European Economic and Social Committee

NAT/758
Communication updating the 2012
Bioeconomy Strategy

OPINION

European Economic and Social Committee

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions
A sustainable bioeconomy for Europe: Strengthening the connection between economy, society and the environment
COM(2018) 673 final

Rapporteur: **Mindaugas MACIULEVIČIUS**
Co-rapporteur: **Udo HEMMERLING**

Referral	European Commission, 14/12/2018
Legal basis	Articles 29(1) and 304 of the Treaty on the Functioning of the European Union
Bureau decision	16/10/2018
Section responsible	Agriculture, Rural Development and the Environment
Adopted in section	25/04/2019
Adopted at plenary	15/05/2019
Plenary session No	543
Outcome of vote (for/against/abstentions)	203/1/4

1. **Conclusions and recommendations**

1.1. There is a **sense of global urgency**: global challenges like climate change and worldwide population growth are forcing us as a matter of urgency to find substitutes for fossil fuels and to use bio-resources more efficiently. Agriculture and the forest-based sector are major producers of biomass for uses other than food or feed and as such are important contributors to the bioeconomy. New value chains offer additional opportunities for activities in the rural economy to shift from a fossil fuel-based to a bio-based economy.

1.2. Against this backdrop, **better awareness of our consumption** of bio-resources must be given priority in line with the climate objectives of the Paris Agreement. Beyond achieving better understanding, bioeconomy activities need to **engage consumers** through regular advice and information, so as to facilitate the necessary changes and pave the way for introducing market creation measures to further boost consumers' trust and public procurers' uptake of EU-produced bio-based products.

1.3. There are **opportunities** for biodiversity, industry, economic development and jobs. The EESC welcomes the update of the 2012 Bioeconomy Strategy which is an important step in the right direction. There is a global demand for sustainable, resource-efficient bio-based products. However, in spite of the significant progress made in the new version, some of the measures included still need to be put into practice:

1.3.1. In addition to access to financial instruments, it is essential to **set up individual, flexible consulting or advisory services** to help agri-food SMEs to launch long-term, innovative projects. They often lack the necessary in-house expertise or knowledge for many reasons, including human, financial and infrastructure resources.

1.3.2. **Public-private cooperation** should give due attention to primary producers. This model could be supported by a range of measures and instruments under the **Common Agricultural Policy** (CAP).

1.3.3. Incorporating **research, innovation and bioeconomy** activities into a long-term strategy will make it easier to support **development and replication**.

1.3.4. Continuing the **education and training** of workers and primary producers is crucial. It is important to facilitate **knowledge exchange**, provide support for transnational networks and keep pace with societal and technological change. Education, engagement and communication approaches which involve rural bioeconomy stakeholders are crucial.

1.3.5. It is essential to promote the **circular economy and inter-sectoral, territorial linkages** in the EU and beyond, notably with regard to meeting commitments under the Sustainable Development Goals and COP21 objectives.

1.3.6. All Member States should **mainstream a comprehensive bioeconomy strategy** into their policies and programmes and involve the competent local authorities and relevant stakeholders

(primary producers, research and education providers, industry, civil society and social partners, etc.).

1.3.7. The EU should strive for a **global pricing system for carbon emissions**, which would be a neutral and effective way of promoting the bioeconomy and bringing all market players on board to mitigate climate change.

1.4. Respecting sustainability principles is essential for a "new" bioeconomy, and natural resources have to be conserved in order to keep them productive. In this regard, the Bioeconomy must follow sustainability criteria. To avoid distortions to the disadvantage of the environment, economy and society, the same rules shall apply for biomass from the European Union and from abroad.

2. General comments

The bioeconomy encompasses the production of renewable biological resources and their conversion into food, feed, bio-based products and bioenergy. This includes agriculture, forestry, fisheries, food, pulp and paper production, as well as parts of the chemical, biotechnological and energy industries.

2.1 The 2012 EU Bioeconomy Strategy aimed "(…) to pave the way to a more innovative, resource-efficient and competitive society that reconciles food security with the sustainable use of renewable resources for industrial purposes, while ensuring environmental protection". In 2017, the Commission carried out a review of its 2012 EU Bioeconomy Strategy, which concluded that the strategy has demonstrated the relevance of its objectives and that the importance of the opportunities offered by the bioeconomy is increasingly recognised in Europe and beyond. In October 2018, the Commission put forward an action plan to develop a sustainable and circular bioeconomy "to improve and scale up the sustainable use of renewable resources to address global and local challenges such as climate change and sustainable development"[1].

2.2 The global population is expected to grow to almost 10 billion by 2050[2], and biological resources urgently need to be used more efficiently, so there can be safe, nutritious, high quality and affordable food for more people with less environmental and climate impact per unit produced, and sufficient renewable biological material to produce a sizeable part of what we currently harness from fossil crude oil, in conjunction with wind, solar and other renewable energies. A refocusing of the actions and an update of the bioeconomy strategy was therefore necessary in light of recent policy developments, including the United Nations Sustainable Development Goals (SDGs)[3] and Convention on Climate Change (COP21 commitments).

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1 https://ec.europa.eu/research/bioeconomy/pdf/ec_bioeconomy_strategy_2018.pdf#view=fit&pagemode=none

2 https://www.un.org/development/desa/en/news/population/world-population-prospects-2017.html

3 https://sustainabledevelopment.un.org/?menu=1300

2.3 The Commission states, through the Updated Bioeconomy Strategy[4], that it will launch 14 measures in 2019, including:

- establish a EUR 100 million Circular Bioeconomy Thematic Investment Platform to bring bio-based innovations closer to the market and de-risk private investments in sustainable solutions; facilitate the development of new sustainable bio-refineries across Europe;
- develop a strategic deployment agenda for sustainable food and farming systems, forestry and bio-based products;
- set up an EU Bioeconomy Policy Support Facility for EU countries under Horizon 2020 to develop national and regional bioeconomy agendas;
- launch pilot actions for the development of bioeconomies in rural, coastal and urban areas, for example on waste management or carbon farming;
- implement an EU-wide monitoring system to track progress towards a sustainable and circular bioeconomy;
- enhance our knowledge base and understanding of specific bioeconomy areas by gathering data and ensuring better access to it through the Knowledge Centre for the Bioeconomy;
- provide guidance and promote good practices on how to operate in the bioeconomy within safe ecological limits.

2.4 The bioeconomy can provide options that can both help reduce CO_2 emissions and reduce reliance on imported fossil resources. For example, EU forests sequestrate an amount of carbon corresponding to 10% of the EU's yearly emissions, while providing a sustainable and constant supply of biomass for renewable energy. Furthermore, estimates show that 100 000 chemicals currently in production can, in theory, be sourced from renewable raw materials. This does not mean all of them should be, but it is theoretically possible. This will not only offer the possibility of producing our everyday household items locally and renewably, it will also help create jobs, particularly in coastal and rural areas, and growth in Europe, where the technological edge still remains strong. According to industry estimates, one million new jobs could be created by 2030 in the bio-based industries.

2.5 However, major barriers remain on the path towards greater innovation within the EU bioeconomy. An important obstacle relates to product cost-competitiveness, both compared to fossil alternatives and to equivalent products from elsewhere in the world. Cost-competitiveness is affected by many factors, including technology readiness level, labour costs, fossil fuel subsidies and amortisation, as well as the low level of market support for bio-based products. This competitiveness issue is compounded by difficulties in accessing finance for innovative projects and production facilities and, often, ongoing low end-user awareness of bio-based products, as well as by a lack of skills and operational relationships to drive the sector forward. Moreover, permit procedures for new bio-based projects are becoming lengthy and burdensome, leading to significant legal uncertainties and financial risks for economic actors.

4 https://ec.europa.eu/research/bioeconomy/index.cfm?pg=policy&lib=strategy

3. **Specific comments**

The EESC welcomes the communication updating the 2012 bioeconomy strategy. A long-term, consistent and efficient policy to promote the bioeconomy is needed. However, the connection between this overarching bioeconomy strategy and other existing policy instruments is still not automatic. The key to effective policy making on the bioeconomy is therefore still to identify synergies between policy areas in a way that takes account of the objectives of viable food production, sustainable management of natural resources, balanced territorial development in rural areas, and secure, decent livelihoods.

3.1 While the update aims to harness EU investments and puts a significant emphasis on strengthening and scaling up the bio-based sectors, through unlocking investments and markets, there is still a gap (beyond R&D) when it comes to helping bioeconomy companies with fundraising, go-to-market strategy, organisation development and product maturation. Early-stage growth investors at national and regional levels with tailored advice for micro and small scale industries and start-ups are as necessary as the mobilisation of EU investments for big projects. A comprehensive funding approach in order to commercialise new products is required.

3.2 The update also highlights the fact that synergies between the public and private sector can make the best use of different sources of investments. In this context, the Bio-based Industries Joint Undertaking is proving crucial in supporting the development of European industrial bio-based infrastructure and value chains centred around the use of renewable resources – including waste.

3.3 However, not enough focus is placed on the private sector, and in particular primary producers, i.e. farmers, forest owners and their cooperatives, which have a significant role to play in the development of a sustainable bioeconomy; SMEs, which are a major part of the agri-food chain, must also be given due attention. In this context, the CAP could become an interesting tool to help farmers, forest owners and their cooperatives to invest more in their production and make it more sustainable.

3.4 Against this backdrop, creating favourable market conditions is critical and goes hand in hand with the level of trust consumers have in the information they are provided with about the products they are considering purchasing. There is merit in considering information standards, and an important first step has been the establishment of clear EU-wide standards for bio-based products in order to better protect the credibility of industry-agreed standards, and at the same time avoid consumer confusion and give confidence to industrial customers and public procurers. Much more remains to be done to help consumers to make an informed choice through smart communication strategies.

3.5 The updated strategy also reinforces the idea of "upscaling", but it misses the notion of "replication". The research is there and long-term innovation and bioeconomy strategies must go hand in hand. Basic and applied research should be well synchronised and contribute to common strategic objectives. Attention should also be paid to the development, access and maintenance of high quality research and innovation infrastructure or clusters. For example, the

establishment of world-class centres for applied research in full scale bioprocess manufacturing, creating innovative and sustainable solutions, could help small and medium-sized enterprises (SMEs) to tap a full range of knowledge. The knowledge transfer would be helped by demonstrations and examples. The demonstrations would give the SMEs a comprehensive picture of the technologies available in that particular field of the bioeconomy.

3.6 Rural areas are going through a period of profound economic, demographic and institutional transformation in the EU. Therefore, due attention also needs to be directed towards infrastructure and logistical improvement to foster existing and novel biomass supply chains, while optimising the sustainable management of natural resources and the creation of jobs and added value in rural areas.

3.7 There can never be too much emphasis on the reality that the introduction of technologically advanced machinery in the bioeconomy requires improved operating and maintenance skills, including further information and computer technology (ICT) skills, new health and safety training programmes, as well as a better understanding of and attention to environment conservation aspects. Ensuring the continued development and adaption of individuals' skills over their lifetimes is of the utmost importance, as is tackling skills gaps in this emerging bioeconomy sector. Peer-to-peer exchanges, joint activities of researchers, innovation support services, farmers, foresters, their cooperatives and other private actors have not been put forward in the updated strategy but would be crucial to facilitate knowledge exchange.

3.8 We cannot meet the UN Sustainable Development Goals and mitigate climate change[5] without upgrading residues, sidestreams and waste and promoting the circular economy. Collaboration across sectors (food, non-food systems and rural territories) and continents is imperative here. Further attention needs to be given to territorial and local linkages (urban-rural, rural-rural, land-sea) and their contribution to sustainable bioeconomy value chains and clusters in rural areas. Developing these linkages in Central and Eastern Europe would be key to helping these countries frame their strategic development goals for better biomass processing. The Central and Eastern European region is rich in biomass due to its extensive activities in the fields of agriculture, forestry and fishery, with high but unused or under-utilised biomass capacity in terms of food, feed, industrial raw material, biofuel and energy utilisation. Furthermore, the updated strategy has not sufficiently advanced the idea that international cooperation to pool existing expertise and capacities in the most effective way and reinforce synergies with Member States and non-EU research programmes is necessary. International partnerships are particularly important for testing and replicating solutions.

3.9 Lastly, in implementing the objectives set by the Paris Agreement, maximum use should be made of market mechanisms. A global pricing system for carbon emissions would be a neutral and effective way of bringing all market players on board. The EESC encourages the Commission to actively explore different routes and steps and to engage with other countries on moving towards global carbon pricing. An efficient and fair global carbon-pricing system would level the playing field for export businesses in world markets and thus decrease the risk of

5 OJ C 440, 6.12.2018, p. 45

investment and job leakage. In addition, it would eliminate the competitive advantage of imported goods that are cheaper due to lower climate requirements.

Brussels, 15 May 2019

Luca JAHIER
The president of the European Economic and Social Committee