

European energy policies in the context of the Green Deal

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Climate change and environmental degradation represent a serious challenge and threat to the citizens of Europe and the whole of humanity. In order to overcome these challenges and threats, the European leaders have drawn up a package of measures, which will transform the European Union into a modern, efficient and durable economy from the point of view of resources, but also competitive, from the point of view of fulfillment climate neutrality objectives until 2050.



Thus, in December 2019, the European Commission approved the European Green Deal, an ambitious policy package having a fundamental role in transforming the European Union's economy into an ecologically sustainable economy in the sense of achieving climate neutrality by 2050 and transforming the transition into an economic and industrial opportunity for the whole of Europe and the whole world.

The package includes a wide range of policy measures and subsidies designed to limit pollution, but also to pursue the involvement of the research, innovation and investment sectors in green technologies.



The Green Deal is the new vision for reconfiguring Europe, which aims to reset the economy on pillars of growth and sustainability, which will transform the climate of life, work, production and consumption into a healthy and suitable climate for current and future generations, but which will ensure the development of research, innovation and digitization capacities for the existence and survival of the construction and future of Europe.

The future of Europe must be rethought through the lens of redefining European policies, especially energy ones, which will have a direct and substantial role in transforming climate and environmental challenges into opportunities for all policy areas, but which will also guarantee a transition towards targeted clean energy towards an efficient, fair and inclusive energy in order to achieve the climate objectives for 2030 and 2050.



In order to achieve the climate objectives for 2030 and 2050, energy policies must focus on the decarbonisation of the energy system, on phasing out coal, on increasing the use of renewable sources, on the full integration of European electricity networks, on their digitalization, as well as on the energy supply of the European Union, under safe and accessible conditions for domestic consumers and companies.

The Green Deal offers the opportunity for energy policies to play a fundamental role in changing the paradigm of European society to a society based on an efficient, fair and inclusive transition for everyone to achieve the climate goals for 2030 and 2050 that contribute to economic growth and to the development of modern society in general.



Green Deal policies are based on fundamental principles for the transition to clean energy, which aims to limit greenhouse gas emissions and improve the quality of life of European citizens.

These principles follow:

- ensuring and maintaining an efficient supply of safe, durable and affordable energy for the European Union;
- the development of an energy market of the European Union fully based on criteria of integration, interconnection and digitization;
- prioritizing energy efficiency as the fundamental policy for space in the European Union;
- improving and perfecting the energy performance of buildings;
- the development of energy sectors based on renewable sources.



The main objectives of the European Commission in this matter are:

- to create interconnected energy systems and better integrated networks to support renewable energy sources;

- to promote innovative technologies and modern infrastructures in order to stimulate energy efficiency;

- ecological design of products;
- decarbonisation of the gas sector;

- promoting intelligent integration between sectors in the energy field to stimulate domestic and industrial consumers and the cooperation of the states of the European Union.



Also, the Commission addressed through the lens of the Green Deal and energy poverty in the member states of the European Union, in the sense of promoting EU energy standards and technologies through a global interconnection for the development of the entire potential of Europe's offshore wind energy.

In the context of the transition to clean energy, the Commission proposes to increase the mandatory objective of renewable sources in the energy mix of the European Union to a percentage of 40%.

The proposals promote the adoption of renewable fuels such as: hydrogen in industry and transport. In addition, reducing energy consumption is essential to reduce both emissions and energy costs for consumers and industry.



The Commission proposes to also increase the objectives regarding energy efficiency at the EU level and make them mandatory for the member states, in order to achieve a global reduction of 36-39% in final and primary energy consumption by 2030.

- **40%** new renewable energy target for 2030;
- 36-39 % new 2030 energy efficiency targets for final and primary energy consumption.



In order to fulfill these targets, there is a need for an interconnection of the energy infrastructure between the states of the European Union, which can play a fundamental role in ensuring a diversified supply of energy and in a better mitigation of possible energy interruptions for both domestic and industrial consumers.

In order to ensure the interconnection of energy infrastructures and the achievement of climate neutrality, by 2050 the involvement of the research, innovation and digitization sector is needed, therefore, currently, the European Commission is revising a series of instruments regarding the financing of cross-border energy infrastructure projects in order to and meet climate objectives.



In order to make Europe climate neutral by 2050, the Green Deal must pursue as its main objective: reshaping the way energy is produced and consumed in the European Union space. Both the production and use of energy in the entire economy represent more than 80% of the greenhouse gas emissions of the European Union.

Approximately three quarters of the energy system of the European Union is based on fossil fuels. Oil dominates the energy mix of the European Union (having a share of around 35%), natural gas (24%) and coal (14%).

In terms of renewable energy sources, there is an increase, with a percentage of 13.9 percent), in relation to the nuclear field, which has a percentage of approximately 12.6%.



According to the studies and forecasts of the European Commission, the change will be progressive, in the sense that fossil fuels will deliver approximately half of the energy to the European Union states until 2030.

The use of coal, considered almost the most polluting element in the energy mix - must be significantly limited until 2030, while oil and especially natural gas may be phased out later. If the states of the world and in particular, the countries of the European Union, through the implementation of the Green Deal, will be successful and climate neutrality will be reached.

The EU's vision for the energy sector is largely based on energy efficiency and renewable energy, while the pact also addresses important issues such as gas decarbonisation, energy affordability, as well as market integration, connectivity and digitalization of markets.



One of the main ways in which the European Commission aims to achieve climate neutrality is the decarbonisation of the energy sector. For the decarbonisation of the energy sector, several financing mechanisms have been established to support the established objectives:

-The Recovery and Resilience Facility, a fund that will make available € 672.5 billion in loans and grants to support reforms and investment in member countries. It should be noted that 37% of the expenses will be directed to investments and climate reforms;

-The Just Transition Mechanism, the key factor of the Green Deal, which mobilizes funds worth EUR 150 billion by the end of 2027 through a common fund (Just Transition Fund), a transition system (the InvestEU "Just Transition" schema" with EUR 30 billion in investments) and a European Investment Bank public sector loan scheme (backed by EUR 1.5 billion from the EU budget, mobilizing up to EUR 30 billion in investments);



-The EU Renewable Energy Financing Mechanism, in which the private sector will be involved in order to develop renewable energy projects for national energy markets;

-The Modernization Fund for energy efficiency projects. Private companies, public entities and other types of organizations can attract between 70% and 100% non-repayable financing for investments in the modernization of the energy sector and energy systems;

-The Innovation Fund (EUR 10 billion) focuses on investments in innovative technologies that can contribute to significant limitations on gas emissions. Companies, public entities and international organizations have the possibility to obtain up to 60% of the innovation expenses for such projects.



-The Connecting Europe Facility aims to facilitate the decarbonisation and interoperability of cross-border and sectoral networks.

Legal entities can provide up to 50% (or 75% under specific conditions) of the investment expenses for energy transport and for cross-border renewable energy projects.

Using these mechanisms, energy, especially renewable sources, will play a fundamental role in preventing and combating climate change, and in the long term, the objective of member states is to eventually eliminate coal and other fossil fuels from their energy mix.



The European Green Deal will improve the well-being and health of citizens and future generations by providing:



fresh air, clean water, healthy soil and biodiversity

renovated, energy efficient buildings



healthy and affordable food



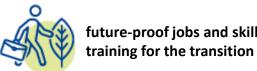
more public transport



longer lasting products that can be repaired, recycled and re-used



cleaner energy cuttingand clean edge technological innovation



future-proof jobs and skills



globally competitive and resilient industry

(Source: A European Green Deal | European Commission (europa.eu))



Thank you for your attention!