

## THE MAIN DIFFERENCES BETWEEN THE UPDATED BIOECONOMY STRATEGY AND THE EUROPEAN GREEN DEAL

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### **Abstract**

*Since the industrial revolution, the global economy has consistently relied on fossil fuel reserves, such as natural gas, oil, or carbon for industrial use. They have been and are used to produce a diverse range of products: fuel, chemicals, pharmaceuticals, synthetic fiber soaps, plastics, etc. All this to meet the demand of a growing population. The concept of bioeconomy is at the center of strategies worldwide. That is true for European Union (EU), which made a priority the development of bioeconomy. The term bioeconomy is still very diverse, but the EU's efforts in this direction to develop sustainable research, innovation and entrepreneurship play a huge role in raising awareness. At the end of 2019, the strategy that was in place, The Updated Bioeconomy Strategy was joined by a new one, European Green Deal. Bioeconomic strategies conceptualize future development as being devoid of alternatives and their objectives as more or less accessible. Nevertheless, the debate of bioeconomic policies has revealed several impediments and uncertainties, diverging interests in the bioeconomy and concepts.*

*This paper aims to study the main similarities and differences between the strategies that EU has adopted in the area of bioeconomy, with the Updated Bioeconomy Strategy from 2018 and the European Green Deal from 2020. The methodology of this paper comprises the review of the main similarities and differences of the two strategies, to accomplish the foundation for further research. Thus, we can outline that the bioeconomy is playing a significant contribution in shaping the policy of the EU given the growing number of policies adopted in the past years.*

**Keywords:** bioeconomy; European Union; strategies; European Green Deal; Updated Bioeconomy Strategy

**Clasificare JEL :** Q56, Q57

### **1. Introduction**

The concept of linear economic growth indicates that consumption of natural resources reserves is closely connected to the economic growth. (Roser, et al., 2013). The concept of taking on the challenge of increasing population and resource use has been around for a long time. However, with the implementation of sustainable actions, these downsides can be reduced.

Bioeconomy is a concept where bio-based resources are used to produce various goods and services. This emerging concept refers to the use of renewable materials such as algae, plant tissue, and soil to generate various products and services. (Ronzon, et al., 2020, p.1).

The European Green Deal is aiming to decouple the economic development from natural resource utilization. (European Commission, 2019, p.3) and the world's greenhouse gas emissions will have been reduced significantly, by 2050 according to the Paris Agreement (European Commission, 2019, p.3). This responsibility has a comprehensive and cross-sectoral way to deal with use assets even more effectively by propelling the economy as cleaner and more circular. To be more explicit, it has different regions, which incorporate biodiversity, supportable agribusiness, cleaner energy, feasible food frameworks, and environment lack of bias. Likewise, this arrangement focuses to return biodiversity to its past and better conditions. Presently, practically 90% of ozone harming substance discharges come from energy enterprises, transport, farming, and fuel ignition by energy clients (European Environment Agency, 2017). For accomplishing these objectives, the EU needs to act in all sectors of its economy. For instance, by subsidizing ecological advances to help advancement, making a zero-carbon energy area, fostering a more energy-effective structure area, and framing the vehicle area as less expensive, cleaner, and better, European nations can relieve such ozone harming substance discharges. Nonetheless, other than this load of green monetary plans,

overseeing government financial plans, and applying charge changes under natural concerns are likewise huge and characterized under this arrangement. Consequently, the bioeconomy can reinforce Europe and lift accomplishing European Green Deal by boosting advancement while protecting the climate and biodiversity. The importance of government spending on overheads and good public governance is significant for sustainable economic development. This topic has garnered new evidence that supports the link between good governance and economic growth (Noja et al., 2021)

Bioeconomy can possibly make to flourish these green desires. It can upgrade to satisfy the responsibilities, for example, to accomplish the environment objectives of the EGD and the Paris Agreement, contracting states should zero in on bio-based arrangements or inventive methods of delivering and utilizing normal assets rather than the extreme use of non-renewable energy sources, minerals, and other regular assets as the straight economy recommends. (European Commission, 2018). The Bioeconomy Strategy is a necessary activity intend to streamline the commitment of the European Green Deal related with the United Nations SDG and the Paris Agreement. To flourish a manageable and a circular economy, five targets of the Bioeconomy Strategy are indispensable to speed up the cycles and investigating these five destinations with their advantages and potential use-cases can be useful to determine how the sector of bioeconomy complements the European Green Deal. On the off chance that the current strategies are amended to utilize low-carbon biofuels, hostile natural effects can be eased, similarly to how the Bioeconomy Strategy proposes. These objectives are guaranteeing food security, diminishing the reliance on non-inexhaustible assets, moderating, and adjusting to environmental change, and fortifying European seriousness, and making occupations (European Commission, 2018).

## 2. Literature review

A common EU research and funding policy began in the year 1982 with the European Commission's first program dedicated to research about biotechnology (Biomolecular Engineering Program). Several research programs in the field of biotechnology have followed over the next three decades (Aguilar et al., 2012).

A key tool for implementing the strategy is the EU's Horizon 2020 research and innovation program for 2014-2020, the "Biotechnology" part of the "Industrial Management" section and the "Food security, sustainable agriculture and forestry, research" section. "Marine, Maritime and Inland Waterways and the Bioeconomy " in the Societal Challenges section, with a dedicated budget of € 4.1 billion for the latter for the period 2014-2020 (EC, 2012).

In 2018, the European Commission updated its strategy for sustainable and circular economy. The updated strategy focus through 14 specific actions, which are aimed at creating a sustainable and circular society. (EC, 2018).

The EU is aiming to lead the world in tackling climate change by 2050. (European Commission, 2020) this includes ambitious goals of accomplishing a carbon-neutral economy. The course of action builds on the 2030 worldwide goals and aims to hasten the achievement of these goals by EU countries comparative to the rest of world. The competition will stimulate further discussions on climate change and the environment. (EuroMemo Group, 2019). The EGD should likewise guarantee the truth of long-haul execution of SDGs, regardless of the need to respond to squeezing emergency difficulties, for example, the Covid pandemic, psychological oppressor dangers and relocation identified with threats, tyrannies, natural debacles, etc.

In compliance with the new comprehension of the Green New Deal, the duty of the approach extends essentially (Ikerd, 2019) and isn't restricted to natural angles, however, gets back to the classification of manageability and comprehensiveness. Specifically, this applies to food and sanitation as a significant component in securing purchasers' privileges and guaranteeing their good wellbeing. A comparative perspective on the substance of the GND is illustrated in Seitz and Krutka

(2020). The new environmental arrangement is similarly applicable for China, whose fast financial development more than thirty years has caused huge ecological harm (Li, 2014). Present day China knows about the certainty of changes in the field of ecological assurance and natural administration, which are straightforwardly associated not exclusively to the conspicuous adverse results for general wellbeing, yet in addition for additional financial turn of events, particularly over the long haul.

EGD additionally plans to execute arrangements in different areas of the economy pointed toward establishing an eco-accommodating climate for people. Likewise, because of the need to change the metropolitan climate, the green course will build a circular economy to bring them nearer to where individuals live and work. Pianta and Lucchese (2020) additionally contend that EGD's drawbacks incorporate the absence of assets to accomplish the expressed excessively yearning objectives. All things being equal, "a more extensive scope of 'green' modern strategies" is required. The EU new green arrangement proposes focuses for 2030 (for instance, splitting emanations contrasted with 1990) and 2050 (Schiermeier, 2020).

### 3. The Updated Bioeconomy Strategy

The bioeconomy has become an integral part of European policy. Its importance has become more visible in recent years. The various political positions taken by different actors during the review process revealed a wide range of viewpoints on the prospect of the European bioeconomy. Although these positions differed, they did not lead to a vital debate on the strategy's aims and substance.

The Commission's revised bioeconomy strategy was presented at a summit in Brussels in October 2018. The strategy updates the Commission's previous bioeconomy plan, which was launched in 2012. It aims to address the challenges presented by climate change, land degradation, and global population growth. (EC, 2018a: 4–5). The need for a sustainable economy is introduced as an opportunity to improve the efficiency of industry and create new jobs in the biotechnology industry. This framework should help minimize greenhouse gas emissions and develop a circular economy (EC, 2018a: 5–7).

The importance of research and innovation in the bioeconomy is also highlighted in the new strategy. The proposed funding for bioeconomy research is 10 billion euro. This level is included in the 2021–2027 Framework Programme (EC, 2018a: 7–8).

The strategy maintains the main goals of the 2012 and defines fourteen actions to reach them. These include scaling-up the biobased sectors; promoting new processes; and developing an investment platform, endorsed with 100 million euro, that would support both bio-based and plastic industries (EC, 2018a: 8–12). The second goal, which is focused on local bioeconomies, aims to deploy local production methods locally. This goal is organized into a strategic deployment agenda that includes measures to aid MS in developing and implementing bioeconomy policies (EC, 2018a: 8–14). The third goal aims to raise awareness about the ecological limitations of the bio economy. This area includes measures to increase knowledge about the various ecological impacts of bioeconomy (EC, 2018a: 14–15).

The updated strategy can be considered a correspondence between the positions of the actors who participated in the survey and the positions of those who support its expansion or continuation. The strategy's prioritisation of an industrial policy, an innovation-oriented economy development program, and a social-based research program are all broadly reflect in its measures. However, demands for a fundamental reassessment of bioeconomy policy are not reflected in the strategy.

The concept of bioeconomy was first established during the early 1980s. This process started with the establishment of biotechnology research (Patermann and Aguilar, 2018). The process of developing the bioeconomy began at the start of the decade when debates on the knowledge-based bioeconomy took place at the EU level. By 2012, the bioeconomy strategy had been established. (Patermann and Aguilar, 2018: 23–24).

The relationship between the bioeconomy and the hegemonic world view is also linked to the concepts of competition and knowledge-based growth. (Apeldoorn et al., 2009: 28–31). The European Union has set out a course of smart and sustainable growth that is its main policy priority. Since 2010, the goal of competitiveness and the growth imperative have become the core elements of the EU's meta-narrative (EC, 2010: 3).

While actors can position themselves in different ways within the context of European bioeconomy policy, they cannot easily alter these conditions. This is because their interests are aligned with those of the responsible state apparatus. Other positions that are focused on specific goals such as climate or environmental protection may find their way into the debate about bioeconomy policy often. However, their influence on policies is still marginal unless they are clearly defined and reflected in the political action structure.

#### **4. The European Green Deal**

The European Green Deal aims to reduce greenhouse gas emissions and make the transition to a climate neutral economy within 2050, EGD is an ambitious set of measures, a policy in an unprecedented effort by the European Commission to tackle climate-change and reduce greenhouse gas emission. It was first announced in December 2019, and it was in effect as of January 2020.

It proposes a set of actions aimed at reducing greenhouse-gas emissions by at least 50% by the year 2030 - COM (2019). The concept of the EU2020 is focused on transforming the EU into a “fair and prosperous society, with a modern, resource efficient and competitive economy” - COM (2019) by 2050.

The evolution of the EGD framework is an opportunity to adopt a horizontal regulatory approach that is based on effective instruments and efficient use of time (Miccinilli, 2020). This opportunity arises from the various legal developments and political commitment made by the international community towards addressing climate change. These developments are part of the EU's climate law and are formally recognized in the Lisbon Treaty - Chalmers (1999)- besides the EU law we must consider the Paris Agreement (2015), un 2030 Agenda and the SDGs (2015).

The European Commission's Green Deal Investment Plan was launched in January 2020. It aims to mobilize 1 trillion worth of sustainable investments within the next decade The EGD can, if it remains a priority for both the short and long run, significantly alter the Union's economy and its financial position according to Siddi (2020). The Union's new industrial strategy will be aligned with the European Green Development Agenda, which was adopted on March 2020 – COM (2020).

The impact of the EGD on various levels should be assessed. It should be approached from multiple perspectives ranging from the perspective of the constitutional EU law to the impact that it may have economically and socially. The EU's various climate policies and actions are liable to cause a climate spill-over effect. This effect will affect the substance of the EU's actions and policies. The enforcement level of environmental commitments expressed in the EGD objectives should be enhanced once the legal instruments are translated into their intended form. This is because the enforcement of these commitments would be enhanced if they are enforced properly.

The Water Framework Directive (WFD, 2000) is a landmark law that sets out the objectives and procedures for implementing water-related projects. It has been interpreted by the Court of Justice as requiring Member States to prevent the construction of projects that threaten the status of a body of water or its chemical composition. The objective of the directive is to provide a substantive obligation for the adoption and implementation of climate neutrality plans and actions. The concept of green transition is an opportunity, but it must be properly anchored in the concepts related to the EU's legal order to succeed.

## 5. Conclusion

The European Bioeconomy Strategy is an arrangement to create a bioeconomy that is both supportable and roundabout. It intends to add to Europe's practical turn of events and ozone depleting substance decrease.

To comprehend the part of the Bioeconomy in Europe's recuperation even more likely, we need to take a gander at the construction of the bioeconomy. Key financial markers show that the agri-food area produces 3/4 of the worth added and occupations.

Notwithstanding, the generally financial slump has decreased the limit of organizations to put resources into new imaginative and then some maintainable bio-based ventures. Europe's development methodology – the Green Deal including the Recovery and Resilience plan – gives now a significant chance likewise for the bioeconomy, as these public ventures will want to help the green change.

One example of how a monetary instrument could contribute to the achievement of the European Green Deal is the European Union's Bioeconomy Fund. This fund helps establish bio-based waste and reuse offices.

However, bioeconomy and its utilization of biomass are not a panacea for all difficulties. As monetary examination shows, the image is more perplexing and portrayed in terms of professional career offs. For example, endeavouring towards a more useful bioeconomy infers primary change, which could lessen the quantity of occupations.

The advantages of the bioeconomy can be seen in all areas of the European Green Deal, including the areas of timberland bioeconomy, blue bioeconomy, and so on. Even though saving and re-establishing biodiversity and environments are composed as an arrangement under this arrangement, it's anything but a tight viewpoint. European timberland-based industries can provide support biodiversity and the environment through their woods bioeconomy. (European Forest Institute, 2020, p.3). As an assessment, the designs of certain arrangements, for example, the Farm to Fork Strategy ought to be characterized obviously. Besides, it is important to plan broad trainings for new position abilities to make sure there is nobody left behind. Further enhancement of the role of research and development in education and the overall development of the country's economy is a core component of any comprehensive set of measures adopted by policymakers at the European and national levels (Anghel et al., 2019). To manage environmental change and to alleviate its unfavourable effects on a worldwide scale, if just Europe make a move without anyone else, it would not be sufficient. Subsequently, manageable moves must be made on a worldwide scale, and created nations ought to support green activity plans in agricultural nations monetarily.

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