EU Policies and Goals of the Green Transition of Bulgaria and Romania for 2030

IANA PALIOVA
PhD, Chief Assistant Professor
Economic Research Institute, Bulgarian Academy of Sciences (ERI BAS)
Aksakov Street, no. 3, 1040 Sofia
BULGARIA
and Public Finance Consultant at the International Monetary Fund
i.paliova@iki.bas.bg; ipaliova@abv.bg

Abstract: The article analyses the policies of the EU Green Deal, focusing on the initiatives NextGenerationEU, Fit for 55 Package, Just Transition Mechanism, and RePowerEU Plan under the EU program period 2021-2027. It presents the state of play of Bulgaria and Romania as regards the energy and electricity mix and their objectives for reduction of greenhouse emissions, primary and final energy consumption by 2030. The investigation examines both countries' National Recovery and Resilience Plans and the EU funding under the 2021-2027 Partnership Agreements while underlying their role for stimulating green transition policies during the current financial package. The internal and external risks for the implementation of the green policies have been identified.

Keywords: Environmental Taxes and Subsidies, Environmental Sustainability, Economic Integration

JEL Classification: H23, Q56, F15

1. Introduction[1]

This article contributes to the analysis on economic impacts of public policies of Bulgaria and Romania for stimulating green energy and energy efficiency aligned with the goals of the Paris Agreement and the EU Green Deal for climate neutrality until 2050. The policies of the EU Green Deal, focusing on the initiatives NextGenerationEU, Fit for 55 package, Just Transition Mechanism, and RePowerEU Plan under the EU program period 2021-2027, have been analysed. It presents the state of play of Bulgaria and Romania in terms of energy and electricity mix and their objectives in the field of green transition.

2. EU Policy Initiatives for Green Transition

The EU 2021–2027 Multiannual Financial Framework (MFF) provides further opportunity to invest in the sustainable recovery and green and digital transformation of Bulgaria and Romania. During the programming periods 2007-2013 and 2014-2020, many of the activities for the ecological and digital transition have been funded through the European Structural and Investment Funds and national co-financing, while from 2021 with additional EU funding from the initiatives NextGenerationEU (NGEU), Fit 55, Just Transition Mechanism and RePowerEU under the EU 2021-2027 MFF.

The NGEU with a budget of €750 billion (in 2018 prices) supports the Member States (MS) public investment for sustainable recovery after COVID-19 and reforms towards green and digital transition. In the period 2021-2026, the Recovery and Resilience Facility as the main financial instrument of NGEU with 90% of the total budget finance national recovery and resilience plans of MS. The remaining 10% of the NGEU funding is being spent on modernization of the EU economies, such as research and innovation via 6 other programs (Figure 1).

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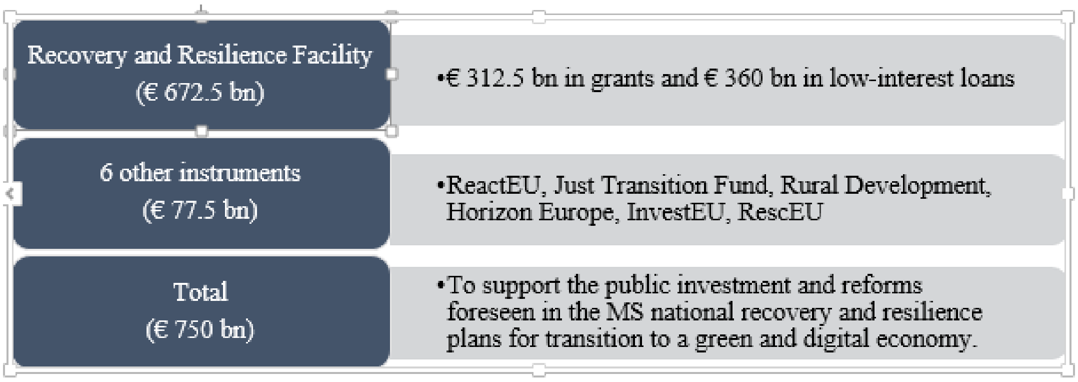
Figure 1: NextGenerationEU financial instruments



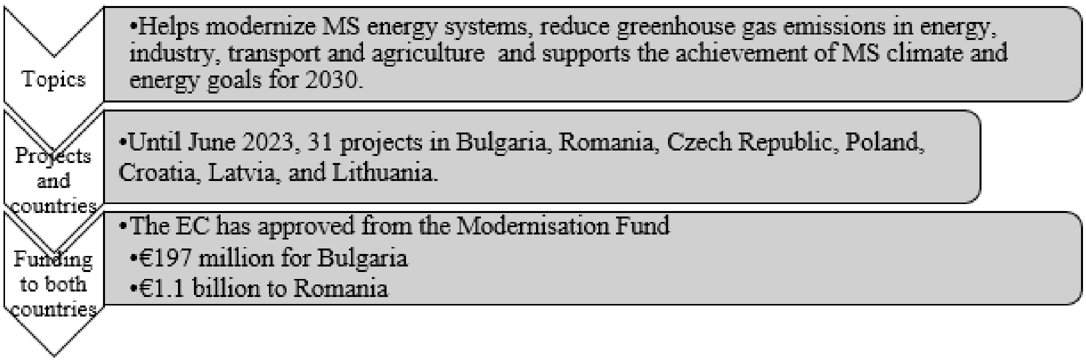
Source: European Commission, https://commission.europa.eu/strategy-and-policy/eu-budget/eu-borrower-investor-relations/nextgenerationeu_en.

The new EU initiative Fit for 55 presented by the European Commission (EC) on 14 July 2021 introduced measures for sectors which were not covered by the EU Emissions Trading System (ETS) established in 2005, including agriculture and forestry sectors, road and marine transport and the building stock.

The initiative also created Social Climate Fund and new CO_2 emission performance standards for road transport and the building stock. Two funds, namely Modernization Fund and Innovation Fund will be financed by ETS allowances to provide funding for projects in MS.

The Innovation Fund has awarded €3.6 billion to 41 large-scale projects of 15 MS (Austria, Belgium, Croatia, Czechia, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain and Sweden), as well as Norway. Until July 2023, the Modernization Fund has provided €2.4 billion (Figure 2).

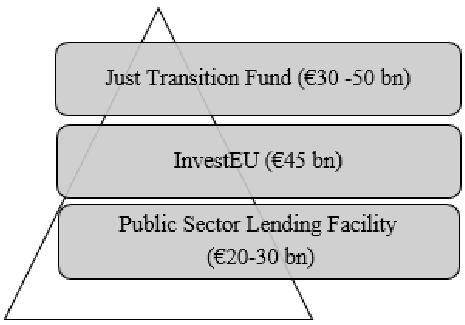
Figure 2. Funds for Bulgaria and Romania from Modernization fund



Source: Official site of Modernization Fund.

Through the Just Transition Mechanism (JTM) the EC plans to financially support the affected sectors of the MS by decarbonisation of the economy with at least €100 billion to ensure their transition to climate neutral production. The JTM consists of three instruments – Just Transition Fund, InvestEU, and Public Sector Lending Facility (Figure 3).

Figure 3: Just Transition Mechanism



Source: Official site of Just Transition Mechanism.

The RePowerEU Plan has been introduced on May 18, 2022 as a new instrument of European green transition policies after Russia's military invasion of Ukraine on February 24, 2022. Additional funding of €210 billion at the EU level is foreseen for the implementation of the RePowerEU Plan, with the MS having to add a separate part in their national recovery and resilience plans. It is based on Fit for 55 package and has been presented together with a range of other documents - the External Energy Strategy, the Solar Strategy, the Energy Savings Communication, the Solar Roof Initiative and the Biomethane Action Plan.

3. Goals of the Green Transition of Bulgaria and Romania

According to the European Green Deal, coal-fired power plants must be closed by 2030 across Europe, which would be a challenge for the energy sector of Bulgaria and other EU member states, especially with the new realities of the war in Ukraine and reduced supplies of Russian gas for Europe. At the same time, this issue is addressed individually for each Member State through the national recovery and resilience plans. There is a reprieve for countries such as Poland and Bulgaria, for which coal-fired power generation is a significant share of their energy mix. The transition to cleaner energy sources and advanced technologies is imperative to meet the EU's commitment to reduce CO2 emissions by at least 55% by 2030 and to become the world's first climate-neutral region by 2050. Although that coal is a key fuel in the European energy mix and accounts for one fifth of the EU electricity generation mix (Tagliapietra, 2020).

Bulgaria relies on its own coal resources and coals products for its energy mix. For 2021 in Bulgaria, coal and coal products provided about 60% of the country's energy mix, while Romania counted on 44% from its oil and natural gas resources. In Bulgaria, nuclear power produces 36% of the country's electricity. In Romania renewables, biofuels and biomass provide 48% of the country's electricity mix (Figures 4 and 5).

Figure 4: Bulgaria: Energy and electricity mix in 2021

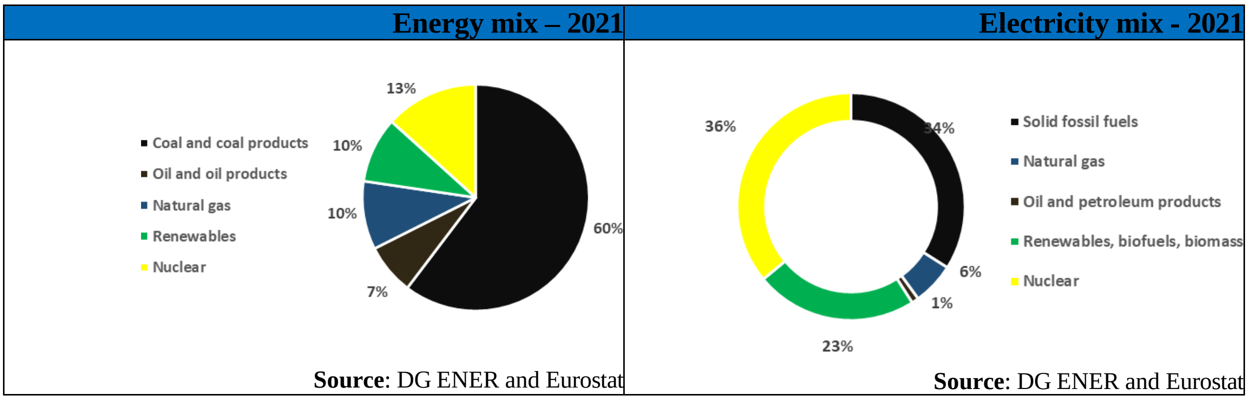
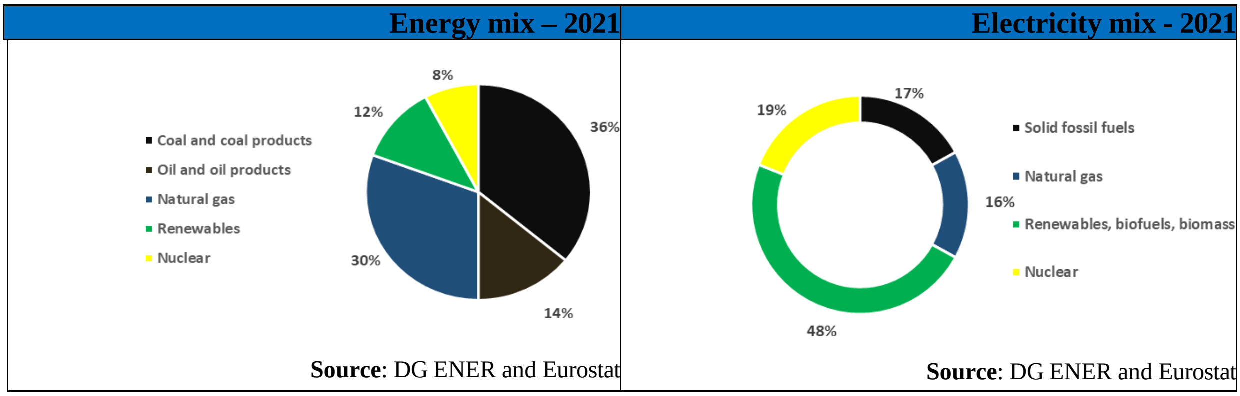


Figure 5: Romania: Energy and electricity mix in 2021

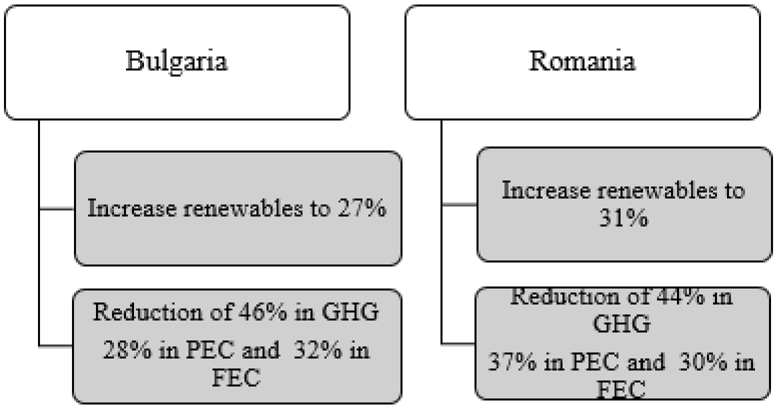


Source: European Commission,

https://energy.ec.europa.eu/publications/state-energy-union-2022-snapshots-eu-country_en

Both countries are net receivers of EU funding, which contributes significantly to their total public investment, including for energy efficiency and the goals for green transition. According to EU climate legislation, coal-fired power plants should be closed by 2030 throughout Europe, which is a challenge for Bulgaria's and Romania’s energy sector. The implementation of both countries’ policy measures to increase renewables, and to reduce greenhouse gas (GHG) emissions and boost energy efficiency for 2020-2030 should lower in all sectors primary energy consumption (PEC) and final energy consumption (FEC) by 2030 substantially, but less than the 45% target at the EU level. Both countries have similar targets for reduction of greenhouse emissions by 46% for Bulgaria, and 44% for Romania. The goal of Bulgaria is to increase renewables share in the energy mix (Figure 6).

Figure 6: Bulgaria’s and Romania’s main green targets for 2030



Source: Partnership Agreements of Bulgaria and Romania.

From the 2021-2027 MFF both countries expect substantial financing (Table 1). Bulgaria will not use loans from NGEU for the projects under the Recovery and Resilience Plan of Bulgaria, which puts its public finances in a better position. Romania's Recovery and Resilience Plan has been approved by the EC in 2020 as an important step towards the EU disbursement of €14.2 billion in grants and €14.9 billion in loans to Romania under the RRF.

Table 1: EU funding for Bulgaria and Romania for the 2021-2027 program period

(billion euros)

EU funding	Bulgaria	Romania
Partnership Agreement for 2021-2027	10.9	60.9
National Recovery and Resilience Plan	6.3	29.2
Total budget	17.2	60.9

Source: Partnership Agreements and National Recovery and Resilience Plans (2022).

Bulgaria’s plan outlines policy objectives and needed investment in four areas, of which *Green Bulgaria* is focused on reducing the energy intensity of the economy and promoting the green transition, and increasing the competitiveness of the agriculture sector. The other program *Innovative Bulgaria* aims to increase the quality and scope of education and training, provide support for research and development, and support the industrial sector. *Connected Bulgaria* aims to build a modern and secure digital infrastructure, reduce the carbon footprint of the transport sector, and increase the competitiveness and sustainable development of regions; while *Fair Bulgaria* is dedicated to achieving inclusive and more sustainable growth, expanding the scope of social services, and strengthening the health system. The plan includes measures to phase out gradually coal and lignite power production by 2038. Bulgaria received the first tranche of €1.3 billion from the EC in December 2022. During the period 2021-2027 the estimated expenditures under the 2021-2027 MFF, contributing to green transition, amount to 64.01%.

Romania will use the EU funding for the energy sector, mainly through its Sustainable Development Operational Program 2021 –2027. It is focus on promoting energy efficiency measures and GHG emissions reduction and developing smart energy systems, grids and storage outside the Trans-European Networks for Energy (TEN-E). Romania's plan devotes 41% of the plan's total allocation on measures that support the green transition. The plan includes measures to phase out coal and lignite power production by 2032. Romania already received two tranches (€1.8 billion grants and € 0.8 billion loans) in 2022, and a payment request for €3.22 billion have already been provided. During the period 2021-2027 the estimated expenditures under the 2021-2028 MFF, contributing to green transition, amount to 57.17%.

For 2021- 2027 Bulgaria has negotiated a budget of €2.4 billion from the European Regional and Development Fund (ERDF) and Cohesion Fund to help achieve its climate targets. Romania relies on €6.8 billion from the ERDF and Cohesion Fund for green energy projects, reduction of carbon emissions, environmental infrastructure, biodiversity conservation, green spaces, risk management and sustainable urban mobility measures.

The resources of €600 million from EBRD for the 2021-2027 MFF should help Bulgaria increase the share of renewable energy to 27% of total energy consumption as well as reduce energy consumption and greenhouse gas emissions in public buildings. Bulgaria uses ERDF funding also to recycle 70% of all packaging waste. The investments focus on the reduction by more than 1/3 (at least 35%) in the share of the population living at risk of natural disasters, such as floods or wildfires.

In Romania €2.3 billion are envisaged for improvement of energy performance of residential and public buildings and development of renewable energy sources and smart energy systems. The latter aims to reduce energy consumption and carbon emissions and support the decarbonization of the energy sector. Another €2.3 billion support the water and wastewater sector and to improve the circular economy focusing on waste, re-use and recycling.

To alleviate the social and economic impact of the green transition towards a climate neutral economy JTF provides €1.3 billion to Bulgaria. Romania can use €2.1 billion from the JTF for the regions, which are most negatively affected by phasing out coal and lignite, focusing on the transformation of energy intensive industries.

The projects in the national recovery and resilience plans and the partnership agreements of both countries for 2021-2027 are ambitious. For successful implementation the internal and external risks should be overcome. Among internal risks are administrative and political, as well as economic (e.g., high inflation, high electricity prices and labour costs), uncoordinated actions of institutions and stakeholders could have negative impact on the implementation of green projects. Economic and energy crises, war in Ukraine, problems of the supply chains could also prevent the implementation of the projects towards green transition.

4. Conclusion

The EU initiatives are designed to finance investment and structural reforms, with certain shares required to be dedicated to green transition, as well as measures aimed at enhancing the resilience of national economies. The introduction of new economic instruments as part of a broader package of measures provides an opportunity to identify them and to ensure coherence with other policies.

The EU 2021–2027 MFF provides a unique opportunity to invest in the sustainable recovery and green transition in Bulgaria and Romania. Both countries need to improve their institutional capacity to offer good projects and coherence of public and private sector actions as beneficiaries of European funding.

The European procedures and regulations are complex and difficult to apply in the development and implementation of the projects with European funding and assume good institutional support for the beneficiaries, which Bulgaria still cannot achieve. Clear communication by policy makers with stakeholders and civil society is crucial to the success of an economic instrument and can contribute to greater public acceptance.

The governments of Bulgaria and Romania should manage the internal and external risks, and the emphasis should be placed on projects for the decarbonization of the energy sector, which create a negative public response and unpredictability for those employed in this sector.

References:

[1] Bulgaria's Partnership Agreement for 2021-2027, 6 July 2022, https://commission.europa.eu/publications/partnership-agreement-bulgaria-2021-2027_en.

[2] European Commission (2021). Strategy for financing the transition to a sustainable economy, https://finance.ec.europa.eu/publications/strategy-financing-transition-sustainable-economy_en.

[3] European Commission (2020). Green Deal, https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu_en.

[4] Ministry of Energy (2023). Bulletin on the state and development of energy of the Republic of Bulgaria in 2022.

[5] Official site of Recovery and Resilience Mechanism, https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/index.html.

[6] Official website of Modernization Fund, https :// modernizationfund . eu / european - green - deal - eu - modernization - fund - invests - e 2-4- billion - to - accelerate - the - green - transition - in - seven - eu – countries.

[7] Official site of Innovation Fund, https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3787.

[8] Official site of Just Transition Fund, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/finance-and-green-deal/just-transition-mechanism_en.

[9] Official site of RePowerEU, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en.

[10] Official site of EU funds for Bulgaria, www.eufunds.bg.

[11] Romania’s Partnership Agreement for 2021-2027, 25 July 2022, https://commission.europa.eu/publications/partnership-agreement-romania-2021-2027_en.

[12] Tagliapietra, S. (2020). The European Climate Law Needs a Strong Just Transition Fund. Bruegel-Blogs, 6 October, https://www.bruegel.org/blog-post/european-climate-law-needs-strong-just-transition-fund.