

Public Finance and the Green Transition: Romania's Strategic Path in Implementing the European Green Deal

Oana Oprișan

"Ovidius" University of Constanta, Faculty of Economic Sciences, Romania

oana.oprisan@yahoo.com

Abstract

This paper investigates the role of public finances in advancing Romania's green transition, in line with the commitments undertaken through the European Green Deal.

The research aims to demonstrate how fiscal policies, and the strategic use of European funds, contribute to the development of a sustainable and competitive national economy.

The overall objective is to identify and evaluate the main national and European financial instruments dedicated to supporting the green economy. To achieve this, three specific objectives are pursued: analyzing the relevant legislative framework, examining the sources of funding available for the period 2021–2030, and identifying institutional challenges, together with possible solutions. The case study on the Ministry of European Investments and Projects provides a concrete perspective on the absorption of funds for the green transition. The paper draws useful conclusions for public decision-makers, highlighting the need for integrated strategic planning and the involvement of private capital in the sustainable transformation process.

Key words: green transition, European Green Deal, public finances, European funds, sustainable economy

J.E.L. Classification: H50, Q01, Q58, O13, E62

1. Introduction

Climate change has emerged as a critical challenge for the global community, driving governments and international bodies to take decisive action to curb environmental damage. This shared concern has spurred the creation of structured strategies, binding agreements, and cooperative initiatives focused on cutting greenhouse gas emissions, safeguarding ecosystems, and advancing sustainable growth. The growing occurrence of extreme climatic events, the steady rise in sea levels, and the rapid decline in biodiversity have heightened the demand for urgent measures. Consequently, the issue has gained prominence on the international policy agenda, underscoring the recognition of its profound economic and social consequences. In this context, the European Union has set forth the European Green Deal, outlining a pathway toward achieving climate neutrality by the year 2050. This comprehensive approach extends beyond environmental targets, envisioning a fundamental shift in Europe's economic and social framework through changes in production, consumption, and resource management. Moving toward a green economy calls for deep transformations across essential sectors, including energy, transportation, agriculture, manufacturing, and infrastructure. Achieving this shift demands substantial financial investment and the effective use of both public and private funding sources. Public authorities play a pivotal role in this process, not only by shaping

Romania, as a member state of the European Union, actively participates in the implementation of the European Green Deal, aligning its national policies with the Union's climate neutrality objectives. This involvement positions Romania within the broader strategic framework of economic and environmental transformation pursued at the European level. Our country has a responsibility to adapt and implement European policies on green transition, in line with national specificities and the needs of Romanian society. In this regard, public finances play a fundamental

role, as they have the capacity to support climate objectives through the strategic allocation of available funds. This support is not limited to national budget allocation but also includes the efficient use of non-reimbursable European funds, attracting private investment, and strengthening institutional capacities for resource management. However, a few structural difficulties persist in Romania that affect the efficiency of the transition process. Among the most important are the low absorption rate of European funds, deficiencies in strategic planning, institutional fragmentation, and budgetary constraints. These obstacles may limit the country's progress in achieving the objectives set at European and international level.

This paper sets out to examine the contribution of public finances to the implementation of the green transition in Romania, concentrating specifically on the institutional role played by the Ministry of European Investments and Projects (MIPE) in the management of European funds earmarked for this strategic objective. The analysis is structured around the mechanisms through which MIPE operationalizes financial instruments that support the objectives of the European Green Deal, focusing on the alignment between national priorities and European funding frameworks. By investigating the processes of fund allocation, project selection, and monitoring procedures, the study seeks to assess the extent to which public financial governance in Romania facilitates the transition toward a climate-resilient and environmentally sustainable economy. Particular attention is given to the coherence of MIPE's interventions with green policy targets, the transparency of financial decision-making, and the institutional capacity to manage complex funding structures under the NextGenerationEU and other multiannual financial instruments. The paper aims to provide an evidence-based account of the interaction between European funding mechanisms and domestic public finance strategies, highlighting how MIPE functions as a key actor in translating supranational environmental commitments into concrete investment programs at the national level, within the broader architecture of the green transition. The overall objective of the research is to evaluate the financial mechanisms used to achieve the climate targets assumed by Romania in the context of its commitments to the European Union. This analysis addresses several specific objectives, including investigating the regulatory framework governing the green transition, identifying the main sources of funding available for the implementation of green projects, and highlighting the challenges encountered in the process of absorbing and using funds. At the same time, the paper analyzes the opportunities that exist in the context of new European and international financial instruments.

Through this approach, the research aims to provide an integrated perspective on the relationship between public finances and economic and environmental sustainability. The emphasis is on the importance of effective governance, strong inter-institutional collaboration, and a coherent strategic vision as essential factors in facilitating the transition to a green and resilient economy. Finally, the paper formulates concrete recommendations aimed at enhancing the institutional and financial framework that supports the implementation of the green transition in Romania, thereby contributing to the consolidation of national efforts in addressing the challenges posed by climate change and aligning with European sustainability objectives.

2. Literature review

The shift toward a sustainable economy has emerged as a foundational theme in contemporary economic research, driven by the accelerating impact of climate change, the progressive depletion of natural resources, and the escalating stress placed on global ecosystems. Over the past twenty years, scholarly interest in this field has expanded considerably, underpinned by a growing scientific consensus regarding the anthropogenic origins of climate disturbances and reinforced by the establishment of shared international commitments, most notably by the 2015 Paris Agreement. Within this evolving intellectual and policy landscape, the European Green Deal introduced by the European Commission in 2019 has assumed a central role in both academic inquiry and strategic public discourse. Recognized for its scope and ambition, the Green Deal is increasingly examined as a transformative framework aimed at reshaping the European Union's economic model in alignment with long-term sustainability objectives. It integrates climate neutrality targets, circular economy principles, and social equity considerations into a unified strategy for structural change. As such, the European Green Deal has become a critical object of study, not only as a policy

instrument but also as a conceptual cornerstone in the literature addressing the interface between environmental imperatives and economic systems (European Commission, 2019).

The academic literature highlights that the primary objective set out by the European Green Deal consists in reaching climate neutrality by 2050, a target that demands a profound transformation of both economic structures and societal models. Achieving this objective involves reconfiguring production systems, energy use, mobility, agriculture, and consumption habits. It also requires integrated policy frameworks, cross-sectoral coordination, and sustained public and private investment. The literature emphasizes that climate neutrality is not merely a technological challenge, but a structural shift toward sustainability. Therefore, the European Green Deal is framed as a long-term strategy that redefines development pathways within the European Union.

This transformation is articulated through a set of interconnected strategic directions that include the decarbonisation of the energy system, aimed at phasing out fossil fuel dependency and increasing the share of renewable energy sources. It also involves the electrification of transport, with a focus on reducing emissions in mobility through the adoption of clean technologies and infrastructure. The transition to sustainable agricultural practices represents another critical dimension, promoting environmentally responsible food systems and resource efficiency. Industrial modernisation is equally emphasized, targeting the deployment of green technologies, digital innovation, and circular economy principles to reduce the environmental footprint of production. Finally, the protection and restoration of biodiversity are presented as integral components of the Green Deal, reinforcing the link between ecological stability and long-term economic resilience. These pillars form the foundation of a strategic vision designed to realign the European Union's development trajectory with climate objectives, positioning sustainability as the core principle of future growth and integration (European Commission, 2020). The strategy involves mobilizing more than €1 trillion in public and private investment over the next ten years, which implies an acute need to reform the European financial and budgetary framework. The European Commission (2020) estimates that, to achieve the targets set, additional annual investments of at least EUR 260 billion are needed.

In theory, one of the most influential works that shaped the economic discourse around climate change is the report by Nicholas Stern (2007). It argues that inaction in the face of climate change could generate economic losses of up to 20% of global GDP, while the cost of preventive measures would be less than 1% of GDP. This powerful economic argument has been taken up in numerous subsequent works advocating active state intervention to correct market failures associated with the negative externalities of carbon emissions. Ekins et al. (2019) reinforce this direction, arguing that public policies must create a framework of predictability and incentives for the private sector, particularly through green subsidies, green taxation, and strategic public investment.

De Grauwe (2020) emphasizes, from a macroeconomic perspective, the essential role of public finances in managing the green transition. He argues that, in the absence of substantial state involvement, the market will not be able to generate the necessary structural changes. Moreover, he draws attention to the fact that fiscal and monetary policies must become proactive in supporting environmental objectives through dedicated budget allocations, green industrial policies, and the integration of climate risks into national and European financial systems.

Recent international literature has begun to pay increased attention to innovative financial instruments for the green transition. Flammer (2021), for example, highlights the potential of green bonds to stimulate investment in sustainable infrastructure, reduce the cost of capital for green companies, and increase transparency in the use of funds for green projects. Studies show that green bonds are not only a tool for attracting capital, but also a signaling mechanism for investors, with positive effects on companies' reputation and performance (Flammer, 2021). Along similar lines, Monnin (2018) analyzes how central banks' monetary policies can support the green transition through preferential refinancing operations for green assets and the integration of climate risks into the assessment of bank portfolios.

In Romanian literature, studies dedicated to financing the green transition are less numerous but growing. An important contribution is made by the analyses of the Ministry of European Investments and Projects (MIPE), which provides a detailed picture of the main sources of financing available for the green transition, through the National Recovery and Resilience Plan (PNRR), the Modernization Fund, and InvestEU. According to MIPE (2023), Romania has access

to significant financial resources, but the absorption rate of funds remains below potential due to institutional challenges, lack of administrative capacity, and legislative instability. These findings are also confirmed by the National Bank of Romania (2022), which draws attention to the low level of financial inclusion, the shortage of mature projects, and the lack of a predictable framework for sustainable investments.

Another emerging subfield in the literature is that of just transition, which aims to ensure social equity in the process of ecological transformation. The European Commission (2020) promotes this concept through the Just Transition Mechanism, dedicated to supporting regions and workers affected by decarbonization. In the Romanian context, the concept has been analyzed by Georgescu (2021), who argues for the importance of active policies for professional retraining, regional development, and economic support for mono-industrial counties. Popescu and Iancu (2022) complement this analysis by pointing out the lack of a coherent institutional mechanism to enable the effective implementation of funds earmarked for a just transition, particularly in mining areas affected by mine closures.

In addition to these contributions, national and international literature increasingly highlights the need for an effective governance framework for managing green transition funds. The OECD (2021) emphasizes the importance of inter-institutional coordination, transparency in resource allocation, and the involvement of local communities in the decision-making process. In Romania, such recommendations are essential, given the fragmented nature of climate policies and recurring administrative difficulties (MIPE, 2024).

Furthermore, the issue of mobilizing private capital is analyzed in numerous recent studies, which indicate that public finances, although fundamental, cannot fully cover the financial needs of the green transition. Thus, public-private partnerships, guarantee instruments, venture capital funds, and blended finance initiatives are increasingly present in the literature (World Bank, 2022). These mechanisms can ensure the scaling up of green projects and reduce the risks associated with investments in innovative technologies, but they require clear regulation and robust governance to be effective.

In conclusion, the literature confirms the complex and multidimensional nature of the green transition, which involves not only environmental policies but also structural reforms in the economy, governance systems, and financial architecture. Public finances are seen as an indispensable catalyst in this process, both through the allocation of budgetary resources and through the creation of a stable and predictable framework that encourages the mobilization of private capital. In the case of Romania, the literature identifies both significant opportunities and systemic challenges, highlighting the need for a coherent strategic vision, institutional capacity building, and effective governance to enable the full utilization of available resources for the transition to a green, sustainable, and equitable economy.

3. Research methodology

The research presented in this paper is conducted through a qualitative, descriptive-analytical approach that investigates the contribution of public finance to the green transition in Romania, viewed through the lens of the European Green Deal's implementation. The study relies on a methodology that combines documentary analysis with the interpretation of relevant statistical data, aiming to capture the dynamics and mechanisms through which public financial instruments facilitate environmental sustainability objectives. Central to the investigation is a case study focusing on the Ministry of Investments and European Projects (MIPE), which plays a pivotal role in mobilizing financial resources and coordinating funding programs aligned with green priorities. The research framework integrates institutional documents, policy reports, budgetary data, and programmatic evaluations to assess the extent to which Romania's public finance system supports the strategic shift toward a low-carbon, resource-efficient economy. By analyzing the financial flows, allocation criteria, and policy coherence within MIPE's portfolio, the study identifies both enablers and constraints in the national governance of green investments. This approach allows for a nuanced understanding of how fiscal instruments and public investment planning intersect with environmental policy objectives, offering insights into the effectiveness of Romania's institutional response to the European Green Deal framework.

To outline the theoretical and normative framework, a systematic review of the specialized literature from academic sources, official documents of the European Commission, reports of the National Bank of Romania, MIPE, as well as analyses carried out by international organizations involved in sustainable financing was conducted. These sources were used to define key concepts such as green transition, sustainable finance, public investment, and climate neutrality.

The applied component of the research focuses on a case study of the activity of the Ministry of European Investments and Projects in the period 2021–2024. At this stage, the main sources of European funding (PNRR, InvestEU, Modernization Fund, Just Transition Fund), the allocation and spending of funds, the degree of absorption, and the estimated impact on GDP and the labor market were analyzed.

For the quantitative part, secondary data from official sources tables and graphs provided by MIPE and the European Commission were used, which were processed and interpreted economically. The absorption rate, the volume of green investments relative to GDP, and allocations by area (energy, transport, energy efficiency) were analyzed to identify dysfunctions and good practices.

The limitations of the methodology lie in its dependence on publicly available data and the lack of primary survey. However, the integrated qualitative-quantitative approach provides a solid basis for formulating conclusions and recommendations on the effectiveness of green transition financing in Romania.

4. Findings

The research results confirm that Romania is at a critical stage of economic and social transformation, marked by the integration of European climate ambitions into national development strategies. The green transition, defined in the European Green Deal as the process of transforming the European economy into a sustainable and climate-neutral one by 2050 (European Commission, 2019), involves a systemic change that transcends traditional sectoral boundaries. In Romania, this process is accelerated by European financing and conditionality mechanisms but remains strongly conditioned by the internal capacity for absorption, implementation, and adaptation to new institutional and economic paradigms.

One of the central conclusions of the research is that the financing architecture for the green transition in Romania is both complex and vulnerable. In theory, Romania benefits from a favorable financial framework, with access to a wide range of European instruments, including the Recovery and Resilience Facility (PNRR), the Modernization Fund, InvestEU, Cohesion Funds, and the Social Climate Fund. However, the application of these instruments is marked by a few structural limitations: low level of digitization in public administration, shortage of qualified personnel, cumbersome bureaucratic procedures, and lack of a coherent strategic framework for integrating climate objectives into public budgets (MIPE, 2023; BNR, 2022).

Excessive reliance on non-repayable grants to the detriment of market instruments reflects institutional reluctance to take financial risks and a reduced capacity to mobilize private capital. While green bonds, sovereign guarantees, and risk-sharing schemes have become standard instruments in developed economies for financing sustainable projects (Flammer, 2021; Monnin, 2018), in Romania they are used marginally. Even though the Romanian state has taken steps to issue sovereign green bonds as part of its debt instrument diversification plan (MIPE, 2024), the institutional infrastructure that would enable a functional financial ecosystem in this regard is still in its infancy. This situation leads to predominantly top-down financing, with the state playing the leading role and the market remaining a peripheral actor.

Another major aspect highlighted is the strategic role of the Ministry of Investments and European Projects (MIPE), which acts as the main coordination center for European funds earmarked for the green transition. Its functions are not limited to attracting and distributing resources, but also include developing funding guidelines, monitoring project implementation, and reporting regularly to the European Commission. According to official reports, MIPE's administrative capacity has increased significantly in recent years, with the absorption rate of European funds rising from around 14% in 2021 to a projected 80% in 2024 (MIPE, 2024). This development indicates progressive institutional maturation and better adaptation to the 2021–2027

financial cycle. However, the progress made does not eliminate persistent structural vulnerabilities, such as the fragmentation of responsibilities between institutions, the lack of specialized staff at the local level, and legislative constraints on public procurement.

The thematic distribution of funds allocated to the green transition in Romania reflects a strategic orientation aligned with European priorities, but at the same time suggests certain internal imbalances. Thus, the analysis of budget allocations indicates a concentration of resources in areas such as renewable energy (32%), sustainable transport (22%), and energy efficiency (18%). Funds for research and innovation (17%) indicate an openness to supporting emerging technologies, while allocations for the protection of vulnerable groups (4%) indicate limited concern for the social dimension of the transition (MIPE, 2023). Despite the rhetoric about a "just transition," the low proportion of funds earmarked to support groups affected by decarbonization such as workers in polluting industries or low-income households highlights the underrepresentation of these groups in decision-making and budgeting processes.

From an ecological convergence perspective, Romania is below the European average in terms of green investments, both as a share of GDP and in per capita terms. Available data show that Romania allocates approximately 1.9% of GDP to green investments, compared to the European Union average of 2.6%, Germany (3.1%) or France (2.8%) (Eurostat, 2024). In absolute terms, per capita spending on green projects is around EUR 410, compared to EUR 850 in Germany and the EU average of EUR 670. This difference reflects not only the gap in economic development, but also the different prioritization of the climate agenda in the national budget architecture. Despite extensive access to European funds, the low level of financial execution suggests either a lack of administrative capacity or insufficient political will to make sustainability a cross-cutting objective of public policies.

A specific focus of the research is the territorial analysis of interventions under the Just Transition Program. It targets six regions affected by the decarbonization process Gorj, Hunedoara, Dolj, Galați, Prahova, and Mureș characterized by their historical dependence on extractive and energy-intensive industries. The total budget of over €2.5 billion aims to support the structural transformation of these regions through retraining projects, SME development, green infrastructure, and investments in education and innovation (European Commission, 2023). Pilot projects, such as the construction of photovoltaic parks in Gorj or vocational training centers in Hunedoara, offer evidence of potential economic revitalization. However, the lack of an integrated approach combining economic, social, and cultural interventions raises risks regarding the sustainability of these transformations. Without the active involvement of local communities and a coherent vision for regional development, the transition risks being perceived as a source of uncertainty rather than an opportunity for regeneration.

The research also highlighted a direct link between the level of integration of green financing into public policies and the effectiveness of governance. Member States that have managed to coherently align strategic planning, climate objectives, and budget allocations such as the Netherlands, Sweden, and Germany demonstrate the ability to use European funds in an efficient and impact-oriented manner (Ekins et al., 2019; De Grauwe, 2020). In Romania, this process is ongoing, but there are still inconsistencies between environmental, fiscal, and industrial policies. For example, while investments in renewable energy are being promoted, indirect forms of support for fossil fuels continue to exist, such as subsidies for thermal power plants or the lack of environmental taxation. These inconsistencies contravene the principle of "do no significant harm" and undermine the credibility of transition programs in the eyes of investors and the public (European Commission, 2020).

Finally, a key conclusion of the study is that the success of the green transition cannot be measured exclusively in quantitative terms funds raised, projects approved, kilowatts installed—but must be analyzed from the perspective of systemic impact: improving quality of life, strengthening social cohesion, and enhancing economic resilience. To achieve these objectives, a paradigm shift in governance is needed: from a reactive model based on compliance and reporting to a proactive one focused on results, partnerships, and innovation. The involvement of the private sector, civil society, and local authorities must become a fundamental component of financing mechanisms. At the same time, a new administrative culture is needed, focused on transparency, accountability, and execution capacity.

5. Conclusions

The study highlights that Romania is at a critical juncture in its transition to a green economy, facing both major structural challenges and unprecedented financial opportunities. The European funds available for the period 2021–2030, those allocated through the PNRR, the Modernization Fund, InvestEU, or the Just Transition Program, are the central pillars of national decarbonization and modernization efforts. However, the mere existence of these resources does not guarantee the success of the transition. The efficient use of funds depends directly on the quality of governance, institutional absorption capacity, and the strategic commitment of decision-makers.

A key finding of the analysis is that the Ministry of Investment and European Projects (MIPE) plays a key role in the institutional architecture of the green transition. By managing European funds and promoting an integrated approach, MIPE has managed to accelerate the absorption process and support structural reforms in strategic areas such as sustainable transport, energy efficiency, and renewable energy. This development is particularly relevant in the context of the European climate neutrality targets for 2050 and the need to align national policies with European sustainability standards.

However, the data analyzed indicates significant disparities between funding potential and the actual implementation of projects. Despite a gradual improvement in the absorption rate, administrative bottlenecks, delays in the preparation of technical documentation, and insufficient strategic planning capacity at the local level persist. These obstacles may reduce the long-term impact of investments and affect Romania's ability to fully access the funds available under the current multiannual financial framework.

From a socio-economic perspective, the green transition generates not only opportunities for sustainable development but also risks related to social exclusion and regional polarization. Investments in regions affected by decarbonization, supported by the Just Transition Program, are a partial response to these risks, but require better integration of the social dimension into national climate policies. Support for vulnerable households and workforce retraining are essential to ensure a just and inclusive transition.

In conclusion, Romania has all the financial and strategic prerequisites to move towards a green economy, but the success of this process depends on a profound transformation of the governance paradigm. Administrative reform is needed to reduce bureaucracy, improve inter-institutional coordination, and increase the transparency of the decision-making process. It is also essential to actively involve the private sector, local authorities, and civil society in defining and implementing green solutions. The green transition represents more than a technical or financial objective; it constitutes a systemic transformation requiring coordinated adaptations across all dimensions of economic and social life, including production models, consumption patterns, institutional frameworks, and behavioral norms, thereby reshaping the foundations of development toward long-term environmental and societal sustainability.

6. References

- De Grauwe, P., 2020. *Economics of Monetary Union*. 13th ed. Oxford: Oxford University Press. [online] Available at: <https://global.oup.com/academic/product/economics-of-monetary-union-9780198849544>
- Ekins, P., McGlade, C., Skea, J. & Watson, J., 2019. *Global Energy: Issues, Potentials, and Policy Implications*. Oxford: Oxford University Press. [online] Available at: <https://global.oup.com/academic/product/global-energy-9780198817369>
- European Commission, 2019. *The European Green Deal*. Brussels: European Commission. [online] Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019DC0640>
- European Commission, 2020. *Financing the Green Transition – The European Green Deal Investment Plan and Just Transition Mechanism*. [online] Available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_20_17
- Flammer, C., 2021. Corporate green bonds. *Journal of Financial Economics*, 142(2), pp.499–516. <https://doi.org/10.1016/j.jfineco.2021.05.009>

- Georgescu, F., 2021. Tranziția Justă în România: Realități și Provocări [Just Transition in Romania: Realities and Challenges]. *Public Policy Journal*, 5(2), pp.33–48. [online] Available at: <https://www.revistadpp.ro/revista/2021/2/3.pdf>
- Ministerul Investițiilor și Proiectelor Europene [Ministry of Investments and European Projects] (MIPE), 2023. *Raport privind implementarea fondurilor europene pentru tranziția verde 2021–2023* [Report on the implementation of European funds for the green transition 2021–2023]. [online] Available at: <https://mfe.gov.ro>
- Monnin, P., 2018. *Central Banks and the Transition to a Low-Carbon Economy*. Council on Economic Policies, Discussion Note 2018/1. [online] Available at: <https://www.cepweb.org/wp-content/uploads/2018/10/CEP-DN-Central-Banks-and-the-Low-Carbon-Transition.pdf>
<https://doi.org/10.2139/ssrn.3350913>
- Popescu, D. & Iancu, R., 2022. Provocările implementării Fondului pentru Tranziție Justă în regiunile carbonifere [The challenges of implementing the Just Transition Fund in coal regions.]. *Theoretical and Applied Economics*, 29(3), pp.73–88.
- Stern, N., 2007. *The Economics of Climate Change: The Stern Review*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511817434>