

CBE JU Deployment Group on Primary Producers Concept note for the CBE JU Governing Board

The purpose of this note is to present the scope, objectives, composition, and tasks of the CBE JU Deployment Group on Primary Producers.

1. Background

The CBE JU Deployment Groups are established in accordance with Articles 22 and 56 of the Council Regulation establishing the Joint Undertakings¹ (Council Regulation), taking also into consideration the CBE JU Impact Assessment² and the CBE JU Strategic Research and Innovation Agenda (SRIA)³.

A deployment group (DEG) in the context of the Circular Bio-based Europe Join Undertaking can be defined as a group of stakeholders that actively promotes the deployment of sustainable circular bio-based solutions in Europe and provides support to the CBE JU Governing Board.

The conceptual definition of the Deployment Group on Primary Producers (DEG PP) presented in this note, is based on the work already undertaken in the Circular-Bio-Based Europe Joint Undertaking (CBE JU) and its predecessor, the Bio-Based Industries Joint Undertaking (BBI JU), to support the contribution of primary producers & enhance their role in the bio-based value chains.

In particular, the DEG PP will build upon:

- the outcomes of the "Study on the participation of the agricultural sector in the BBI JU: Business Models, Challenges and Recommendations to enhance the impact on Rural Development", and its Action Plan⁴;
- activities and results of relevant EU-funded projects, studies, networks, infrastructure, etc. relevant to the primary sector and the bioeconomy ensuring synergies with them;
- a preliminary SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis in relation to issues (challenges and opportunities) encountered by primary producers involved in circular bio-based innovations (presented in Annex 1), based on the outcomes of the study mentioned above and dialogue with relevant EU-funded projects;
- the outcomes of the participatory workshop "engaging with primary producers in bio-based value chains: setting the scene for the CBE JU Deployment Group on Primary Producers" organised on 28 February 2024. The report of the workshop is available on the CBE JU website⁵.

¹ Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe

² SWD(2021) 37 final PART 17/19

³ CBE JU Strategic Research and Innovation Agenda

⁴ Study "Participation of the agricultural sector in the BBI JU: business models, challenges and recommendations to enhance the impact on rural development" and its Action Plan

⁵ https://www.cbe.europa.eu/



2. Main problems and opportunities

The main opportunities identified for primary producers are:

- New business opportunities for primary producers based on the efficient use of biomass and valorisation side streams from primary production & crop residues to produce high addedvalue materials.
- Novel **business models with environmental benefits**, e.g., via circulation of nutrients and new sustainable, diversified production systems.
- **Revitalisation** of the economic sustainability of unused or abandoned rural areas granting benefits to primary producers that provide ecosystem services.
- Innovations as a lever for rural regeneration and generational renewal.
- Benefits of participating in new innovative value chains: reduce the risk and accelerate the
 work, networking at EU level, working closely together with other partners in so-called
 innovation ecosystems.
- A balanced economic development and territorial cohesion by bringing development opportunities to regions across the Union, in particular to rural, coastal and marginal regions that typically do not benefit from industrial development but may have a strong potential for bio-based industry.
- Create purposeful jobs, **linking rural and urban areas** leading to improved wellness and welfare for people and societies.

The main **problems and critical issues** encountered by primary producers are reported below:

• Awareness & communication:

- Primary producers are not always aware of the opportunities offered by the deployment of circular bio-based innovations.
- Sometimes they are **reluctant** to change their business models and embark on these new opportunities.
- Several communication barriers prevent primary producers from understanding what are the potential benefits (e.g., language used is too complex, inappropriate interlocutors at the primary producer level, insufficient exchanges between primary producers and industry).

Scale and structural characteristics:

- The **small scale of the primary sector activities** is often dominated by fragmented value chains, small players, etc.
- They often lack appropriate skills to be involved in circular bio-based innovations.
- Advisory services are not always of sufficient quality, depending on the countries and regions.

• Role in the value chains:

 Primary producers are often only marginally integrated into the bio-based value chains.



- The **share of profit**, resulting from their involvement, is not fairly distributed among the actors. This impacts their interest in remaining in a long-term business relationship.
- Primary producers influence the sustainability of the whole value chain to a large extent, but their efforts, such as applying sustainable farming practices, are not rewarded by downstream users of the biomass.

• Financial and economic support:

- The need for infrastructure investment (e.g., for storage and pre-processing biomass), that may not be reflected in the price of the feedstock, making the involvement of some primary producers economically unviable.
- Insufficient **economic incentives** available to adapt their production systems and to invest in the necessary infrastructure, and **access to finance** is not facilitated.
- **Technological risks and uncertainties:** building a new supply chain takes many seasons and years, with high risk for the primary sector and with limited short-term results.
- Policy, regulatory & legal barriers, such as the volatile market for biomass, demanding
 environmental requirements, inconsistencies in the legislation for the valorisation of residues,
 registration of new bio-based products is very complex, lack of incentives to produce bio-based
 materials versus fossil-based, regulatory uncertainty and lack of predictability, differences in
 the application of legislation even inside the same country as in the case of new crops if CAP
 implemented differently at national level, etc.
- Environmental or geopolitical risks: primary producers are highly exposed to unexpected global challenges affecting production & logistics costs (e.g., global threats, climate change, etc.).
- **Replicability** of the business models, contributing to the deployment of circular-based innovations in different regions of Europe, is uncertain and highly affected by local factors (e.g., what works locally in one region might not work in other regions).

3. Scope

While the primary sector plays an important role in the deployment of circular bio-based innovations, and might influence the sustainability of circular bio-based sector to a large extent (considering their crucial role as biomass suppliers, but also as producers and end-users of bio-based products and innovations) several issues have been identified as to preventing primary producers fully engaging and/or benefiting from these opportunities as presented above.

The **Deployment Group on Primary Producers (DEG PP)** will be an action group and the scope of their activities is to propose specific actions to address the challenges and use opportunities for the **agricultural, forestry and aquaculture & fisheries primary producers** that might influence, impact and/or hinder the **deployment of circular bio-based solutions and innovations,** ensuring that primary producers benefit from their involvement in new and innovative circular and bio-based value chains.



The DEG PP will have the capacity to propose actions to deal with some of the problems and opportunities mentioned above, and at national and EU levels; however, it is important to highlight that its scope is limited to the activities and context set out in the Council Regulation establishing the Joint Undertaking under Horizon Europe⁶, within the remit of responsibilities of CBE JU Programme Office and its partners, the European Commission and the Bio-Based Industries Consortium, and the available resources. Certain actions will require additional efforts from the European Commission and Member States, which are beyond the scope of activities proposed for this Deployment Group.

In line with the vision set out for CBE JU in the Council Regulation, a strong, resource-efficient and competitive bio-based innovation ecosystem can develop renewable bio-based products, materials, processes and nutrients from waste and biomass through sustainability- and circularity-driven innovation. Such ecosystems can also create value at local level by valorising feedstock, including waste, residues and side-streams, to create jobs, economic growth and development, not only in urban areas but especially in rural and coastal territories where biomass is produced, and which are often peripheral regions that rarely benefit from industrial development.

In this context, the DEG PP should contribute to **strengthening the integration of the primary sector** in the circular bio-based systems and value chains, and further **empower them** recognising the potential of the solutions focused on the valorisation of residues, waste side-streams and other type of secondary and residual biomass together with the use of industrial and non-food crops and plantations, in particular, in abandoned and unused lands.

The DEG PP should also contribute towards the **mobilisation** of feedstock providers from regions with unexploited potential for bio-based value chain development to cooperate in project activities (Article 47 (e)) of the Council Regulation).

4. Objectives

The final goal of the DEG PP is to highlight the opportunities and address the challenges faced by the primary sector, which constitute critical issues for the deployment of circular bio-based solutions and innovations and to ensure that primary producers benefit from their involvement in new and innovative circular and bio-based value chains. To that end, the DEG PP will pursue the following two main objectives:

- Enhancing the role and support an effective and rewarding engagement of primary producers along the circular bio-based systems and value chains;
- 2. Ensure that primary sectors benefit from the economic, social and environmental opportunities offered by circular and bio-based innovations and solutions (supported by long-term sustainable and feasible business models).

⁶ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02021R2085-20230921&qid=1710940829611



5. The actors

5.1. The Members of the Deployment Group on Primary Producers

The DEG PP shall be a **balanced group of stakeholders** and shall consist of several organizations representing the agricultural, forestry, fisheries and aquaculture primary sectors.

Primary producers are defined as entities operating in the agriculture, forestry, fisheries and aquaculture primary sectors performing activities related to the production, harvest, handling, and storage of biological resources before being either processed or distributed. The production of biological resources is a key part of the activities of the entity.

As a general principle, the organisations involved in the DEG PP will have to be relevant for the activities proposed for this Deployment Group. In this regard, the envisaged types of organisations are:

- Primary producers, organisations working with primary producers, cooperatives, advisory services or other multipliers, which should be able to motivate such organisations.
- Organisations working as closer as possible to primary producers and their cooperatives or associations.
- Organisations in which the activities foreseen in the context of the DEG PP are linked to their existing mandates.

A balanced **geographical representation** (across EU regions and considering different climatic and soil conditions) should be also achieved.

The DEG PP will involve actors working at national, regional and local levels but also actors working at EU level (large EU organisations). The involvement of networks representing young entrepreneurs (e.g., young farmers) will be also considered.

The DEG PP should **engage with the other actors of the value chains, in particular with industry,** as well as with other relevant actors, including policy makers, local authorities, advisory bodies, financial entities (banks), networks, associations, knowledge brokers, that are not direct members of the DEG PP.

The selection process, including the selection criteria and timeline for the establishment of the DEG PP, will be defined in a separate CBE JU Governing Board Decision.

5.2. Other actors and supporting mechanisms

The CBE JU Programme Office will oversee and support the activities of the DEG PP together with the European Commission and the Bio-based Industries Consortium, and will act as the secretary of the DEG PP.

In addition, the DEG PP will be supported by a € 3 million Coordination and Support Action (CSA) included in the CBE JU Annual Work Programme 2024. The expected activities of this CSA are defined in the specific topic 'HORIZON-JU-CBE-2024-CSA-03 Supporting the CBE JU Deployment Group on Primary Producers'⁷.

⁷ CBE JU AWP 2024 0.pdf (europa.eu)



6. Working procedures

To achieve the expected objectives and perform the envisaged type of activities, the DEG PP should **develop and implement an action plan**, including a clear road map of actions (i.e., what, who, how & when) to achieve the objectives, while taking into consideration the following aspects:

- The action plan should address the challenges and opportunities that constitute critical issues for the **deployment** of circular bio-based solutions and innovations.
- The starting point of the action plan is defined in this concept note (problems and challenges to be tackled by the DEG PP based on the preliminary SWOT analysis). However, the DEG PP should review this preliminary identification of critical issues and beyond that, should take into account the specificities of each primary sub-sector and other potential developments and/or emerging issues that might influence the role of and challenges for the primary sector in the deployment of circular bio-based solutions and innovations.
- The action plan should be drafted considering the particularities and specificities of each one of the **primary sub-sectors (agriculture, forestry, and fisheries and aquaculture)** but also the commonalities to be addressed with common actions for all the primary sectors.
- The DEG PP should **monitor** the implementation of the action plan and the achievement of its targets and **update** it as needed (emerging issues and new opportunities and challenges) along the life span of the DEG PP.

The DEG PP should **meet at least once per year in person.** However, additional (online) meetings can be organised and will be strongly encouraged.

During the meetings, **representatives for primary producers** who are beneficiaries in relevant projects (e.g., CBE, BBI, Horizon Europe - Cluster 6, national initiatives, etc.) might be invited to **participate as observers** to share:

- first-hand experiences as regards the challenges encountered during the implementation of the projects, and for the sustainable and effective deployment of the bio-based solutions and innovations once the projects are finalised;
- success stories and opportunities with replicability potential, which could serve as examples and good practices.

Appropriate cooperation with the other actors of the value chains, in particular with industry, as well as with other relevant actors, that are not direct members of the DEG PP, should also be promoted with the support of the CSA to achieve the set objectives for this DEG.

The DEG PP shall **report to the CBE JU Governing Board** every year on the activities performed and the advice provided. The DEG PP will **issue recommendations** to the Governing Board on their own initiative, but it can also be requested by the Governing Board.

It is expected that the DEG will perform activities and **deliver tangible outputs** (e.g., reports, guidelines, analyses, or recommendations to the CBE Governing Board and other stakeholders, mechanism(s) to connect and build on the work with existing initiatives (multipliers & synergies); material & dissemination activities to share knowledge and create awareness, etc.) to achieve the objectives of the DEG PP.



Synergies and cooperation should also be sought with the other C**BE JU advisory bodies,** including the exchange of best practices through the States Representatives Group as well as with the Scientific Committee and other Deployment Groups, such as the DEG on Finance and Investment.

7. Type of activities

The activities proposed for the DEG PP are organised in the following blocks:

- Actions to improve awareness and better understanding on opportunities and benefits offered by circular bio-based innovations in general and, in particular, about the opportunities offered by CBE JU.
- Measures to enhance cooperation and communication among all the actors of the entire value chain, including primary producers, industry, regional stakeholders, advisors, and endusers.
- Measures to promote the development, deployment, and replicability of business models
 that balance the sharing of power and profit for primary producers across novel circular biobased value chains.
- Actions to capitalise on existing initiatives and create synergies with relevant initiatives to support the activities of the DEG PP and facilitate knowledge transfer.
- Activities to fill gaps in advisory services offered to primary sectors in the Member States and encourage the wider use of available knowledge among primary producers across the EU.
- Specific widening actions to mobilise primary producers from regions with unexploited potential for bio-based value chain development to be involved in the DEG PP and engaged in circular bio-based value chains.

A list of indicative actions is reported in Annex II. These actions together with the outcomes from the workshop should be consider by the DEG PP in the drafting of its action plan, which will detail the specific actions to be implemented by the DEG PP with the support of the CSA.



ANNEX 1. SWOT analysis of the primary producers in the deployment of circular bio-based solutions and innovations*

*Disclaimer: Preliminary identified by BIC, EC and CBE JU PO based on the work already done in the context of BBI/CBE JU on farmers and agriculture primary producers

Strengths:

- Primary producers are at the forefront of the bio-based value chains.
- Direct processing and conversion of biomass at source (primary producers as operators of biorefineries, instead of 'just' biomass suppliers).
- Incremental demand for biomass and increasing demand for circular bio-based products from industry and from consumers.
- Long tradition to cooperate in market-oriented value chains.
- Possibility to use different forms of cooperation to strengthen the organisation of the primary sector, e.g., farmers' cooperatives (among themselves, and with industry and regional stakeholders) ensuring the direct and indirect participation of their members in the opportunities offered by the circular bioeconomy.
- National support (e.g., farmers' support from national advisory services plus their enhanced role under CAP).
- Existence of hubs, training centers, and capacity-building initiatives in rural areas.

Opportunities:

- New business opportunities for primary producers based on the efficient use of biomass and valorisation side streams from primary production & crop residues to produce high added-value materials.
- Novel business models with environmental benefits, e.g., via circulation of nutrients and new sustainable, diversified production systems.
- Revitalisation of the economic sustainability of unused or abandoned rural areas granting benefits to primary producers that provide ecosystem services.
- Innovations as a lever for rural regeneration and generational renewal.
- Benefits of participating in new innovative value chains: reduce the risk and accelerate the work, networking at the EU level, working closely together with other partners in so-called innovation ecosystems.

Weaknesses:

- Primary producers do not always/fully benefit from the opportunities offered by cooperation with the bioeconomy/circular bio-based sector.
- Mistrust & reluctance about new crops and potential opportunities offered by such crops, including their residues and new farming systems.
- Insufficient engagement/cooperation of primary producers in the bio-based value chains (missing integration) and difficulty in maintaining motivation over the years.
- Insufficient innovation capacity.
- A volatile market for biomass as input to the bio-based sector.
- Lack of skills, administrative burden, and language barriers encountered by primary producers to engage in new value chain development through participation in R&I projects.
- Individual primary producers' involvement in bio-based value chains is in general more difficult than if they are represented by the cooperative or other type of organisations serving their interest.
- Replicability of business models in different regions highly affected by local factors

Threats:

- Difficulties in cooperation and an unlevel playing field between large companies/cooperatives and SMEs/individual primary producers (e.g., feasibility of long-term contracts between the primary sector with industry).
- Lack of credibility of long-term economic viability of novel bio-based business models and associated technical barriers, e.g. building a new supply chain takes many seasons and years with high risk and very limited short-term results.
- Too complex or not clearly communicated environmental requirements, including the competing demands for the use of land: biomass use for food and feed production, carbon storage, biodiversity (set-aside), etc.
- Climate change impact and/or other unexpected threats to primary production.
- Societal issues, including rural depopulation and aging (the average age of EU farmers is +60 years and the new generation may not be interested).
- Policy, legal & regulatory barriers: e.g., validity of 'new' crops not included in the actual CAP implemented at a national level, difficulty to use abandoned lands, barriers linked to logistics & transport of waste across regions, bio-based sector not considered among the national CAP plans and Operational Groups, fragmented legislative framework, etc.



ANNEX 2. Examples of possible activities

Awareness and explaining better the opportunities:

- Produce promotional and communication material. The communication material should use
 the right language adapted to primary producers (simple and highlight the benefits and
 potential diversify revenue streams).
- Mobilise/use local interlocutors (well-known/trusted by primary producers and speaking their language) to convey information to primary producers and provide the advice they need (direct channels).
- Share best practices and use examples of front runners such as successful start-ups.
- Participate in local events relevant to primary producers (go where the primary producers are, rather than ask primary producers to attend EU-wide events).

Cooperation and communication among all the actors of the entire value chain (in particular with industry):

- Activate and connect networks and stakeholder platforms.
- Foster dialogue and cooperation between primary producers & industry & regional stakeholders.
- Identify innovative digital tools to match the demand of the industry (e.g., biomass) with the offer of primary producers (e.g., residues from crops, side-streams, etc.).
- Develop and promote successful models of cooperation between the primary sector and the industry (e.g., co-ownership, direct contracts, demonstration projects of biorefinery models working with the involvement of farmers, etc).

Successful business models for the primary sector:

- Promote business models that succeed and identify key factors of success.
- Promote successful and concrete financial solutions to support the investments that the primary sector need.
- Promote the participation of primary producers (or their representatives) in EU-funded projects (in particular in CBE JU projects) but also beyond that, ensure they benefit from long-term opportunities by solutions developed these projects.
- Prepare guidelines for the sustainable and reliable use of secondary biomass and how this can bring value for primary producers.
- Identify policy, legal & regulatory hurdles that might hinder the success of business models and propose potential solutions and good practices.

Improving skills and knowledge:

- Support training, education activities, skills and capacity building, for primary producers
- Develop appropriate tools for sharing knowledge between initiatives (e.g., a live and interactive repository for farmers, platform or centralised point with updated information).
- Transfer of good practices from green to blue economy.
- Create added value by better linking research, education, advisors and primary producers.
- Develop interaction with regional policymakers, initiatives and networks such as with the Common Agricultural Policy (CAP) and the European and national CAP networks (national competent authorities, researchers, advisors, EU institutions and programs, etc.) and the Agricultural Knowledge and Innovation Systems (AKIS).



- Identify appropriate tool(s) to translate the knowledge available into deployment opportunities adapted to specific local and regional circumstances.
- Identify gaps in advisory services and share effective and novel approaches among advisors in EU Member States that are sustainable in terms of economic, environmental, and social aspects.

Synergies with other initiatives:

- Map relevant initiatives for the DEG PP and reinforce links with them such us the Common Agriculture Policy networks and the Agricultural Knowledge and Innovation Systems (AKIS), Soil Mission, Mission Ocean, EU4Algae and SUBMARINER Network, Smart Specialisation Strategies, etc
- Foster dialogue and exchange of information with relevant initiatives using existing networks and events.

Widening actions:

- Organise specific events and targeted training.
- Exchange of good practices between more-v-less active regions.
- Facilitate the participation of primary producers from widening countries in relevant events.