BioBased Industries

Respondent's profile

Are you answering as an individual or on behalf of an organisation or an institution? -single choice reply-(compulsory)	I am answering on behalf of an organisation or institutions (business organisation, NGO, public authority, etc.)
If you are* responding on behalf of *organisation or an institution -single choice reply-(compulsory)	I represent an industry association or a chamber of commerce (national/regional/local)
What is your main professional field? -multiple choices reply-(compulsory)	Other (non-pharmaceutical) biotechnologies - Energy and bio-fuels
Please provide your country of residence If answering as individual, please provide your place of residence. If answering on behalf of company/organisation/institution, please provide the country of your workplace. -single choice reply-(compulsory)	Denmark
Name and contact details NB: the questionnaire will be available for your full contributions only if name and contact details are provided. If you choose not to provide your name and contact details, we offer the opportunity to provide us with your general comments (up to 2000 characters). Please note that in the next question, you may still opt for your name not to be disclosed upon publication of the results. -single choice reply-(compulsory)	Yes, I will provide my name and contact details in the box below

Please provide your name/name of organisation/postal address/telephone/e-mail) -open reply-(compulsory)

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Received contributions together with the identity of the contributor may be published on the Commission's website. Do you agree to your contribution being published under your name? -single choice reply-(compulsory)	My contribution can be published under the name indicated

Identification of the problems

EU primary production is competitive in a global context -single choice reply-(compulsory)	Neutral
EU logistics and storage is competitive in a global context -single choice reply-(compulsory)	Neutral
Extraction and processing of renewable biological resources into value-added bio-based	Neutral

materials in the EU is competitive in a global context -single choice reply-(compulsory)	
Extraction and processing of renewable biological resources into biofuels in the EU is competitive in a global context. -single choice reply-(compulsory)	Disagree
Commercialisation of value-added products produced from renewable biological resources in the EU is competitive in a global context -single choice reply-(compulsory)	Disagree
EU measures for market development, harmonisation and standardisation in the field of bio-based industries are competitive in a global context -single choice reply-(compulsory)	Disagree
Overall, Europe's biobased industries are competitive on the worldwide scene -single choice reply-(compulsory)	Disagree
Strength of basic research in areas of likely future relevance -single choice reply-(compulsory)	Strong
Strength of applied research & technology development -single choice reply-(compulsory)	Neutral
EU wide coordination of applied research & technology development -single choice reply-(compulsory)	Weak
Involvement of primary producers (farmers, forestry or aquaculture) in innovation efforts related to the development of supply chains for biomass as feedstock for bio-based industries. -single choice reply-(compulsory)	Weak
Investment of the private sector in Research and Innovation related to bio-based industries. -single choice reply-(compulsory)	Strong
SME participation in Research and Innovation related to bio-based industries. -single choice reply-(compulsory)	Weak
Investment of the public sector in Research and Innovation related to bio-based industries. -single choice reply-(compulsory)	Neutral
Filing of patent applications (in line with the exploitation potential of research results obtained). -single choice reply-(compulsory)	Neutral
Collaboration between stakeholders along value and supply chains in terms of conducting R&I pertinent to bio-based industries -single choice reply-(compulsory)	Weak

Access of bio-based industries to a range of state of the art demonstration plants -single choice reply-(compulsory)	Very weak
Bio-based Industries are sufficiently consolidated and integrated (critical mass) across Europe to support the growth of the biorefinery infrastructure -single choice reply-(compulsory)	Neutral
There is a sufficient availability of traditional feedstock, mainly foodcrops such as maize, wheat, sugar beet or oilseeds in Europe, to support the rapid growth of bio-based industries while assuring food and feed supply. Such feedstocks are often referred to as "first generation" feedstocks. -single choice reply-(compulsory)	Agree
There is good potential to source, in an environmentally sustainable way, other types of non-food feedstocks (e.g. residues from agriculture, forestry and biowaste, lignocellulosic crops) in Europe, supporting the future development of EU bio-based industries. Such feedstocks are often referred to as "second generation" feedstocks. -single choice reply-(compulsory)	Strongly agree
Appropriate solutions to ensure an effective biomass supply chain are already in place (e.g. logistics, stable supply contracts) -single choice reply-(compulsory)	Disagree
Necessary cross-sectorial collaboration between stakeholders in bio-based value-chains enabling smart and sustainable ways of using biomass is in place. -single choice reply-(compulsory)	Disagree
EU level public support mechanisms stimulating large-scale deployment of innovation in the bio-based industries are strong. -single choice reply-(compulsory)	Disagree
Member state public support mechanisms stimulating large-scale deployment of innovation in the bio-based industries are strong. -single choice reply-(compulsory)	Disagree
Appropriate industry standards, certification systems and labels are in place to create a favourable economic environment for the development of bio-based industries -single choice reply-(compulsory)	Disagree

Policy measures and initiatives promoting the use of bio-based products create a favourable environment for the development of local bio-based industries. -single choice reply-(compulsory)	Strongly disagree
There is a strong and effective integration of measures to protect the environment with measures aimed at the development of bio-based industries -single choice reply-(compulsory)	Strongly disagree
Consumers are well informed about benefits and risks associated with bio-based products -single choice reply-(compulsory)	Strongly disagree
European Added Value	
Industry alone, without government support, is able to address the relevant problems. -single choice reply-(compulsory)	Strongly disagree
An intervention at the level of the regions or of Member States would be sufficient to help industry address the relevant problems. -single choice reply-(compulsory)	Disagree
An intervention at EU level is needed to help industry address the problems. -single choice reply-(compulsory)	Strongly agree
… mobilising the necessary critical mass required to reach key objectives in a timely way -single choice reply-(compulsory)	Strongly Agree
… ensuring EU wide cooperation between all relevant stakeholders along the value chains -single choice reply-(compulsory)	Strongly Agree
… promoting non-traditional partnerships (transnational, cross-sectorial) between stakeholders that may otherwise lack opportunities or incentives to collaborate -single choice reply-(compulsory)	Strongly Agree
… contribute to achieving the required level of investment in research and innovation -single choice reply-(compulsory)	Strongly Agree
… greater mobilisation of research efforts in universities and research institutes -single choice reply-(compulsory)	Agree
… coordination between national policies -single choice reply-(compulsory)	Strongly Agree
…. reduce first mover risk associated with deployment of innovative technologies -single	Strongly Agree

choice reply-(compulsory)	
… providing improved policy coherence, e.g. in terms of environmental, agricultural and industrial policies -single choice reply-(compulsory)	Strongly Agree
Objectives	
… generate knowledge required for competitiveness of EU industries in the medium and long term -single choice reply-(compulsory)	Very important
… boost EU leadership in technologies for conversion of lignocellulosic biomass and other non-food feedstock such as biowaste -single choice reply-(compulsory)	Very important
… promote effective collaboration between stakeholders to conduct the research and innovation work required to ensure sufficient availability of biomass -single choice reply-(compulsory)	Very important
… promote effective collaboration on research and innovation between all stakeholders along the value chain for greening the industry -single choice reply-(compulsory)	Very important
… promote building projects with greater critical mass -single choice reply-(compulsory)	Very important
… incentivise private sector stakeholders to increase their investment level in R&I -single choice reply-(compulsory)	Very important
… help to build pan-European and cross-sectoral linkages with a view to achieving enhanced innovation success -single choice reply-(compulsory)	Very important
… effectively promote the participation of SME's in funded projects -single choice reply-(compulsory)	Very important
… favour high industrial participation rates in funded projects -single choice reply-(compulsory)	Very important
… reinforce and effectively utilise the research and innovation potential present in Europe's universities and research centres -single choice reply-(compulsory)	Very important
… ensure that greater emphasis is placed on seeking protection through intellectual property rights when promising results emerge -single choice reply-(compulsory)	Important
… facilitate more rapid deployment of promising technologies in pilot, demonstration and "first of	Very important

its kind" industrial scale plants. -single choice reply-(compulsory)	
… deliver research and innovation outputs (e.g. related to standards or labels) that can stimulate the growth of the markets for bio-based products -single choice reply-(compulsory)	Very important
… deliver innovative technologies for the use of biomass in smart and efficient no-waste processes -single choice reply-(compulsory)	Very important
… deliver innovative technologies aimed at building stable, competitive and sustainable biomass/biowaste supply chains (e.g. with regard to logistics and integration of supply networks) -single choice reply-(compulsory)	Very important
Towards a PPP ?	
A public-private partnership is the most appropriate mechanism to implement the Research and Innovation Programme for Bio-based industries under Horizon 2020. -single choice reply-(compulsory)	Strongly agree
Impacts	
… will help ensure development of bio-based industries in a way that is compatible with food security objectives -single choice reply-(compulsory)	Strongly agree
… will help ensure that bio-based industries develop in line with EU objectives on sustainability -single choice reply-(compulsory)	Strongly agree
… will contribute to developing technologies that allow the conversion/upgrading of existing plants to use new types of biomass input and / or to manufacture new products. -single choice reply-(compulsory)	Strongly agree
… will increase the chances of setting up "first of its kind" industrial scale biorefineries in the EU based on innovative processes -single choice reply-(compulsory)	Strongly agree
… will contribute to the competitiveness of bio-based industries in the EU at a global level -single choice reply-(compulsory)	Strongly agree
… will contribute to the development of more effective biomass supply chains in the EU -single choice reply-(compulsory)	Strongly agree
… will contribute to the creation of new and attractive income streams for farmers, foresters	Strongly agree

and aquaculture -single choice reply-(compulsory)	
… will contribute to the creation of new jobs in rural and/or coastal areas -single choice reply-(compulsory)	Strongly agree
… will contribute to achieving EU greenhouse gas emission reduction objectives -single choice reply-(compulsory)	Strongly agree
… will enable a greater use of renewable biomaterials in a wide range of products -single choice reply-(compulsory)	Strongly agree
… will help in achieving EU ambitions with regard to bio-based products from biomass in a way that is environmentally sustainable and compatible with food/feed security -single choice reply-(compulsory)	Strongly agree
… will help to increase overall investments in research and innovation activities in the EU in the sectors concerned -single choice reply-(compulsory)	Strongly agree

Open comments

Your comment. **If you prefer, you can upload a position paper or comments.** -open reply-(optional)

The new field of 'Bioeconomy' is rapidly developing around the world. Major investments are currently being made in the development and production of bio-based products – not only in large countries like China, Brazil and the US, but in a number of EU Member States as well. These efforts are motivated by several factors: the realisation that the era of fossil fuels is drawing to a close; rising oil prices and the wish to reduce our dependence on imported oil; climate policy; and, finally, a wish to be centrally positioned in growing markets for bio-based products. Denmark has a strong point of departure for becoming a leading player, creating new jobs and increasing its export revenues by giving top priority to bio-based products where the feedstock is sustainable biomass. The central issue is therefore: does Denmark and other EU countries intend to be just another customer buying other countries' biomass-based products or do we want to be an active producer providing knowledge and technology and a preferred partner of the best international players? Now is the time for us to decide if we want to be at the cutting edge and reap the full benefits of the many areas of expertise we have developed in agriculture, logistics, manufacturing and research. BioRefining Alliance recommends: • that a new market be created by requiring 2G biofuels to comprise a substantial part of the obligation to ensure that 10% of the transportation sector's fuel consumption in 2020 is biofuels – or to guarantee a minimum fuel price for a limited number of years, as is the case with wind power; • that an analysis be carried out to identify how public procurement policy and other measures can be used to create new markets for bio-based materials and other high-value bio-based products; • that the EU Common Agricultural Policy be adapted to also support the development of the 2G bioeconomy in rural districts; • that a socioeconomic analysis be carried out to identify the benefits of increasing the areas of biomass utilisation. THE RESOURCES BioRefining Alliance recommends: • that the EU's sustainability criteria for biofuels be tightened up and widened to also include solid biomass (wood); • that agricultural yields per hectare be increased while safeguarding biodiversity and the environment at the same time; • that all organic waste be considered a resource in an effort to achieve the greatest possible value for society (high-value recycling and storable energy); • that a macroeconomic model be developed to gain knowledge of how to maximise yields from both robust and sensitive soils. DEMONSTRATION AND COMMERCIALISATION BioRefining Alliance recommends: • that testing and demonstration facilities be established which are capable of accelerating efforts to develop, upgrade, mature and commercialise promising new technologies throughout the value chain; • to support the establishment of an integrated, full-scale biorefinery in Denmark and other relevant EU countries. RESEARCH AND DEVELOPMENT BioRefining Alliance recommends that high priority be given to the areas of bioresources, biorefining, biofuels and biomaterials: Bioresources • cultivation systems, plant breeding and recirculation of nutrients; • biomass harvesting methods, logistics and storage. Biorefining • reduce the cost of manufacturing 2G sugars; • flexibility: widen feedstock input and optimise the value of subsidiary flows (lignin, biogas, proteins, feedstuffs, fibres, etc.). Biofuels • reduce the

cost of manufacturing 2G bioethanol; • develop lignin-based biofuels. Bioproducts • contemplate the establishment of a national centre for sustainable materials; • develop and commercialise biochemicals, focusing on major markets; • develop and commercialise advanced biomaterials and other high-value products for specialised markets.