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DRAFT OPINION
of the
Committee of the Regions

INNOVATING FOR SUSTAINABLE GROWTH: A BIOECONOMY FOR EUROPE

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Deadline for tabling amendments:

midnight on Thursday 15 November 2012 (Brussels time), to be submitted through the new online tool for tabling amendments (available on the Members' Portal: www.cor.europa.eu/members)

Number of signatures required: 32

CDR1112-2012_00_00_TRA_PAC

Reference document

Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on Innovating for Sustainable Growth: A Bioeconomy for Europe
COM(2012) 60 final

I. THE COMMITTEE OF THE REGIONS

Key messages

1. welcomes the present Communication from the European Commission (hereafter "Commission") proposing to shift towards greater and more sustainable use of renewable resources and calling for a transition from a fossil-based to a bio-based society with support from research and innovation;

2. agrees with the Commission's view that the bioeconomy is a key element for smart and green growth and that it contributes to the objectives of the EU 2020 strategy and the flagship initiatives on the innovation union and a resource-efficient Europe; reiterates that life sciences and biotechnology contribute substantially to core EU policy goals in terms of health, sustainable and economic development and job creation[1];

3. recognises that the transition towards a bioeconomy is a prerequisite to making Europe a global leader in the bioeconomy especially regarding innovation and competitiveness; emphasises that the bioeconomy offers great potential for job creation, and not only in the agricultural sectors; observes that the world's natural resources are diminishing and that Europe will need to move faster in order to remain competitive in the bioeconomy, as other countries around the world are putting similar strategies in place and actively stimulating market initiatives (e.g. China, the USA); believes Europe is in need of a strong European response based on innovation in support of the bioeconomy;

4. believes that the action plan set out in the Communication lacks practical measures and instruments to tackle the potential barriers or risks when shifting towards a bioeconomy; specific attention should be paid to overlapping or conflicting regulations and the availability of venture capital;

5. welcomes the fact that the bioeconomy is listed, together with food security and sustainable agriculture, as a "societal challenge" in Horizon 2020[2], with a budget proposed by the Commission of EUR 4.5 billion; this provides scope for innovative measures aimed at addressing food security, natural resource scarcity, sustainable agriculture, fossil resource dependency, soil fertility and climate change, while achieving sustainable economic growth; notes, however, that this funding will focus on "food security, sustainable agriculture, marine and maritime research and the bio-economy", which is much more restricted than the sectors included in the bioeconomy in the Commission communication; stresses that it will be at least 25 years before the bioeconomy can compete with the fossil-based economy and that this requires long term investment (in R&D), strategies (beyond 2020) and cooperation among all stakeholders along the value chain aiming to achieve cooperative knowledge transfer;

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1 CdR 174/2007 fin EN.

2 COM(2011) 808 final.

6. believes that, due to the transition from a fossil-based to a biobased economy, the agricultural sector, providing food security and without undermining its primary role as food supplier, could become at the same time a supplier of a variety of (non-food) bio-based products, which could lead to a more sustainable agricultural sector. The bio-economy will provide new business and innovation opportunities for Europe's value chain including the agricultural sector; believes that in order to make optimal use of natural resources, close interaction between the agricultural, bioeconomy and science sectors are needed[3] to create a sustainable and more efficient agricultural sector; believes that any intensification of primary production must not run counter to the sustainability principle, and therefore highlights the importance of spatial planning policy instruments in maintaining areas used for agriculture and forestry;

7. agrees that in order to accelerate the transition to a sustainable European bioeconomy, a secure and sufficient supply of sustainable and high-quality bio-based products as well as resource-efficient primary production systems are prerequisites; points out, however, that the Commission's proposed action plan does not include any measures to increase natural resource efficiency;

Implementing the (cross-sectoral) bioeconomy

8. emphasises that more focus is needed, in terms of strategy and policy, regulation and incentives in the bioeconomy field; stresses that continuous coordination, clear political commitment and further integration between European policies (H2020, Cohesion Policy, CAP, Renewable Energy Directive, Waste Framework Directive) and sectors are needed to avoid contradictions in policy objectives and ensure a level playing field for all actors;

9. welcomes the efforts and ambition of the Commission towards an integrated and cross-sectoral, inter-disciplinary policy approach to the bioeconomy; notes that strong policy coordination by the Commission is needed and that the ambitions do not yet take account of the level of practical implementation that is needed at the regional and local levels;

10. supports the attempt by the Commission to establish a common and broad definition of the bioeconomy; believes that due to the cross-sectoral nature of the bioeconomy, its meaning might differ among the various European, national and regional stakeholders active in the bioeconomy sector; suggests that the biomass pyramid (figure 1)[4] could offer a framework for discussing values and preferred usage of biomass in a more structured manner;

11. believes that Europe should develop and implement its own clear and long term bioeconomy vision based on the different segments of the biomass pyramid (see figure 1), in which higher

3 CdR 1749/2012 – NAT-V-022.

4 The report entitled De Ecopyramide – Biomassa beter benutten– Biomassa beter benutten (Derksen et al 2008) and the English language summary "The Ecopyramid – better biomass efficiency" http://www.innovatienetwerk.org/en/bibliotheek/rapporten/342/DeEcopyramide

segments represent higher values; believes that Europe should follow a "value-strategy" focusing on the higher segments of the biomass pyramid and giving preference to the use of 2nd and eventually, 3rd generation biomass[5]; acknowledges that investment in first-generation biomass is a necessary step in the transition towards 2nd and eventually, 3rd generation biomass; believes that these European objectives should be embedded in all cross-sectoral policies linked to the bioeconomy;

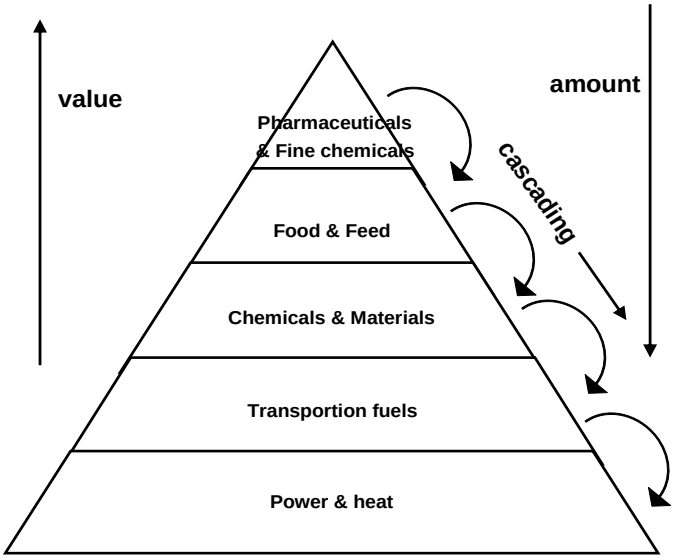

Figure 1: the biomass pyramid

12. believes that Europe should take and maintain the lead in developing sustainability criteria for optimising the supply of and demand for biomass (or "renewable biological resources"), in promoting sustainable land use, considering increased agricultural production capacities and the accelerated use of second- and eventually, third-generation biomass, minimising the potential negative effects of the non-sustainable usage of first-generation biomass and addressing the food versus fuel debate;

13. advises the Commission to develop a common bioeconomy roadmap, providing an analysis of the next steps required in the development of a European bioeconomy, taking into account a value chain approach, and considering existing work (by European Technology Platforms, the

5 In general, first-generation biofuels are produced from food crops (e.g. wheat, maize), oil crops (e.g. rape, palm oil) and sugar crops (e.g. sugar beet, sugar cane) using established technology. In general, second-generation biofuels are produced from cellulosic materials (lignocellulosic feedstocks) and agricultural residues or specially cultivated plants (not destined for food production), 3rd generation biofuels may be defined as cultivated forms of biomass which are highly efficient in terms of their light and land use yet which do not take the form of food crops. Algae are the best example of such biofuels and provide oil and other high-value products. See among others: http://www.biofuelstp.eu/fuelproduction.html and http://biofuelsandthepoor.com/facts-and-definitions/ .

OECD and others); calls for practical measures and instruments to be included, while taking into account the various profiles that regions have; underlines the potential of interregional cooperation for the value chain;

14. points out that the bioeconomy encompasses a range of policy fields within the Commission. Therefore, in order to better facilitate access to bioeconomy-related EU initiatives and programmes, suggests a "one-stop shop" approach where enquiries are processed through a single entry point in the Commission;

Multilevel governance instruments and subsidiarity

15. welcomes the fact that the Commission communication takes account of the regional dimension of the bioeconomy and considers that the communication and all of the proposals in the Bioeconomy Action Plan are compliant with the principle of subsidiarity;

16. notices that in Europe few Member States have been conducting activities to support the development of the bioeconomy, and that strategies here are mainly developed by national governments; a good example is the common regional bioeconomy strategy of the Biobased Delta Europe (south-west Netherlands and Flanders); believes an integrated framework and a more cooperative European approach is needed; believes that we need to strengthen local and regional initiatives through the implementation of bioeconomy strategies at all levels of cooperation (EU, national, regional, local) and the coordination of cross-sectoral activities. Mechanisms for coordinating all relevant (cross-sectoral) policy fields related to the bioeconomy at the EU, national and regional levels should be established;

17. endorses the Commission's proposal to set up a Bioeconomy Panel, helping to enhance synergies and coherence between policies, and discuss and evaluate the practical impact of policy actions related to the bioeconomy; considers that the precise purpose of the Panel is still unclear, as is how it will work in practice and how regions will be involved; stresses that it should be a multi-stakeholder forum where representatives come together in a Triple-Helix setting (businesses, research institutes and LRAs) to share knowledge, ideas and discuss solutions for the bio-based society as well as practical efforts to move from a fossil-based economy to a bioeconomy; believes that there should be good representation of a broad range of sectors on the platform, providing a good basis for facilitating a cross-sectoral approach to the bioeconomy;

18. believes that the functioning and role of national, regional and local bioeconomy platforms might differ; calls on the Commission to establish specific guidelines describing the competences of national, regional and local bioeconomy panels; stresses that the bioeconomy panels should carry out tasks of coordination between the political, scientific and business communities with a view to agreeing on measures to be taken in the pre-competition stage; calls for a place-based approach taking into account their respective geographical, developmental, environmental and regional circumstances and priorities and existing regional

initiatives; believes that each region should tell "its own story" and develop its own regional bioeconomy strategy;

19. stresses that LRAs play a crucial role in the implementation and development of the bioeconomy; recognises that LRAs are vital for defining risks and possible barriers to implementation on the ground, therefore strongly encourages their active involvement and participation in the setting-up, organisation and implementation of the Bioeconomy Panel; asks the Commission to provide enough flexibility and to clarify the function and role of regional and/or national panels, the way they interact and how regional and/or local experiences will be reflected in the EU's Bioeconomy Panel;

20. believes that the success of the transition towards the bioeconomy will depend on the active engagement of civil society in the planning and implementation processes; emphasises the importance of public awareness; encourages the Commission to stress the relationship between science, society and policy-making, and the important role for LRAs in this transition;

21. believes that the transition towards a bioeconomy will only be successful in a "bio-based society"; therefore suggests that NGOs and civil society organisations should play a major role in the early stages of the transition and should be represented on the panels;

22. emphasises the potential of the bioeconomy for growth and job creation in Europe; believes that this requires highly skilled workers to develop the innovations and knowledge basis building the bioeconomy; emphasises that while education policy is a national competence, it is important to make developments related to the bioeconomy part of the regular curriculum at primary level and in vocational and higher education, through studies and courses that deal with agriculture, chemistry and food;

23. believes that cooperation based on the Triple Helix concept is essential for achieving innovation and knowledge valorisation in the bioeconomy. The Triple Helix concept, too, is in need of modernisation and development aimed at ensuring that regional innovation ecosystems function effectively. The field naturally profits from broad-based, positive participation by citizens and is therefore very well placed to be a frontrunner in Europe in terms of research-intensive yet user-driven innovation activity;

A sustainable bioeconomy in the internal and global markets

24. emphasises the important role of public-private partnerships (PPPs) in accelerating the transition towards a bioeconomy; believes that SMEs play a crucial role in the translation of scientific research into applications and market introduction in the form of new products or techniques; the role of regional SMEs in innovation cannot be sufficiently emphasised and strong, structured support is needed to stimulate their activities;

25. believes that it is necessary to facilitate better access to finance for SMEs through investment in start-ups, venture capital and support for technology transfer, and less complex regulations and knowledge valorisation in the field of the bioeconomy; suggests that an SME panel should be set up to advise the Bioeconomy Panel and secure a business-driven approach;

26. is concerned that the current political and economic framework in the EU does not support the industrial use of biomass as a (raw) material;

27. stresses that the transition towards a bio-based economy must be consistent with the implementation of the internal market and trade policy;

Regional examples and financing instruments

28. welcomes the emergence of leading European networks of regions and clusters on the bioeconomy; examples include the cooperation between Flanders (Belgium) and the south-west of the Netherlands, north-west France, North Rhine-Westphalia (Germany), the Helsinki region (Finland), Styria (Austria) and the initiatives in Sweden, Estonia and Hungary; calls on the Commission to support such networks and clusters with a view to promoting the exchange of experiences and joint processing of project applications with other European regions and involving them in the Bioeconomy Panel; believes that mutual learning about the set-up of investment funds and technology transfer is important;

29. believes that bottom-up initiatives are important in creating a bio-based society, and that a business- and demand-driven approach, combined with a government-driven approach, is crucial;

30. notes that biomass-producing regions should be able to benefit from technological innovation and not only be considered as suppliers of biomass; thus specific attention is needed for technology transfer and knowledge valorisation; believes that close relations between urban and agricultural regions are important for establishing technology transfer and knowledge valorisation;

31. believes that part of the CAP funds should support – in conjunction with Horizon 2020 – the *European Innovation partnership on agricultural productivity and sustainability* to bridge the gap between R&D and farming practice in order to increase the knowledge base and knowledge valorisation[6];

32. suggests that the Commission should facilitate the outlining and mapping of best practices, existing activities and available bio-based products of regional clusters and regions, building on the work and results of existing programmes such as ABC-Europe, Cluster-IP financed by

6 (Draft) opinion of the Committee of the Regions on the European Innovation Partnership: Agricultural Productivity and Sustainability, CdR 1749/2012 (NAT-V-022).

DG-ENTR[7] and the Interreg and Regions of Knowledge programmes financed under regional policy and FP7[8] respectively, and promote multi-fund programming;

33. welcomes the proposal by the European Commission to earmark a part of the European Regional Development Fund for "low carbon economy" projects for less developed regions, developed "transition" and richer regions; believes that this will have a positive impact on the transition towards a European bio-based society; underlines the potential of Smart Specialisation Strategies (S3) for enabling regions to deliver a more strategic and integrated approach to the bioeconomy;

34. suggests that advanced regions in the bioeconomy field should be supported in taking the steps required by bioeconomy value chains and in connecting to other less advanced regions; believes that advanced and less advanced regions should together instigate pilot plants in which (start-up) companies can test new products in a protected environment; believes that this "stairway to excellence" approach would lead to an effective use of resources, while fostering cohesion; supports initiatives such as Regions of Knowledge which provide a helpful tool for knowledge exchange, strongly promote effective regional uptake and application of research results, and generate additional research cooperation;

35. is convinced that both the Knowledge and Innovation Communities (KICs) and Regional Implementation and Innovation Communities (RICs) address long-term societal challenges and identify and tackle new opportunities for innovation in Europe; therefore calls on the Commission to launch a KIC focusing on the bioeconomy in the new wave of KICs in the period 2014-2020[9];

36. having said the above, believes that there is a palpable sense of urgency among all European, national, regional and local stakeholders as regards developing a low-carbon economy/bioeconomy; divining the pathway to that objective and bringing it into practice requires a revolution in our ways of thinking and doing; as regions are key in the practical execution, the CoR offers its expertise and states it willingness to closely cooperate with the Commission in bringing the bioeconomy strategy in Europe to the next phase;

37. we would ask the Commission to take the following steps at EU level:

    a. further develop the Bioeconomy Strategy (using a Triple Helix structure), focusing on the higher echelons of the biomass pyramid; establish a Bioeconomy Panel with

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7 http://ec.europa.eu/enterprise/sectors/biotechnology/index_en.htm and http://www.europe-innova.eu/web/guest/cluster-cooperation/cluster-innovation-platform

8 ftp://ftp.cordis.europa.eu/pub/fp7/kbbe/docs/regional-biotech-report.pdf, http://cordis.europa.eu/fp7/kbbe/library_en.html.

9 The European Institute of Innovation and Technology (EIT) with its Knowledge and Innovation Communities (KICs) in different areas will in 2014 address questions related to the bioeconomy, in particular under the proposed KIC "Food4future" see COM(2012) 60 final; the bioeconomy includes not only food but also non-food products. It is important to include as well the non-food component as part of the overall value chain of the bioeconomy.

representatives from businesses, knowledge institutions and public authorities (at regional, national and EU levels);

b. develop an integrated approach to the bioeconomy based on and requiring a multi-fund strategy at both the regional level and the European level (H2020, Cohesion Policy, CAP, Energy);
c. make the public in the regions aware of the need for the bioeconomy and the opportunities it provides;
d. base the integrated approach to the bioeconomy on stimulating and non-conflicting regulations and measures (by means of certification systems, integrated and customised R&D programmes across several DGs) and possibilities for regions to determine their own direction concerning the bioeconomy and Smart Specialisation Strategy;

and to further develop a European strategy focusing on:

- Specialisation and knowledge valorisation of innovations in the European bioeconomy sector in order to remain competitive at global level.
- Research and development of 2nd and 3rd generation biomass.
- Value chains (from the production of raw materials to market finished products).
- Products with high added value.

38. we believe the regions have the following to offer:

a. The mapping and availability of documented best practices of regions that are successfully planning and implementing (aspects of) the bioeconomy and finding ways to propagate and assign these structures to other regions (Stairway to Excellence).
b. Help in setting up Triple Helix structures and providing input for the bioeconomy panels;
c. Given their position close to the citizens, LRAs can increase public awareness of (the need for and benefits of) the bioeconomy at local and regional levels.
d. Support in building "stairways to excellence" by facilitating and initiating interregional cooperation between less developed and more developed regions and using multi-fund approaches to European programmes and projects.

Brussels,

II. PROCEDURE

Title	Opinion on Innovating for Sustainable Growth: A Bioeconomy for Europe
Reference(s)	COM(2012) 60 final
Legal basis	TFEU: Article 307; Articles 179 to 181 (for research and innovation); Articles 38 to 44 (for agriculture and fisheries), Article 173 (for the competitiveness of industry), and Articles 191 to193 (for the environment).
Procedural basis	
Date of Council referral/Date of Commission letter	
Date of Bureau/President's decision	
Commission responsible	Commission for Education, Youth, Culture and Research
Rapporteur	Rogier van der Sande (NL/ALDE)
Analysis	
Discussed in commission	6 July 2012
Date adopted by commission	27 September 2012
Result of the vote in commission	Adopted unanimously
Date adopted in plenary	29-30 November 2012, expected
Previous Committee opinions	– Mid-term review of the strategy on life sciences and biotechnology, CdR 174/2007, EDUC-IV-016 – Pre-commercial procurement: driving innovation to ensure sustainable high quality public services in Europe, CdR 58/2008, ECOS-IV-022 – Community legal framework for a European research infrastructure and joint programming in research, CdR 283/2008 – Developing a common strategy for key enabling technologies in the EU, CdR 15/2010, EDUC-V-002 – Contribution of cohesion policy to the Europe 2020 strategy, CdR 223/2010, COTER-V-008 – Simplifying the implementation of the research framework programmes, CdR 230/2010, EDUC-V-006 – Europe 2020 Flagship Initiative Innovation Union, CdR 373/2010, EDUC-V-010 – The role of local and regional authorities in achieving the objectives of the Europe 2020 strategy, CdR 72/2011, ECOS-V-015 – General regulation on the funds covered by the common strategic framework, CdR 380/2011 COTER-V-017 – Horizon 2020 (the Framework Programme for research and innovation), CdR 402/2011, EDUC-V-021