

## Financing Green Deal in Romania

Daniela Panait (Zănescu)

*The Bucharest University of Economic Studies, Romania*

[panaitdana@yahoo.com](mailto:panaitdana@yahoo.com)

### Abstract

*The present paper is a short description of the European Green Deal and its main features at the EU level while the in depth analysis is made for the financing sources available for our country. While the theoretical foundation of Green Deal has been acknowledged, the research on its funding, especially at national level has only been published recently or is forthcoming.*

*Based on the research on the current provisions and EU framework on the European Green Deal, this overview may be helpful to recognize and how to implement the Green Deal by our country from financing perspective.*

**Key words:** green deal, climate change, EU Emission Trading Scheme, EU funding

**J.E.L. classification:** Q59

### 1. Introduction

In December 2019, the European Commission presented the European Green Deal which is an ambitious package of measures ranging from ambitiously cutting and even reducing to zero greenhouse gas emissions; investing in state of the art research and innovation; preserving Europe’s natural environment.

From climate perspective, the European Green Deal follows the principle “no person and no place is left behind” and sets the target for the greenhouse gas emissions reduction at least 55% by 2030, as well as zero GHG emissions by 2050 (“no net emissions of greenhouse gases”).

The European Green Deal covers all sectors of the economy, notably transport, energy, agriculture, buildings, and industries such as steel, cement, textiles and chemicals.

First climate action initiatives under the Green Deal include:

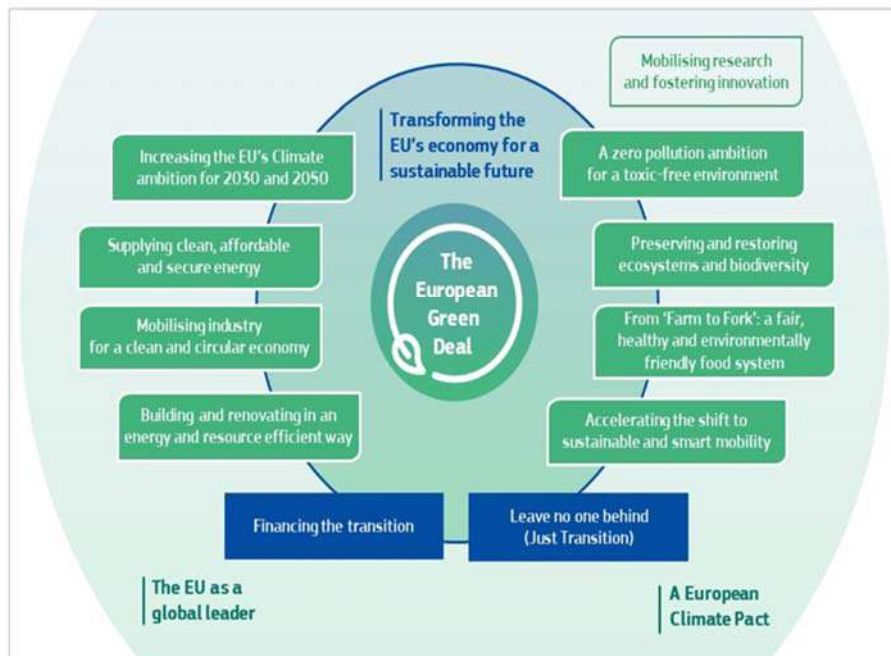
- 1) European Climate Law (by turning the 2050 climate-neutrality objective into EU ruling);
- 2) European Climate Pact (engaging in climate action the citizens and all parts of society);
- 3) 2030 Climate Target Plan ( by 2030 reducing emissions at least 55%).

The European Green Deal provides an action plan to increase and support the efficient use of resources by moving to a clean, circular economy and repair biodiversity and reduce pollution as much as possible.

The Just Transition Mechanism represents the EU financial support and technical assistance to help those that are most affected in the process towards the green development of the economy. In this respect, over the period 2021-2027 , at least €100 billion will be transferred in the most affected regions .

The Sustainable Europe Investment Plan will be the tool used to implement and finance the European Green Deal. During the next 10 years, this plan will mobilize through the EU budget and the associated instruments at least EUR 1 trillion of private and public sustainable investments. The Sustainable Europe Investment Plan contributes to the implementation of the Sustainable Development Goals and it is the pillar EU’s climate policy.

Figure no. 1: The European Green Deal



Source: (European Commission, 2019)

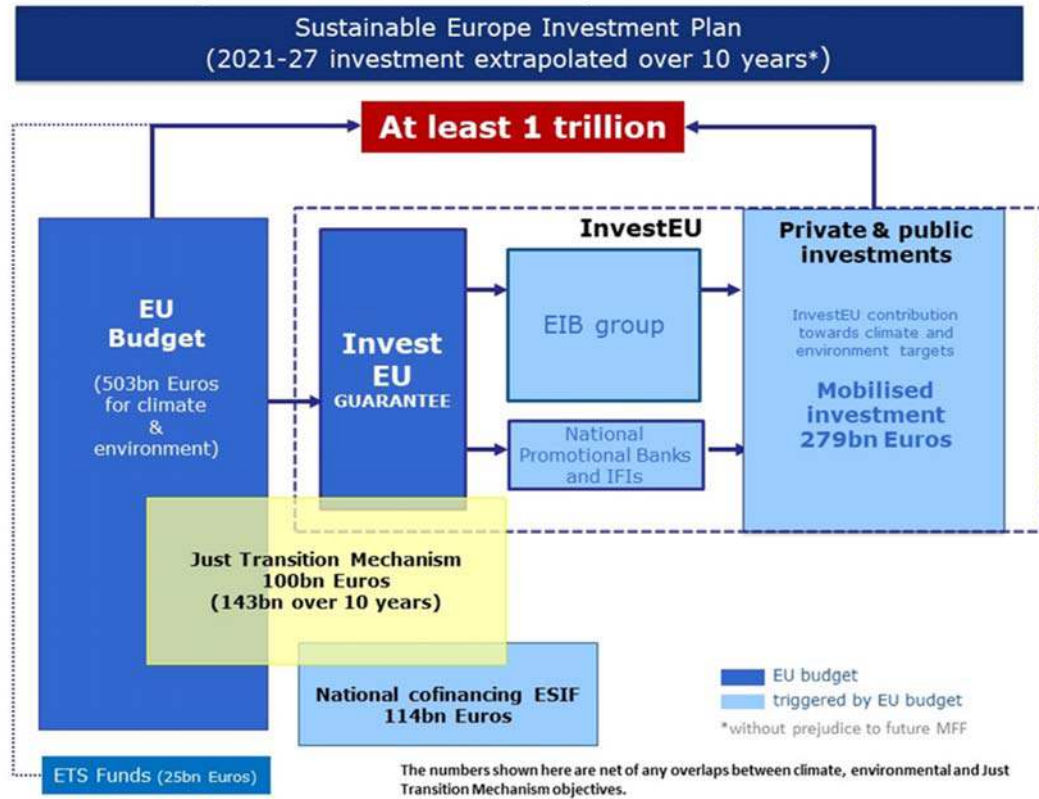
The transition to a climate-neutral, green economy supported by the the Sustainable Europe Investment Plan will be based on three dimensions:

- ✓ mobilising investments with a greater share of public spending to climate and environment; in the regions covered by the Just Transition Mechanism helping public funding based on the support given by the private investments;
- ✓ the development of institutional and legislative framework for private investors and the public sector;
- ✓ specific support to public administrations and project promoters in the development and implementation of sustainable projects.

Considering the dynamic and the current status of the EU legislative and institutional framework, the Green Deal is the main pillar of the EU's long-term strategy for economic growth. In the light of the National Plan for Investment and Economic Recovery, Romania will have to use European resources as efficiently as possible while our economy foster the transition to sustainable development and green energy. By 2030 the “new model for economic development” will support investments of approximately €100 billion in various sectors such as infrastructure, agriculture and health.

The use of European funds by our country is directly linked to the implementation of the Green Deal, digital transformation of the society, the Cohesion Policy and Common Agricultural Policy. The competent authorities with the European Commission established these priorities for the next financial period 2021-2027.

Figure no. 2: Financing elements under the Sustainable Europe Investment Plan



Source: (European Commission, 2019)

## 2. Theoretical background

Communication from the Commission “Sustainable Europe Investment Plan European Green Deal Investment Plan” (2020) 21 final states that: “The European Green Deal is a response to these challenges. It is a new growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use”. At the same time, “To achieve the ambition set by the European Green Deal, there are significant investment needs.”

The Sustainable Europe Investment Plan is based on the following pillars in order to mobilise at least EUR 1 trillion:

- the EU budget – with more than 503 EUR billion allocated to climate, environment and sustainable development objectives; this will trigger additional national co-financing of EUR 114 billion;
- the InvestEU Fund - will leverage around EUR 279 billion of private and public climate and environmentally-related investments; by 2025 the EIB will double its climate target from 25% to 50% and become Europe’s climate bank ;
- the Just Transition Mechanism, to leave no one behind – the financing will be focused on the regions and sectors that are most affected by the transition because they depend on fossil fuels or carbon-intensive processes; other programmes and funds (e.g. the European Regional Development Fund and the European Social Fund Plus) will support the Just Transition Mechanism ; contributions from InvestEU and the EIB and financing from the EU budget, co-financing from the Member States ;

- the Innovation and Modernisation funds (not being parts of the EU budget) - specific financing mechanisms under the EU Emissions Trading Scheme providing at least some EUR 25 billion;
- other relevant partners who could bring additional sources and innovative ways to implement the plan.

## 2.1. Financing the Green Deal in Romania

Based on the next Multiannual Financial Framework , Romania has allocated to the implementation of the second objective of the Cohesion Policy (“A greener, low-carbon Europe by promoting the transition to clean and equitable energy, green and blue investment, the circular economy, climate change adaptation and risk prevention and management”) an amount of 8,222 EUR billion; in addition to this, the amount of 1,766 EUR billion is allocated to Just Transition Operational Programme. Out of the total of 31 EUR billion dedicated to the budget of the Cohesion Policy, this amount show us that 32,21% (9,988 EUR billion) from the financing received by Romania from the EU budget will accommodate the objectives “A greener Europe” and “Just Transition “ of the Cohesion Policy. In addition to this, an amount of another 1,15 EUR billion is available from EU made of 1 EUR billion through the New Generation EU and 0,15 EUR billion.

The Regional Operational Programmes through the second objective of the Cohesion Policy”Greener Europe” finance the following actions:

- a) mobility, the consolidation of the transport infrastructure:
  - development of railway access networks to the central and global TEN-T transport;
  - reducing carbon dioxide emissions in municipalities/cities and their functional area through investments based on sustainable urban mobility plans (regional or local roads - clean urban transport and rolling stock infrastructures, cycling and alternative fuels infrastructures);
- b) urban regeneration;
  - regeneration of degraded and abandoned urban spaces, functional reconversion of degraded / unused / abandoned vacant lands and their re-inclusion in the social / economic circuit
  - measures and investments in green infrastructure
  - investments for urban regeneration and security of public spaces
- c) urban transport (metropolitan trains - Bucharest, Timisoara, Cluj, Iasi, Sibiu, Brasov = 350 EUR million form EU budget);
- d) energy efficiency in buildings for urban areas with solid fuel
  - investments in the renovation of public and residential buildings in order to ensure / improve energy efficiency according to the potential to reduce consumption, respectively reduce carbon dioxide emissions;
  - investments in additional energy production capacities from renewable sources in order to increase the share of these sources in the enery consumption of buildings.

Just Transition Mechanism/Fund (Just Transition Operational Programme) is design to achieve by 2030 the reduction of greenhouse gas emissions (GHG) from 50% to 55%. The mechanism will lead new transformed EU society in which, by 2050, there should be no more net greenhouse gas emissions and economic growth should be decoupled from use of resource.

The specific objective of this JTF is thus to support the investments needed to help the territories where the negative effects of the transition are most pronounced economically and socially, in order to combat and alleviate regional disparities. The territories concerned include, first and foremost, the coal-fired regions, subject to the transformation of industrial processes previously heavily industrialized regions and which will support the energy transition.

The following areas are mentioned to be supported:

- Hunedoara and Gorj - coal extraction and use for electricity and heat production, responsible for 30% of GHG;

- Dolj, Galați, Prahova and Mureș - Use of coal for electricity and heat production, or in heavy industry (chemicals, metal processing cement, fertilizers, etc.), responsible for 35% of GHG.

Any other proposals related to potential areas that could benefit from support (eg Maramureș / Baia Mare-Baia-Sprie, Bacău / Asău-Comănești-Dărmănești-Onești, Caraș-Severin / Reșița-Moldova Nouă-Anina, Alba / Zlatna -Cugir, Sibiu / Copșa Mică, Brașov / Victoria-Făgăraș, Harghita / Bălan) must be negotiated with the European Commission. The justification for choosing these areas will take into account the negative effects of the transition at economic and social level.

The Sustainable Development Operational Programme has as major objective the improving competitiveness and supporting innovation, promoting green investments, adapting to climate change and a proactive response to potential risks, ensuring the access of people to infrastructure and connectivity of cities, developing quality public services for the benefit of its citizens.

The areas financed are: energy efficiency, energy transmission and storage networks; development of water and wastewater infrastructure and the transition to a circular economy; promoting adaptation to climate change, prevention and risk management; waste management; biodiversity; environmental protection by conserving biodiversity, ensuring air quality and remedying contaminated sites.

On the other hand, considering the pattern given at EU level by the the Sustainable Europe Investment Plan and from the perspective of climate specific tools, financing the Green Deal in Romania can be achieved mainly through the Modernization Fund, specific financial mechanism under the EU Emission Trading Scheme.

For the period post 2020 the EU Emission Trading Scheme includes, inter alia, specific financial mechanisms such as the Innovation Fund and the Modernization Fund.

The main features of the Innovation Fund are: all Member States are eligible; 450 million EU allowance will be available in the fund and EIB will monetize and managed the fund; the projects are selected on the basis of transparent and objective criteria, taking into account how these projects contribute to the reduction of greenhouse gas emissions; projects must have the potential to be widespread or significantly reduce the cost of transition to a low-carbon economy; projects involving the CCU (Carbon Capture and Utilisation) must ensure a net reduction in emissions and the avoidance or permanent storage of CO<sub>2</sub>; supported technologies must not be available on large scale on the market.

The key characteristics of the Modernization Fund are:

- the Republic of Bulgaria, The Czech Republic, the Republic of Estonia, the Republic of Croatia, the Republic of Hungary, the Republic of Latvia, the Republic of Lithuania, the Republic of Poland, the Republic of Romania and the Slovak Republic (same beneficiaries as for derogation under the provisions of article 10c) represent the eligible Member States;
- for the period 2021-2030 there will be around 310 million EUAs which will be auctioned by the EIB (the monetization of EUA);
- 310 million EUA will be received by Romania , meaning 11.98% from the fund; the carbon price at the time of the auction will have an impact on the level of revenues;
- at least 70% of the financial resources resulted from the Modernization Fund are used to support investments (projects) provided that the remaining costs are financed by private legal entities: production and use of electricity from renewable sources; improving energy efficiency, without production of energy using solid fossil fuels; energy storage and upgrading of energy networks, including pipelines for district heating plants; electricity transmission networks and increasing interconnections between Member States; support for the transition to a low carbon economy in the regions addicted to fossil fuels so as to sustain the relocation, vocational reconversion and improvement of workers' skills, education, initiatives for job search and start-ups in dialogue with social partners. Are also eligible investments in energy efficiency in transport, construction, agriculture and waste.

### 3. Research methodology

Based on the research on the EU policies on Green Deal , this overview may be helpful to recognize the features of the European Green Deal and guide its efficient implementation in our country in line with the established national priorities for the next financial period 2021-2027.

Subject to this, I analyzed and assessed relevant data and documents regarding the use of European Funds and the EU ETS specific mechanisms elaborated by the European Commission, Ministry of European Funds, European Environmental Agency, European Energy Exchange. More specific, I compared long and short time data series on the above mentioned area.

### 4. Findings

It would be useful and pragmatic to approach the Green Deal as the milestone for Romania`s long term investments and economic growth. On the one hand, there is a need for increasing the native potential in many of the areas concerned and on the other for a better connection of our economy with those of other Member States. In this respect, it will be possible to mobilize significant financial resources from both European funds and international financial institutions and markets. Overall, there is a need for a strategy at the level of the national economy coordinating and ensuring the synergy of the sectors that significantly contribute to GDP growth (eg industry, construction, agriculture) and the sectors with a high share of greenhouse gas emissions at national level (eg transport, energy). This strategy, based on a comprehensive analysis, must be carried out with the participation of all authorities with responsibilities in the field, especially from the perspective of identifying and implementing the necessary measures to adapt RO to the new European development paradigm, including the opportunities it offers from economic, environmental/climate change and social point of view.

Comprehensive measures will be needed, with precise medium and long-term national targets in various areas such as energy efficiency (seen as a less expensive source of energy generation), energy infrastructure and storage capacity (including smart grids, charging networks for electric vehicles), directing industrial production, air pollution (eg massive replacement of wood-based heating devices or polluting vehicles), forest management, land use and land use planning (eg: forestry target), agriculture, water quality etc.

Considering the pattern given at EU level by the Sustainable Europe Investment Plan and following the 3 dimensions of the sustainable development, financing the Green Deal in Romania can be reflected through the EU budget as follows:

- the economic aspects – via the Regional Operational Programmes with a budget made of 12, 86 EUR billion out of which 9 EUR billion from EU and 3,86 EUR billion from state budget; within this budget the second objective of the Cohesion Policy ”Greener Europe” has an allocation related to climate, environment and sustainable development measures representing 3, 46 EUR billion out of which 2, 45 EUR billion from EU and 1, 03 from state budget – in addition to this amount, for the scope of energy efficiency in buildings for urban areas with solid fuel there is an amount of 0, 857 billion out of which 0,600 EUR billion from EU and 0,257 EUR billion from state budget;
- the social aspects – via the Just Transition Operational Programme with a budget made of 1,03 billion out of which 0,766 EUR billion from EU and 0,265 EUR billion from state budget; in addition to the this, an amount of another 1,15 EUR billion is available from EU made of 1 EUR billion through the New Generation EU and 0,15 EUR billion from state budget;
- the environment aspects – the Sustainable Development Operational Programme with a budget made of 6,62 EUR billion out of which 3,922 EUR billion from EU and 0,692 EUR billion from state budget.

The JTF is not a fund for the energy transition and is focused on the economic and social cost of the transition (economic diversification, requalification, education, etc.). The following areas are to be supported: Hunedoara and Gorj - coal extraction and use for electricity and heat production, responsible for 30% of GHG; Dolj, Galați, Prahova and Mureș - Use of coal for electricity and heat production, or in heavy industry (chemicals, metal processing cement, fertilizers, etc.). Any other

proposals related to potential areas that could benefit from support (eg Maramureş / Baia Mare-Baia-Sprie, Bacău / Asău-Comăneşti-Dărmăneşti-Oneşti, Caraş-Severin / Reşiţa-Moldova Nouă-Anina, Alba / Zlatna -Cugir, Sibiu / Copşa Mică, Braşov / Victoria-Făgăraş, Harghita / Bălan) must be negotiated with the European Commission.

The Modernisation Fund is one of the two new funding mechanisms of the EU ETS for the period post 2020. The 10 eligible Member States are those with a Gross Domestic Product per capita below the 60 % Union average in 2013: Romania, Bulgaria, Czech, Estonia, Croatia, Hungary, Latvia, Lithuania, Poland and Slovakia. In the period post 2021-2030, according to market analysis forecasts, the average price of the EUA could be 30 euro/EUA. In this context, the amount that Romania could benefit from the Modernisation Fund represents 1,114 EUR billion EUR, calculated with a volume of 37,138 millions EUA.

## 5. Conclusions

The European Green Deal represents the vision with policies and measures for the next decade within the EU economy: biodiversity (measures to protect our ecosystem); agriculture (based on the “from Farm to Fork” principle will shape ways for more sustainable food systems; sustainability in EU agriculture and rural areas via the common agricultural policy - CAP); clean and green energy; sustainable industry (more sustainable, environmentally friendly production cycles); building and renovating (cleaner construction sector); sustainable mobility (more sustainable means of transport); phase out pollution (cut and reduce pollution rapidly and efficiently).

When implementing the Green Deal in our country from environmental perspective, the available amount from the EU budget will be represented by the 11,138 EUR billion, including the finance through New Generation EU.

The implementation of European Green Deal will support the local communities most affected by this transition, such as: Hunedoara and Gorj; Dolj, Galaţi, Prahova and Mureş, Maramureş / Baia Mare-Baia-Sprie, Bacău / Asău-Comăneşti-Dărmăneşti-Oneşti, Caraş-Severin / Reşiţa-Moldova Nouă-Anina, Alba / Zlatna -Cugir, Sibiu / Copşa Mică, Braşov / Victoria-Făgăraş, Harghita / Bălan) must be negotiated with the European Commission.

Considering the climate specific financing mechanisms, in addition to the abovementioned amount, there will be another available 1,114 EUR billion EUR from the auction of the EU allowances under Emission Trading Scheme. Romania could benefit from Modernization Mechanism through 1,114 EUR billion EUR by taking into account 37,138 millions EUA. The fund will go (in 10 lower-income Member States, including our country) to the power sector (namely its modernization and for the diversification of the energy mix), increasing the energy efficiency and facilitating the transition to low-carbon economy.

The Innovation Fund will have 450 million EUAs supporting innovative technologies and state of the art innovation in industry. The funding available will represent 13,5 EUR billion and part of this amount could be used by the private Romanian companies covered by the EU Emission Trading Scheme.

Implementing the Green Deal in our country from environmental and climate perspective will be supported by more than 12,252 EUR billion, including the finance through New Generation EU and the mechanisms under Emission Trading Scheme.

## 6. References

- Bogojevic, S., 2013. *Emissions Trading Schemes: Markets, States and Law*. 1st edition. Oxford: Hart Publishing. p. 66;
- European Commission, 2019. *Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions “The European Green Deal”* (2019) 640 final)
- European Commission, 2020. *Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions “Sustainable Europe Investment Plan European Green Deal Investment Plan”* (2020) 21 final

- Goeree, J.K., Palmer, K., Holt, C.A., Shobe, W., Burtraw, D., 2010. An experimental study of auctions versus grandfathering to assign pollution permits. *Journal of the European Economic Association*, volume April–May 2010, pp. 514–525;
- Keller, D.P., Lenton, A., Littleton, E.W., Oschlies, A., Scott, V., Vaughan, N.E., 2018. The Effects of Carbon Dioxide Removal on the Carbon Cycle. *Current Climate Change Reports*, Volume 4, Issue 3, pp. 250–265;
- Kenig-Witkowska, M., Krämer, L., Ubysz, K., Stoczkiewicz, M., 2015. Derogations from a transition Free EU ETS allowances for the electricity sector in Poland. *Warszawa: ClientEarth Poland*. pp. 44-48;
- <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2019%3A640%3AFIN>
- <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0021>
- [https://ec.europa.eu/clima/policies/eu-climate-action\\_en](https://ec.europa.eu/clima/policies/eu-climate-action_en)
- [https://ec.europa.eu/clima/sites/clima/files/factsheet\\_ets\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/factsheet_ets_en.pdf)
- <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2018/09/The-EU-ETS-phase-IV-reform-implications-for-system-functioning-and-for-the-carbon-price-signal-Insight-38.pdf>
- <https://mfe.gov.ro/minister/periode-de-programare/perioda-2021-2027/>
- [https://gov.ro/fisiere/programe\\_fisiere/Planul\\_Na%C8%9Bional\\_de\\_Investi%C8%9Bii\\_%C8%99i\\_Relansare\\_Economic%C4%83.pdf](https://gov.ro/fisiere/programe_fisiere/Planul_Na%C8%9Bional_de_Investi%C8%9Bii_%C8%99i_Relansare_Economic%C4%83.pdf)