# BENCHMARKS OF FARM TO FORK STRATEGY AS PART OF GREEN DEAL

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#### Abstract

The Green Deal initiative was launched as a response to growing concerns about climate change and environmental degradation. The Paris Agreement of 2015 was a turning point, and the European Union committed itself to acting in accordance with the objectives of this agreement. The article aims to provide a detailed analysis of the objectives, measures and implications of this plan for the environment, economy and society, while illustrating the successes and challenges encountered during its implementation. The Green Deal, adopted in 2019, was a response to these demands, with the objective of making the European Union climate neutral by 2050 and promoting sustainable development. The main objectives of the Green Deal cover a number of key areas, including tackling climate change, promoting renewable energy, boosting sustainable mobility, the circular economy and protecting biodiversity.

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#### 1. Introduction

The premises that led to the emergence of the Green Deal are complex and reflect a growing awareness of the environmental and social challenges facing Europe. The climate crisis, the increase in pollution, the loss of biodiversity and the aggression of the environment have become urgent problems for European society and for the entire planet. It also makes Europe aware of its dependence on fossil energy imports and its vulnerability to supply disruptions. These threats have necessitated strong action to protect the environment, reduce greenhouse gas emissions and create a sustainable economy. The Green Deal emerged as a response to these premises and as an effort to transform Europe into a global leader in sustainability, promoting the transition to a greener and more climate-resilient society.

The Green Deal is an ambitious commitment to transform Europe into a greener, more sustainable and more resilient society. This is not only an ecological issue, but also an economic and social one, with significant implications for how Europe develops and relates to global issues such as climate change (European Commission, 2019).

The purpose of this paper is to inform, educate and raise awareness about the importance and impact of this significant political and ecological innovation in the context of the European Union. The article aims to provide a detailed analysis of the objectives, measures and implications of this plan for the environment, economy and society, while illustrating the

successes and challenges encountered during its implementation. The aim is also to encourage critical thinking and inspire citizens and decision-makers to support initiatives that promote sustainability, fight climate change and ensure a better and cleaner future for all. Thus, the article aims to contribute to greater awareness and commitment regarding the transition to a greener and more sustainable Europe.

### 2. Methodology

This article is based on an analysis of official European Union documents, as well as data and information provided by institutions and organizations relevant to the Green Deal implementation. We also carried out desk research to collect current data on the implementation of measures and the impact of the Green Deal initiative in different EU Member States. We have also critically assessed the sources to ensure the quality and credibility of the data used in this article in order to provide a balanced and objective presentation of the Green Deal.

## 3. Discussions

## 3.1 A walk through history- the need for a green pact

In the light of recent research on rising global temperatures, in 2015 the United Nations has ratified the Paris Agreement – the United Nations Framework Convention on Climate Change – through its 55 signatory states. This is the first global agreement to provide for legal obligations. It was signed in 2016 and ratified by the European Commission in the same year. The fundamental priorities of this agreement are the threat of climate change, sustainable development and poverty eradication, food security, just labour transition and decent job creation, ensuring the integrity of ecosystems, oceans, protecting biodiversity, raising public awareness of global warming, the importance of sustainable patterns of consumption and production.

In 2019, the European Parliament considered that concerns about climate change assessed as priorities in the Paris Agreement should be mainstreamed by the Commission into European legislation.

EC has come up with a response to these requirements, adopting in 2019 the Green Deal, which includes strategic objectives in all areas it aims to achieve by 2030, with the aim of making the European Union a climate-neutral and sustainable Union by 2050.

The Green Deal, or "European Green Deal," is a major initiative of the European Union (EU) that was launched in December 2019. The proposal was made by Ursula von der Leyen, President of the European Commission, during her inauguration speech. The Green Deal is a response to growing concerns about climate change, environmental degradation and the need to address the major environmental challenges facing Europe and the world as a whole.

The main objectives of the Green Deal are to transform Europe into a net zero carbon economy by 2050 and ensure sustainable development. This plan includes a series of measures and policies aimed at reducing greenhouse gas emissions, promoting energy efficiency, supporting the use of renewable energy, encouraging sustainable mobility and protecting biodiversity. The Green Deal also aims to create jobs, boost innovation and economic transformation to meet current and future environmental challenges (European Commission, 2019).

The Green Deal initiative received strong support at European level and was presented in response to the demands of European citizens to address the climate crisis and commit to a transition to a more sustainable society. Over time, the Green Deal has evolved and been supplemented with specific strategies and funding programs designed to help achieve the set objectives. It is seen as a central element of EU policy for the coming decades regarding the environment and sustainable development (Cordella et al., 2022).

The Green Deal initiatives include all areas of environment, climate, industry, transport, agriculture and sustainable development, as they are closely linked to each other. Only if these areas are analysed and treated in an integrated way will the proposed targets be achieved.

#### **3.2 Objectives of Green Deal**

The main objectives of the Green Deal, or European Green Deal, represent an ambitious agenda to make Europe greener, more sustainable and better prepared to respond to climate threats. This strategic plan includes several key objectives (Figure 1).



One of the core objectives of the Green Deal is to achieve climate neutrality by 2050. This means that net greenhouse gas emissions will be reduced to zero, making a significant contribution to efforts to combat change climatic. In the same time, the Green Deal aims to transform the energy sector by promoting renewable energies and energy efficiency. The objective is to reduce dependence on fossil fuels and create a cleaner and more sustainable energy grid.

Sustainable mobility in another key objective set by green deal. The plan includes measures to promote public transport, sustainable mobility and the development of green transport infrastructure. The aim is to reduce carbon emissions from the transport sector and improve air quality in urban areas. Topics related to circular economy were also foreseen. The Green Deal aims to reduce the excessive consumption of resources and promote a circular economy, in which waste is recycled, reused and minimized, thus helping to protect the environment (Filipović et al., 2022).

Last, but not least, the initiative is committed to protecting biodiversity and restoring natural ecosystems, with the objective of conserving the environment and preventing species loss (EC et al., 2019).

## 3.3. Measures proposed by Green Deal

The Green Deal includes a series of concrete measures to help achieve the set objectives. These measures cover a wide range of areas, from energy and transport to the circular economy and biodiversity. In the following paragraph there are presented a few of such specific measures under the Green Deal.

## Fit for 55

The "Fit for 55 Package" is an essential component of the Green Deal and a comprehensive set of legislative measures proposed by the European Commission in July 2021. The name "Fit for 55" is due to the objective of reducing greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels. This legislative package includes several proposals and measures to achieve these ambitious goals. Among the most notable proposals are expanding the carbon trading system (ETS) to include sectors such as road transport and construction, setting emission reduction targets for member states and promoting the use of renewable energy and clean technologies in areas such as transport and industry. Fit for 55 is a significant step towards making the Green Deal a reality and contributing to the EU's efforts to tackle climate change and create a more sustainable Europe. It represent, on the one hand, proposals to revise legislation in the areas of climate and environment, energy, transport, and on the other hand, a number of new legislative initiatives to be in line with EU climate objectives. In order to achieve, from a social perspective, a fair and equitable transition, in order to maintain and strengthen the competitiveness of industrial companies in the European Union, to create a fair framework for economic operators from countries outside the Union, the legislative framework should be balanced and coherent. Meeting the objectives of the Fit for 55 package, the Union strengthens its leadership in the global fight against climate change (EC et al., 2021b).

### European climate law

The political ambition to achieve climate neutrality by 2050 becomes an obligation under European climate law. By adopting this legislation, member states are committed to reaching the target of reducing greenhouse gases by 55 % by 2030 compared to the values measured in 1990. This objective is based on an impact assessment study carried out by the European Commission.

## EU strategy on adaptation to climate change

The strategy includes actions that by implementing them transform society into a society that can adapt to the impacts of climate change. These actions include nature-inspired solutions that help protect ecosystems, increase resilience to climate change and help the union become climate neutral.

### EU Biodiversity Strategy for 2030

The EU Biodiversity Strategy for 2030 aims to help restore Europe's biodiversity by 2030. The EU Biodiversity Strategy includes actions aimed at restoring Europe's biodiversity by 2030. Reducing the use of pesticides and increasing funding for action can achieve the strategy's goals of restoring biodiversity by 2030 for the benefit of nature, climate and people. **Farm to Fork Strategy** 

The Commission's Farm to Fork Strategy will help the EU achieve climate neutrality by 2050, refocusing towards a sustainable model of the current EU food system.

The key objectives of the strategy are to ensure sufficient, affordable and nutritious food supplies within planetary boundaries; halving the use of pesticides, fertilisers and the sale of

antimicrobials; increasing the area of land used in organic farming; informing and raising awareness of consumers to adopt more sustainable food consumption and healthy diets; reducing food waste; combating food fraud along the food supply chain; increase animal welfare (Consilium - European Union).

The main objectives of the two Farm to fork strategies and the EU Biodiversity Strategy for 2030 being aligned, are considered complementary.

Creating a sustainable food chain and achieving healthy and resilient ecosystems will be made possible by implementing the objectives and commitments of these strategies that are considered crucial for agriculture.

Farm to Fork Strategy is part of the European Green Deal, a strategy that was presented in May 2020 by the European Commission. Among the main objectives of the strategy are: reducing the consumption of pesticides, chemical fertilizers in agriculture, increasing the number of farms that adopt ecological agriculture, combating food fraud and reducing food waste.

Recently, more and more consumers are interested in adopting a healthy lifestyle, especially the food style, consuming agro-food products obtained in ecological farms or obtaining part of the necessary food in their own household, especially in rural areas. Farmers use pesticides and chemical fertilizers in their vegetable farms to fight diseases, pests, but also to obtain high yields per hectare. The agricultural products obtained in the conventional system have a lower selling price compared to ecological products because the production obtained is high, mechanized works are carried out with agricultural machines that have a high yield, but these machines damage the environment because they work on the basis of fossil fuels. Farms that have adopted the ecological culture system do not use pesticides or fertilizers and the work during the growing season is not carried out only in a mechanized system, avoiding pollution and the production being lower and the selling price higher.

Food fraud continues to be a big problem at the global level because it endangers the health of consumers and the economy. In order to obtain the highest possible profit, there are food product manufacturers who do not respect the flow of obtaining the finished product, more precisely the ingredients specified on the label do not correspond or are not found in the content of the respective product, for example, irregularities were found in what It is. it concerns telemeau made from sheep's milk that also contained cow's milk or horse meat sold as beef. In addition to these situations, there are also economic agents that sell adulterated or expired agri-food products, endangering the health of the population, leading in most cases to severe forms of food poisoning and intolerances (Beia et al., 2020).

Ecological agriculture represents the process of obtaining agricultural products that do not harm the environment, prohibits the use of herbicides, pesticides, chemical fertilizers in vegetable farms. In the zootechnical agricultural sector, the administration of antibiotics and growth hormones is avoided because the goal is for the animals to be fed with natural feed. The action plan for the development of organic production provides that by 2025, 25% of agricultural land at the EU level should adopt the organic farming system. The purpose of this plan is to provide healthy food to the population and to reduce environmental pollution.

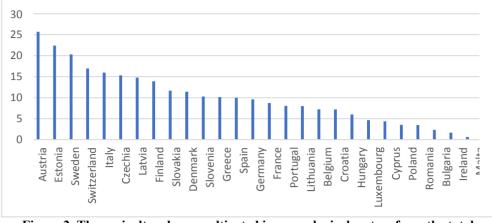


Figure 2. The agricultural area cultivated in an ecological system from the total agricultural area used in the EU in 2020 Source: Eurostat

## The food security plan

At the beginning of the Coronavirus Pandemic, in 2020, the vulnerability of the food chain at the level of supply was discovered because some consumers stocked up with agri-food products that would reach them for a longer period of time than usual. In this case, the stores registered delays regarding the supply because the demand was very high. There were no deficiencies in terms of ensuring food security, there were delays in the distribution of products because the demand increased in a very short time and the big retailers did not expect such a large increase in sales. These delays were found among long supply chains, therefore it was proven that short supply chains have a higher yield because the products arrive in a shorter time from the producer to the consumer, at the same time reducing transport costs, lower costs that will be found in the final price.

## World standards for food safety

The Council of the European Union approved in February 2022 the conclusions on food safety standards for international trade, placing greater emphasis on the integration of sustainability concerns in the work of the Codex Alimentarius Commission. Codex Alimentarius is a set of standards, guidelines and codes of practice, which includes standards for all main food categories, processed, semi-processed or raw products. These standards represent a high level of safety for consumers regarding the quality of the products they purchase.

## Labeling of organic pet food

Until 2022, the criteria for organic food for pets were decided at the national level. More precisely, pet food could be considered organic food even if it contained some ingredients that did not come from organic production. The new EU regulation regarding the labeling of organic food for pets establishes a series of rules. The main objectives are to present organic ingredients in animal feed to consumers, to ensure that pet food marked with the EU organic logo contains at least 95% organic ingredients, to contribute to the development of organic production in the EU.

## **Industrial Strategy for Europe**

European industry is a basic element that can help transition to climate neutrality through innovation and economic growth, which are the main objectives of the strategy.

#### **Circular Economy Action Plan**

The separation of resource use from economic development and the adoption of circular production and consumption systems are key elements in achieving climate neutrality in the EU by 2050. The circular economy and the sustainable use of biomass play a significant role in the Green Deal, the European Union's ambitious initiative to transform Europe into a greener and more sustainable society. The Green Deal promotes the circular economy, which involves recycling, reusing and reducing waste, thereby helping to reduce pressure on natural resources and the environment. At the same time, it is encouraged the sustainable use of biomass as a renewable and biodegradable energy source, contributing to the reduction of carbon emissions and the transition to clean energy sources (Rodino et al., 2019). This synergy between the circular economy and the use of biomass is a key element in the strategy to combat climate change and protect the environment, according to the objectives of the Green Deal. Thus, a holistic approach is being developed to manage resources and energy sustainably, while promoting innovation and job creation in the environment and energy sectors.

### **Batteries and waste batteries**

The European Union, in view of electric mobility, considered it necessary to adopt a regulation to create a circular economy in the field of batteries. This initiative is of major importance because it fully targets the life cycle stages of batteries, from design to recycling.

#### A Just Transition

The correct transition mechanism introduced by the EU provides financial and technical support to the affected areas to support them in the transition to a low-carbon economy.

Over the period 2021-2027, 55 billion will be earmarked for community support, i.e. reskilling, energy efficiency of homes, supporting businesses facilitating the transition to low carbon emissions, investments in technology, research, sustainable public transport and in digitalisation.

## Clean, affordable and secure energy

The highest percentage of greenhouse gas emissions in the EU in the field of energy production is 75 %. For these reasons, decarbonisation of the energy sector is essential for achieving climate neutrality.

It works on multiple levels to achieve goals to get energy from cleaner sources. To this end, the integration and interconnection of energy systems across the EU and the revision of energy efficiency legislation are developed and adopted.

## EU Strategy for Sustainability in Chemicals

This strategy decides on the future vision of the EU's chemicals policy. The aim is to ensure a high level of human health, a more competent industry, a chemical-free environment. The strategy is seen as an essential part of the European Green Deal and its goal of reducing pollution to zero.

#### **Forest and Deforestation Strategy**

This strategy was presented in 2021 by the Commission and is based on the Biodiversity Strategy and is an important component of the implementation of actions to reduce greenhouse gas emissions to 55 % by 2030.

The actions cover sustainable forest management, financial support to forest owners to adopt environmentally friendly practices, increase forest size and rebuild biodiversity and plant 3 billion trees by 2030.

The European Union's commitment to climate neutrality has been included on the strategic agenda of the European Council and the European Parliament as a clear goal for the coming years.

An important element of Green Deal Plan is related to organic agriculture. The Green Deal is at the heart of the European Union's efforts to promote organic farming, which plays a significant role in achieving environmental and sustainability goals. In the context of the COVID-19 pandemic, this connection becomes even more evident. Organic farming and local food production have become priorities in the response to the pandemic, with an increased focus on food security and food chain sustainability. The Green Deal aligns itself with this evolution, promoting environmentally friendly agricultural practices, reducing the use of pesticides and the impact on biodiversity. At the same time, consumers have become more aware of the origin and production methods of the food they purchase, preferring local and organic products, which supports the transition to more sustainable agriculture. As a whole, the Green Deal, organic farming and the changes induced by the COVID-19 pandemic are converging to promote a more sustainable food system and to respond to today's challenges in a green and responsible way (Butu et al., 2019).

#### 3.4. Challenges and critics to Green Deal

The Green Deal, with all its ambitions and promises to make Europe greener and more sustainable, faces various challenges and criticisms. One of the major issues is the high cost associated with implementing this ambitious plan. The financing needed to transition to green energy and transform various economic sectors can be overwhelming and impact national budgets and citizens (Sikora et al., 2021).

There are also concerns about the ability of Member States to successfully implement the Green Deal measures, given the significant differences in the level of economic development and infrastructure. In addition, the fossil industry and other sectors affected by the green transition may experience economic and social consequences such as job losses. Critics of the Green Deal argue that the proposed targets may not be achievable within a reasonable time frame and that, instead, significant costs to the economy could be generated. However, supporters of the plan argued that these challenges and criticisms can be overcome with effective management and a serious commitment at national and European level to make the green transition a reality (Ulpiani et al., 2023).

However, Green Deal proponents point out that these criticisms can be addressed and overcome through smart investment, appropriate support policies and strategic planning. They also argue that the long-term benefits of the green transition, such as energy savings, sustainable economic growth and reduced environmental impact, far outweigh the immediate costs and challenges (Bongardt et al., 2022).

### Conclusions

Green Deal represents an initiative of overwhelming importance for Romania, having impact in multiple fields. First of all, it contributes to achieving the commitments assumed by Romania under the Paris Agreement, to reduce greenhouse gas emissions and to fight against

climate change, which affects the country through extreme weather phenomena and environmental degradation. The Green Deal also offers significant economic opportunities, especially in the renewable energy sector, where Romania has considerable potential. Investments in this sector can generate economic growth and jobs.

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