeavors. Through a number of changes already taking place to varying degrees in important sectors, the shape and nature of such transformative change can already be detected. Research has shown that such measures are necessary to prevent species extinction, maintain ecosystem services, and preserve biodiversity (CBD, 2020).

• Farm to Fork: The EGD proposes to transform the EU's food system to a more sustainable model, by promoting sustainable agriculture, reducing food waste, and improving the nutritional value of food. Malnutrition in all its forms and the depletion of environmental and natural resources are two of the world's biggest problems today. Both events are moving forward quickly. Such actions, according to research, can improve public health, decrease greenhouse gas emissions, and boost food security. (FAO, 2019).

• Sustainable finance: The EGD Cuff includes initiatives to direct private investment towards sustainable projects and make the financial system more resilient to environmental risks. When compared to numerous criteria, sustainable finance has advanced at a rapid rate. The alignment of financial systems with sustainable development is growing. Research has shown that such measures are necessary to align financial flows with the goals of the Paris Agreement and promote sustainable economic growth (UNEP, 2020).

3 Taxonomy Regulation, Green Bond Standard and Non-Financial Reporting Directive

At a later time, there are intentions to expand on this and create a complete taxonomy covering social and governance requirements. The Taxonomy Regulation aims to establish a common language for sustainable finance within the EU. It outlines six environmental goals that a business must significantly advance in order to be deemed environmentally sustainable. Some of these objectives include pollution prevention and control, climate change mitigation and adaptation, sustainable water and marine resource use and preservation, the move to a circular economy, the preservation and restoration of biodiversity and ecosystems, and the transition to a zero-pollution economy. The European financial sector, which manages over €100 trillion in assets, can significantly assist the EU in achieving its climate targets by allocating funds toward environmentally beneficial enterprises and activities (European Commission, 2019b).

To be deemed environmentally sustainable, an economic activity must meet four general requirements outlined in the Taxonomy Regulation. It also defines and offers a framework for six prospective environmental goals and several economic activities that can help achieve those goals. A number of entities, including Member States, participants in the financial markets, and specific enterprises, are required to utilize the Taxonomy Regulation. The four general requirements are:

- One or more of the six environmental objectives must be significantly impacted by the activity,
- while also posing no serious threat to any of the other environmental goals,

- the task has to be completed in accordance with the minimum international social and labor standards,
- must meet the technical screening requirements for every environmental objective (Och, 2020).

The Taxonomy Regulation serves as a framework to identify activities that may be eligible for an ecologically sustainable investment, which corporations can use to draw in investors, by defining environmentally sustainable activities and environmental goals. Investors are safeguarded from green-washing because financial market players may rely on the Taxonomy Regulation since it provides a clear, science based and evidence based framework. Additionally, this legislation will serve as a model for other legislative initiatives in the field of sustainable finance, creating a framework that may be applied to various industries (European Union, 2018). The EU taxonomy will decrease information costs, eliminate green-washing, and boost investor confidence in green financial products.

The EU taxonomy, announced in 2020, defines criteria to ascertain if an economic activity is ecologically sustainable, and the green bond standard is in the consultation phase in 2021. At a time when the issuance of green bonds is increasing, with the bulk of them being issued and traded within the EU, the European Commission has proposed a standard for green bonds issued within the European Union. Investor demand for these assets is also robust, although there are growing worries about 'green-washing,' or inflated claims by bond issuers about the environmental soundness of the underlying projects they are financing. Unsavory actions taken by some issuers could harm the market as a whole. Even if the EU green bond standard may not be implemented for some time, the Commission's proposal might significantly influence how investors are directed toward bonds and projects of better caliber. If extensively adopted, a new asset class in the world's financial markets might appear (Lehmann, 2021).

The last several years have seen a rise in interest in green bonds and climate bonds as vital vehicles for funding the transition to a low-carbon economy. The market, which was a niche when it was established in 2007, has expanded dramatically with the involvement of new categories of investors and issuers (Deschryver, Mariz, 2020). The International Capital Market Association (ICMA) created the Green Bond Standard, which outlines the fundamentals and best practices for issuing green bonds. The standard specifies what is meant by a "green bond" and calls for issuers to provide details on how profits are used and how financed projects affect the environment (ICMA, 2018). The standard aids investors in determining the environmental impact of their investments while promoting transparency and credibility in the green bond market. As illustrated in Table 1, there are four different kinds of green bonds: traditional bonds invested in green projects; green bonds guaranteed by income; project-specific liabilities; and securitized green bonds.

Category	Definition
Green Use of Proceeds Bonds	Similar to conventional bonds in that they give the issuer full recourse and have the same credit rating as the issuer.
Green Use of Proceeds Revenue Bonds	Non-recourse to the issuer, and investors are paid back depending on a revenue stream like tolls, fees, and taxes.
Green Project Bonds	Recourse or non-recourse to the issuer.
Green Securitized Bonds	Bond(s) backed by one or more designated green projects.

Table 1: *Green Bonds' 4 Categories* ***Source:*** *International Capital Market Association GBP – Green Bond Principles (ICMA, 2018)*

4 Sustainable Finance

Every day, the world's population is put in danger by the global climate problem. Unfortunately, global climate change has emerged as one of the most pressing issues on the global agenda in recent years. There are several environmental (increasing sea levels, drought, heat waves, etc.) and social hazards associated with the climate catastrophe (migration, income inequality, etc.). All environmental issues now have a scope that prevents people, companies, and governments from ignoring them. Currently, different circles are following more efficient paths due to the fact that the steps already implemented are insufficient. By beginning to adhere to environmental policies in their operations and by offering various products, the financial sector helps to raise awareness of the environment. The financial industry is largely responsible for ensuring sustainable development and supplying the capital transfers that developing nations need to battle and adapt to climate change and its social and environmental effects. Given these elements, sustainable finance has considerable promise for improving the quality of life for people all over the world. Achieving the objectives of sustainable development requires the use of sustainable financial methods.

Although environmental, social, and governance requirements are typically included in sustainable finance, the environmental aspect was given precedence. With its "Financing Sustainable Growth" 2018 Action Plan, the European Commission has dramatically raised the bar for regulating sustainable finance. The Sustainable Finance Strategy aims to mobilize private finance towards sustainable investments and to ensure that the financial system is more resilient to environmental and social risks. The strategy calls for developing a taxonomy (the EU Taxonomy) for sustainable economic activity to promote sustainable finance labels and standards, and to enhance the disclosure of sustainability-related information by financial institutions and firms (European Commission, 2020b). The 2017 Green Finance Progress Report outlined a fundamental framework to aid in comprehending the growth of sustainable finance. It emphasized three trends that reinforce one another:

- more systematic governmental activity;
- increased global cooperation;
- a rise in market leadership on both an individual and group level. (UNEP, 2020).

The Sustainable Finance Disclosure Regulation, which came into force in March 2021, requires financial market participants and financial advisers to disclose information on how they integrate sustainability risks into their investment decisions and the adverse impacts of their investments on sustainability factors (European Commission, 2019). The regulation aims to increase transparency and accountability in sustainable finance and to ensure that investors are aware of the sustainability risks associated with their investments.

In accordance with the Directive 2014/95/EU on non-financial information (NFI), significant corporations in member states will have to make a number of disclosures regarding their social, environmental, and governance practices starting in 2017. The Non-Financial Reporting Directive requires large corporations to provide non-financial information, such as specifics about their diversity, social responsibility, and environmental impact programs (European Commission, 2014). The goal of the directive is to encourage businesses to use sustainable business practices and to improve transparency and accountability in corporate reporting. The main focus of non-financial reporting is on economic aspects, such as fostering investment, even if it is intended to promote corporate social responsibility.

The Sustainable Finance Disclosure Regulation (SFDR) is another measure that mandates advisors and players in the financial sector to disclose details on how they incorporate ESG factors into investing decisions. The Sustainable Finance Disclosure Regulation (SFDR) is one of these building blocks. It was introduced to increase product comparability, bring transparency to the market for investment products making sustainability-related claims, give investors a better understanding of the effects of their investment choices, and direct money toward more environmentally friendly businesses and endeavors. (Eurosif, 2022).

These resources encourage transparency, comparability, and accountability in sustainable investments and offer a thorough framework for sustainable finance. They are essential in encouraging investors to make sustainable investments and in making sure that they are aware of the sustainability risks involved with their choices. They are therefore crucial to accomplishing the goals of the EU Green Deal.

5 Challenges of the European Green Deal

Environmental concerns are one of the unfavorable effects of industrial development during the past century. The EGD's supporters are the first to point out that it is merely a road map for addressing climate change. The ambitious climate plan must now be translated into effective legal and economic instruments "in a fair way, leaving no one behind", which is the EU's current challenge. There will be a huge number of new policies that need to be worked out, as well as the related technological aspects. There are six main challenges for EU’s GD, as described below.

5.1 Political Alignment

The successful implementation of the EGD faces several challenges, including Political Alignment. It is about achieving consensus among the EU member states. Aligning national policies with the ambitious goals of the EGD is a complex task. However, the green transition and its financing can only occur if it incorporates both EU and State players, as well as EU residents who are willing to bear the costs and participate in the process, especially in light of the newly announced Climate Pact (Sikora, 2021).

5.2 Financing Needs

Mobilizing the necessary financial resources to fund the transition to a sustainable economy is a significant challenge. The European Investment Plan, often known as the Sustainable Europe Investment Plan, is the primary source of funding for the EGD. It was unveiled on January 14th, 2020, with the intention of giving the European EGD's objectives, particularly the one-off becoming carbon neutral by 2050, adequate financial backing. Over the period of 2021–2027, the Plan seeks to mobilize investments totaling at least €1 trillion. The EU budget and the Emission Trading System (ETS) are the main funding sources. More than half of the cost, or 528 billion euros, will be covered in full by the EU budget and the EU Emissions Trading System. The remaining funds will come from the InvestEU Program, which seeks to combine public and private investments totaling €279 billion by 2030, and €114 billion from other sources. (European commission, 2020c).

5.3 Stakeholder Engagement

A successful shift to a sustainable economy depends on involving and involving a wide range of stakeholders, including enterprises, civic society, and citizens. Climate and energy policies developed at the EU level must take into account various national situations, necessitating specialized transpositions into national law (Kleanthis et al, 2022).

5.4 Technological and Innovation Challenges

The first technological challenge is renewable energy. The amount of renewable energy consumption in national energy portfolios still varies widely, and global energy-related carbon dioxide emissions are rising despite the rise in renewable energy consumption. Further policy work is needed to address these issues, particularly in nations that rely heavily on energy imports (Marra, Colantonio, 2021). The second challenge is energy efficiency. The European Commission's new long-term strategic strategy for 2050, which was released in November 2018, offers a number of difficult but doable pathways for the transition to climate neutrality. These routes would all need changes in many facets of society, not the least of which would be a focus on intensifying the production of energy with low or no carbon emissions as well as significant energy consumption reductions. Based on official statistics for energy and greenhouse gas emissions up to and including 2017, preliminary data for 2018, and the progress made in Europe toward the 2020 and 2030 climate and energy targets and national predictions of greenhouse gas emissions published in 2019. The research demonstrates that Member States' present efforts are still not enough to meet the EU targets for 2030 (Hannah et al,2019).

5.5 Social Considerations and Social Acceptance

In some areas nations, the pace at which low-carbon energy sectors might create new jobs may be quicker than the rate at which jobs in the fossil fuel industry are destroyed. Even if former employees possess the necessary abilities, there may be a mismatch between the locations where they live and where new possibilities become available, which could make it difficult for them to accept other employment. In these situations, national government transition plans are advised, coordinated with local governments, to manage the effects of the exit from carbon-intensive industries and address the need to create a new low-carbon workforce, including through skill development and training (Hanna et all,2023).

5.6 International Cooperation and Global Alignment

International cooperation is necessary to combat climate change and achieve sustainability goals. The EU must exert diplomatic pressure to promote international cooperation, persuade other nations to take comparable bold actions, and guarantee a level playing field for European enterprises (European Commission, 2021).

Addressing these challenges will require ongoing commitment, coordination, and adaptation of policies and practices.

6 Conclusion

The greatest challenge of our time is climate change. It presents a chance to create a new economic paradigm. In the struggle to stop climate change, the obligations of producers, consumers, non-governmental organizations, commercial organizations, and governments are growing. In order to combat carbon emissions that cause climate change, financing a transition within the context of mitigation and adaptation methods is a crucial issue. One of the key objectives for nations has always been to increase their economies especially nations in the European Union (EU). By generating markets for environmentally friendly technologies and goods, the green transition offers a significant potential for European business.

The EU's economic strategy, which wants to play a leading role in the fight against climate change, has changed as a result of the rapid resource depletion brought on by this desire for growth, the effects of global warming starting to be felt, the environmental issues our world is facing, and the fact that it is a problematic world to be left to the next generation. As a result, in late 2019, the EU submitted the European Green Deal (EGD), which lays out a plan to make the EU climate neutral by 2050 to mitigate climate change and its harmful effects on the environment. The EGD affects the EU member states, as well as the countries which export goods and services to the EU. Their objective is to make Europe the first continent in the world to be climate neutral. It is clear that environmental deterioration and climate change pose an existential threat to both Europe and the rest of the world.

ThebEU has emerged as a global leader in sustainable finance by introducing the EU Green Deal's Taxonomy Regulation. In order to facilitate the shift to a greener and more sustainable economy, this legislative framework attempts to provide a consistent classification system for environmentally sustainable economic activity. Climate change-related difficulties highlight the necessity of action on the part of diverse stakeholders. Making sustainable finance mainstream is essential to achieving the necessary investment goals given the EU's high environmental standards, which are projected to continue to rise. Green transformation is now a requirement and is no longer dependent on voluntarism. Moreover, the EU's leadership in sustainable finance can serve as a catalyst for global efforts towards a greener and more sustainable economy.

To ensure the EGD is implemented successfully, regulators and decision-makers should strengthen the regulatory structures that underpin it. For the benefit of businesses and investors, this entails harmonizing standards, coordinating reporting requirements, and delineating definitions. Regulators should keep creating and promoting sustainable financing programs to encourage investments in eco-friendly enterprises and technologies. This entails laying out precise criteria, encouraging sustainable investment, and aiding in the creation of eco-friendly financial products.

Also, funding and assistance for research and development of sustainable practices, renewable energy sources, and clean technology should be prioritized by decision-makers. The transition to a green economy can be accelerated by encouraging innovation through grants, subsidies, and partnerships with academic institutions and industry stakeholders. Prioritizing social inclusion will ensure a just transition to a greener economy on the part of policymakers. By offering retraining chances, job creation opportunities, and social safety nets, steps should be taken to support workers and communities impacted by the shift. Regulators and policymakers should actively participate in international climate diplomacy to promote collaboration and adherence to the sustainability objectives of the EU. This entails establishing alliances, exchanging best practices, and encouraging the implementation of comparable, ambitious policies globally.

It is crucial to continuously track and assess the development of the EGD's objectives. The success of policies and programs should be constantly evaluated by regulators and decision-makers who should set up effective monitoring mechanisms. The ability to be adaptable and flexible is essential for dealing with new problems and grabbing chances.

Overall, there is a critical need for additional and better-focused research in this field. To satisfy the continuous expectation that developed economies will give priority to market-based solutions in resolving the global ecological sustainability challenge, we must have a complete understanding of the strengths and weaknesses of that system in the context of company activities. The Green financing industry expansion will provide new financial data that needs to be studied further.

References

- Bongardt, A., & Torres, F., 2020. "The European Green Deal: More than an Exit Strategy to the Pandemic Crisis, a Building Block of a Sustainable European Economic Model", Journal of common market studies, 60(1), 170-185 .
- CBD, 2020. "Global Biodiversity Outlook 5. Convention on Biological Diversity", https://www.cbd.int/gbo5, Access Date: 27.05.2023.
- Deschryver P., Mariz F., 2020. "What Future for the Green Bond Market? How Can Policymakers, Companies, and Investors Unlock the Potential of the Green Bond Market?", J. Risk Financial Manag. 13(3), 61; https://doi.org/10.3390/jrfm13030061 .
- Ecer K., Güner O., Çetin M., 2021. "Avrupa Yeşil Mutabakatı ve Türkiye Ekonomisinin Uyum Politikaları", İşletme ve İktisat Çalışmaları Dergisi, Yıl: 2021, Cilt: 9, Sayı: 2, s. 125-144 .
- EEA, 2019. "Trends and projections in Europe 2019: Tracking progress towards Europe's climate and energy targets", EEA Report, No. 15/2019, European Environment Agency. Luxembourg: Publications Office of the European Union, https://doi.org/10.2800/51114 .
- European Commission, 2014. Non-Financial Reporting Directive, https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting-directive_en, Access Date: 27.05.2023.
- European Commission, 2018. "Action Plan: Financing Sustainable Growth", p. 4, Access Date: 27.05.2023.
- European Commission, 2019. "Sustainable Finance Disclosure Regulation", https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en, Access Date: 27.05.2023.
- European Commission, 2019. "Factsheet: Financing sustainable growth", 2019b, p. 2 ., Access Date: 27.05.2023.
- European Commission, 2020. "Taxonomy Regulation", https://ec.europa.eu/info/publications/sustainable-finance-taxonomy-regulation_en, Access Date: 27.05.2023.
- European Commission, 2020. "Sustainable Finance Strategy", 2020b, https://ec.europa.eu/info/publications/sustainable-finance-strategy_en , Access Date: 27.05.2023.
- European Commission, 2020. "European Green Deal Investment Plan. Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions", Brussels, 2020c, http://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0021 , Access Date: 27.05.2023.
- European Commission, 2021. "European Union Climate Diplomacy", https://ec.europa.eu/clima/policies/international/negotiations/climate-diplomacy_en, Access Date: 27.05.2023.
- Eurosif, 2022. "EU Sustainable Finance & SFDR: making the framework fit for purpose", https://www.eurosif.org/wp-content/uploads/2022/06/Eurosif-Report-June-22-SFDR-Policy-Recommendations.pdf , Access Date: 27.05.2023 .
- FAO, 2019. "Sustainable Healthy Diets – Guiding Principles. Food and Agriculture Organization of the United Nations. http://www.fao.org/3/ca6640en/ca6640en.pdf, Access Date: 27.05.2023 .

- Hanna R., Heptonstall P., Gross R. et al., 2023. "Quantity and quality of job creation in renewable energy and energy efficiency: A review of international evidence", PREPRINT (Version 1) available at Research Square, https://doi.org/10.21203/rs.3.rs-2460691/v1
- Hannah F., Nissen, C., Siemons, A., Renders, N., Sporer, M., Tomescu, M., Gores, S., Winger, C., De Schrijver, J., 2019. "European Environment Agency, Trends and projections in Europe 2019 – Tracking progress towards Europe's climate and energy targets", Publications Office, https://data.europa.eu/doi/10.2800/51114 Access Date: 27.05.2023.
- Hickman, R., Ashiru, O. and Banister, D., 2011. "Transitions to Low Carbon Transport Futures: Strategic Conversations from London and Delhi", Journal of Transport Geography, 19, 1553-1562., https://doi.org/10.1016/j.jtrangeo.2011.03.013 .
- ICMA, 2018. "Green Bond Principles", https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/, Access Date: 27.05.2023.
- International Energy Ageny, https://www.iea.org/reports/global-energy-review-2019/renewables Access Date: 27.05.2023.
- IPCC, 2018. "Special Report Global Warming of 1.5 ºC", https://www.ipcc.ch/sr15/ Access Date: 27.05.2023.
- Kapan, Y., 2022. "The Effects Of The European Green Deal On Turkey's Trade Integration With The EU", University Of Sussex, School Of Global Studies, Dissertation .
- Kleanthis N., Stavrakas V., Ceglarz, A., Süsser, D., Schibline, A., Lilliestam, J., Flamos, A., 2022. "Eliciting knowledge from stakeholders to identify critical issues of the transition to climate neutrality in Greece, the Nordic Region, and the European Union", Energy Research & Social Science, Volume 93, 102836, ISSN 2214-6296, https://doi.org/10.1016/j.erss.2022.102836.
- Lehmann, A., 2023. "The EU green bond standard: sensible implementation could define a new asset class.", Bruegel-Blogs, Gale Academic OneFile .
- Marra A., Colantonio E., 2021. "The path to renewable energy consumption in the European Union through drivers and barriers: A panel vector autoregressive approach", Socio-Economic Planning Sciences, Volume 76, 2021, 100958, ISSN 0038-0121, https://doi.org/10.1016/j.seps.2020.100958.
- Och, M., 2020. "Sustainable Finance and the EU Taxonomy Regulation – Hype or Hope? ", Jan Ronse Institute for Company & Financial Law Working Paper No. 2020/05 .
- Selwyn, B., 2021. "A green new deal for agriculture: for, within, or against capitalism? ", The Journal of Peasant Studies, 48(4), 778-806. doi:https://doi.org/10.1080/03066150.2020.1854740 .
- Sikora, A., 2021. "European Green Deal – legal and financial challenges of the climate change", ERA Forum 21, 681–697 (2021). https://doi.org/10.1007/s12027-020-00637-3 .
- Switch2green, 2022. "The EU Green Deal – a roadmap to sustainable economies", https://www.switchtogreen.eu/the-eu-green-deal-promoting-a-green-notable-circular-economy/ Access Date: 27.05.2023.
- Şahin, Ü., 2017. Sunuş. In A. A. Aşıcı, & Ü. Şahin (Eds.), Yeşil Ekonomi (1 ed., pp. 22-34). İstanbul: Yeni İnsan Yayınevi
- Mazzucato, M., 2018. "**The Value of Everything: Making and Taking in the Global Economy**", New York: PublicAffairs, 384 pages, ISBN 978-161039675-2
- UNEP, 2009. "Global Green New Deal", https://wedocs.unep.org/bitstream/handle/20.500.11822/7903/A_Global_Green_New_Deal_Policy_Brief.pdf?sequence=3&amp%3BisAllowed= Access Date: 27.05.2023.
- UNEP, 2020 , Sustainable Finance Progress Report 2020, https://wedocs.unep.org/bitstream/handle/20.500.11822/34534/SFPR.pdf?sequence=1&isAllowed=y .
- WEF, 2014 . https://www3.weforum.org/docs/WEF_ENV_TowardsCircularEconomy_Report_2014.pdf Access Date: 27.05.2023.
- Url-1, https://www.statista.com/statistics/276629/global-co2-emissions , Access Date: 29.05.2023.
- Url-2, https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature , Access Date: 01.06.2023.
- Url-3, https://www.nortonrosefulbright.com/en/knowledge/publications/c50c4cd9/the-eu-green-deal-explained , Access Date: 27.05.2023.
- Url-4, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_en , Access Date: 09.06.2023.