The ambitious European Commission strategy to drastically reduce greenhouse gas emissions in the EU and achieve climate neutrality by 2050 has recently been set in motion as the European Green Deal. The European Bioeconomy Alliance (EUBA), representing twelve organisations in various sectors active in the bioeconomy, welcomes such a comprehensive policy tool that should ensure alignment and coherence between the different initiatives that are part of the Deal.

The Green Deal represents both an opportunity and a challenge for the bioeconomy sectors. On one hand, if the EU intends to continue leading the green transition, it should be even more committed to unlock the potential of the bioeconomy and implement the Bioeconomy Strategy Action Plan. On the other hand, the ultimate objective of carbon neutrality is very ambitious and requires strong accompanying measures at both EU and national level, e.g. to secure renewable energy supplies of sufficient quantity and enable scale-up of innovative solutions in the bioeconomy.

We consider that it will be vital to secure a well-functioning system that will provide an effective contribution to the EU’s decarbonisation and growth objectives.

The bioeconomy has a pivotal role to play in the transition to a more circular, sustainable and resource-efficient society. In order to achieve food security, meet climate and renewable energy targets and accelerate progress towards achieving the UN Sustainable Development Goals (SDGs), a holistic and cross-sectoral approach to foster bio-based solutions is needed, taking planetary limits into account and preserving biodiversity. This paper shows that the bioeconomy is inherently linked to the following policy areas of the EU Green Deal:

**Bioeconomy and the Circular Economy Action Plan 2.0**

By storing CO2 and replacing fossil-based resources, **bio-based materials and products** help sustain material supply, keep natural resources in the economic cycle, while enhancing viability of these resources and minimising the extraction of finite raw materials, in line with circular economy objectives. Biorefineries are the ‘factories’ that valorise every component of the renewable feedstock to produce a wide range of everyday products and ingredients made from renewable resources. Increasingly, they will play a vital role in developing and adding value to the principles of a truly circular bioeconomy and ‘zero waste’ society.
That is why our first priority is to implement the 14 measures of the EU Bioeconomy Strategy Action Plan of 2018 at EU and national level, as quoted on page 9 of the Circular Economy Action Plan: “supporting the sustainable and circular bio-based sector through the implementation of the Bioeconomy Action Plan”.

More should be done in the future to replace fossil-intensive materials with renewable and bio-based materials and ensure that concrete measures and financial support are promoted and supported. For example, building with wood provides sustainable and climate-smart long-term solutions. The use of bio-based insulation materials is providing answers to many concerns related to energy efficiency and environmental impact. This should go hand in hand with substantive calls from research and innovation. The use of natural bio-based insulation materials has increased in recent years, largely driven by concerns over the embodied energy and whole-life environmental impact of insulation materials.

The Commission’s circular economy approach includes the intention to amongst others propose legislative waste reforms and consider actions in the field of bio-based and biodegradable plastics. In this context, it is important to consider that alternative feedstocks, such as bio-based and renewable feedstocks, help decrease the dependency of the plastics industry on finite fossil carbon resources. In relation to forthcoming initiatives on packaging and waste, it is our conviction that the benefits of using renewable resources should be equally reflected and promoted compared to recycled content.

It is important to emphasise synergies and links between the circular economy and bioeconomy, since the combination of both could boost the achievement of EU ambitions.

Strong policy signals, measures and incentives, consolidated through the circular economy strategy, are important in order to engage industry in the creation of smarter products, processes and partnerships and to promote bio-based products’ visibility to stimulate market demand in strategic sectors such as packaging, automotive, coatings, construction, cosmetics, energy, fertiliser, homecare, pharmaceutical and textiles industries.

Promoting the use of renewable raw materials and the visibility of bio-based products helps raise awareness of existing renewable alternatives to traditional fossil-carbon based products and enhance consumption of sustainable products and sustainable production patterns. Certification and labelling systems based on European standards enable communicating the properties of bio-based products in a clear and unambiguous way. Therefore, building on EU initiatives, the EU should refer to existing standards and labels on the definitions of bio-based products in official communications, such as ‘bio-based content’ certificates and labels based on the standard EN 16785-1:2015, and give a clear preference
towards products for which renewable raw materials were used in public procurement and/or in tax regulations. Public procurement for bio-based products could be a game changer, notably by including renewability as a criterion for Green Public Procurement (GPP).

**Bioeconomy and the EU Industrial Strategy**

A strong EU bioeconomy can also contribute to achieving the **EU Industrial Strategy**, in fields such as sustainability, circularity, competitiveness and job creation. The bio-based industries have great innovation potential for further development of new bio-based products and solutions, with the help of innovative technologies. As outlined in the Commission’s communication, new tools such as Key Enabling Technologies (KETs), sustainable solutions and disruptive innovation are critical to achieve the objectives of the Green Deal. The bioeconomy also contributes to the Just Transition, leaving no one behind, as it has the potential of creating up to 1 million jobs by 2030, particularly in rural and coastal areas.

**Bioeconomy and the EU Climate Law and Renewable Energy Directive**

In the framework of the recently published **Climate Law**, the transition to a circular bioeconomy is a major opportunity to create competitive advantages for Europe as clearly expressed in the updated EU Bioeconomy Strategy: “[a] sustainable European bioeconomy is necessary to build a carbon neutral future in line with the Climate objectives of the Paris Agreement”.

The bioeconomy can ensure access to affordable, reliable, sustainable and modern energy for all by playing a crucial role in developing the **renewable energy** mix for clean energy towards the 2030 and 2050 targets. Considerable efforts have already been made to valorise biomass into sustainable biogas or biofuels, which help achieve significant GHG savings. Furthermore, alternative sources of biomass, originating from forestry, agriculture, marginal land, biogenic residues and wastes are increasingly used to produce clean and renewable energy in the EU.

The announced wide-ranging policy package and roadmap imply the bloc becoming carbon neutral by 2050, an aim that would involve a much faster decarbonisation of transport than what is currently envisaged under the **Renewable Energy Directive**. In this frame, the contribution of biofuels in the context of alternative, renewable energy sources should be optimised.
Bioeconomy and the EU Investment plan

We welcome the launch of the European Green Deal investment plan as we believe that enabling conditions supportive of a more circular economy, such as innovation and investment opportunities for circular business models and enabling technologies will play an important role. As regards the next steps in developing a delegated act of the EU taxonomy on sustainable finance, it would be crucial to take into consideration the bioeconomy as the Commission drafts criteria for the environmental objective on circular economy.

Bioeconomy and the Farm to Fork strategy

We generally support the holistic approach to making the EU food system more sustainable which is being proposed in the framework of the Farm to Fork strategy. However, the proposed changes will inevitably lead to political trade-offs, which should be clearly assessed and highlighted. When setting concrete targets, appropriate transitional measures should be set, taking into account progresses achieved so far by the supply chains and including adjustment incentives where relevant.

Farmers and primary food processors strive for resource efficiency and have a long history of producing and processing agricultural raw materials and of separating all of their valuable components for use in food, feed and industrial applications. Loss/wastage of products that would actually qualify as “waste” are considered to be virtually null within primary processors’ sectors.

The products and co-products of those processes replace fossil-based ingredients with renewable ones, thus contributing to the development of the European bioeconomy. Fermentation products for the animal feed sector can contribute to sustainability and animal welfare objectives. For instance, feed additives produced by fermentation, like amino acids, vitamins, enzymes and probiotics, are essential components of animal diets, helping to avoid malnutrition and contributing to animal welfare. In addition, using such feed additives in livestock production can reduce the nitrogen and phosphorous burden of agriculture and water consumption in animal farming and can contribute to reducing GHG emissions. Another example relates to food, in which bio-based ingredients extend the shelf life of food products, leaving more time for supermarkets to sell them, and/or more time for consumers to store and eat them, reducing the amount of food that goes to the bin.

The EUBA welcomes policy initiatives aimed at strengthening the environmental sustainability of food
systems on the long term. To achieve the ambitious goals and to further improve sustainability and competitiveness in the area of food processing, research and development, innovation and the role of new genomic techniques are key elements. Therefore, the Farm to Fork strategy must empower the EU to support growth in these respective areas and embrace all actors in the food and feed chain equally to maintain food security and competitiveness of food production in the EU. In this context, education and further communication on how the EU food and feed chain model works are equally important tools to consider to further promote science-based policy strategies. It is also important to use meaningful and objective indicators to set sustainability objectives and measure progress - regardless of the farming model.

Finally, evaluations of existing measures proposed in the Farm to Fork are needed to ensure that they are still necessary/framed, taking stock of the observed accomplishments and limitations.

**Bioeconomy and the EU Forest Strategy**

The production of biomass should strike a balance between the economic, social and environmental aspects of sustainability, which are interdependent and mutually strengthen one another. Sustainable forest management deliver benefits such as renewable and climate friendly raw materials and ensures that forests continue to deliver other ecosystem services including recreational activities for society and the protection of key habitats and nature. The future **EU Forest Strategy** should build on the multifunctional role of sustainable forest management and ensure coherence among all forest-related aspects in different policy initiatives within the European Green Deal. This could be done via the provision of meaningful instruments and tools to be included in the post-2020 EU Forest Strategy.

**Bioeconomy and the EU Biodiversity Strategy**

The use of sustainably sourced renewable materials in the bio-based industries will contribute not only to the transition to a climate-neutral economy as well as to preserving biodiversity. In the EU, biomass is produced respecting the highest quality and sustainability standards in the world, which farmers, forest owners and their cooperatives must respect. Consequently, the new **EU Biodiversity strategy for 2030** should take into account the multifunctional role of the agriculture and forest sectors and acknowledge the importance of availability of home-grown raw material to attract investments in Europe.
Horizon Europe, future CAP and investment programmes

In the future Horizon Europe, research and innovation related to the bioeconomy should be a priority to develop and scale-up sustainable bio-based solutions to create a circular, sustainable, renewable and resource-efficient Europe. An appropriate level of funding for the bioeconomy and enabling technologies, such as industrial biotechnology, under Horizon Europe should be ensured to develop new innovative solutions. The future CAP and Horizon Europe should also ensure funding to support farmers, forest owners and their cooperatives to invest in the development of the bioeconomy as well as in further research projects. The EU policy framework should enable the success of innovation in the bioeconomy space. In this sense, public-private partnerships, like the Bio-based Industries Joint Undertaking (BBI JU) and its proposed successor, Circular Bio-based Europe, should be promoted, as they bring together the entire value chain mobilising relevant stakeholders and boost investments and research and innovation funding across food, feed and industrial areas.

This needs to be supported by investments in education and training that are among the main pillars to further develop the bioeconomy in the EU. Joint efforts are needed from public and private sectors to respond to the increasing needs of the various industry sectors to be able to come up with new business models and bio-based products. Skills gaps should be better addressed at EU through target strategies.

The EUBA now calls upon the EU institutions to build on these linkages and support new, effective growth in the bioeconomy sector through the implementation of the Green Deal.
ABOUT EUROPEAN BIOECONOMY ALLIANCE

The European Bioeconomy Alliance (EUBA) is an alliace of leading European organisations representing sectors active in the bioeconomy – agriculture, forestry, biotechnology, sugar, starch, vegetable oils, pulp and paper, bioplastics, renewable ethanol, and research & innovation.

MEMBERS OF THE EUROPEAN BIOECONOMY ALLIANCE

BIC
Bio-based Industries Consortium

CEFS
European Association of Sugar Producers

CEPI
Confederation of European Paper Industries

COPA-COGEC
European Farmers and European Agri-Cooperatives

ePURE
European Renewable Ethanol Producers Association

EUBP
European Bioplastics

EuropaBio
The European Association forBioindustries

FEDIOL
The EU Vegetable Oil & Proteinmeal Industry

FTP
Forest-based Sector Technology Platform

PFP
Primary Food Processors

Starch Europe
European Starch Industry Association