The Seminar gathered a variety of rural stakeholders to share practical examples of bioeconomy initiatives in rural territories across the EU. They discussed how to support sustainable bio-based initiatives in rural areas through coherent use of EU policy instruments, particularly RDPs and future CAP Strategic Plans. Plenary and group discussions concluded that the three main elements in mainstreaming the bioeconomy are: capacity building, including communication and awareness-raising; cooperation; and a holistic approach to sustainability.

The discussion was the culmination of the work of the ENRD Thematic Group on ‘Mainstreaming the Bioeconomy’, which will continue for a further year with a focus on climate action.

Policy and practice: the synergies between the bioeconomy and rural development policy

EU delivering the bioeconomy to rural areas, Galin Gentchev, DG AGRI

Key drivers for implementing the bioeconomy in Europe include: a dynamic governance framework integrating different sectors and levels; the promotion of business models at various scales and integrating primary producers; knowledge transfer; and the development of national bioeconomy strategies which are coherent with regional and EU strategies.

Current RDP Measures include various opportunities to support rural bioeconomy business and cooperation models and bio-based value chains. The post-2020 CAP Strategic Plans (SPs) are an essential tool to mainstream similar interventions in a coordinated way.

Experiences of rural bioeconomy: the practitioners’ perspective, Caroline Van der Heyden, Boerenbond (BE)

This presentation used a series of practical examples to illustrate how primary producers play a crucial role in the development of bioeconomy and need to be further involved in the value chains.

The sequential re-use of raw materials and their residues should guide the sustainability of the bioeconomy (i.e. resource efficiency, ecosystem protection) and needs to be ensured, instead of aiming at increased biomass production. Bioeconomy products need an expanded and stable market, as well as coherent and consistent policies. Knowledge transfer and advisory services which are open to all stakeholders are crucial.

Plenary discussion

The audience underlined the need for better coordination and coherence between the different policies and regulations impacting on the bioeconomy (e.g. waste, agriculture, water, energy). As an example, the EU and national waste regulations sometimes hinder innovative value adding to certain waste streams. There is no ‘one-size-fits-all’ bioeconomy model, so the stakeholders should always assess their specific circumstances and design specific (sets of) solutions to implement the bioeconomy in their rural areas. Ecosystem services are an important part of the bioeconomy. A concrete barrier to the development of certain sectors of the bioeconomy is the lack of a competent and interested workforce, especially in rural areas.
Interactive breakout groups – Discussions and conclusions

Five breakout groups provided the participants an opportunity to exchange their insights and practical experiences.

Building a bio-based value chain

This interactive session challenged the participants to set up a new value chain, identifying the key building blocks and activities. The session concluded that:

- **To build an awareness raising campaign for bioeconomy**, it is important to distinguish between awareness raising and capacity building/training. Initially, the aim should be to change perceptions (not behaviours) and build a momentum for the bioeconomy. Farmers/stakeholders should understand that they can ‘do bioeconomy’ by building on what they already have.

- **To build a bioeconomy value chain concept**, it is crucial to ensure the active involvement of all relevant stakeholders through awareness raising, training and capacity building. The value chain must be collaborative (cooperative and equitable), varied (multi-stakeholder) and sustainable (resource-efficient and respectful of the environment).

Rural climate action through bio-based initiatives

Gottlieb Basch, University of Evora (PT) - Nicholas Wardi, Baltic Sea Action Group (FI) - Clara Lopes, Ministry of Agriculture (PT)

Carbon sequestration in soils is one example of a farming practice that can contribute to climate change mitigation. The experiences shared in this session looked at scientifically tested farm management practices that enhance soil’s capacity to store carbon, and initiatives to support their uptake by farmers. The session discussed how measurement-based climate action can be expensive and requires public subsidies as well as further research to succeed. Demonstrating how agriculture delivers ecosystem services can facilitate public acceptance of such subsidies. The session concluded that mainstreaming rural climate action through bio-based initiatives requires:

- **Stronger focus on the multifunctionality** of agriculture and bio-based initiatives, including climate change mitigation. This perception should be mainstreamed throughout the value chains and clarified to the general public;

- **CAP payments** rewarding projects that deliver more, including in terms of ecosystem services related to climate action. Such an approach could also facilitate MS’ monitoring and assessment of climate-friendly farming practices;

- **Community involvement** and the setting of incentives and result monitoring at the level of communities rather than individual actors;

- **More awareness raising and advisory services** for farmers, including more demonstration activities; and

- **Certification schemes** and a sound legal framework for biomass production (currently not available everywhere).

Building local bioeconomy through Smart Villages

Eero Purontaus, Regional Council of Lapland (FI) - Jean-François Pecheur, LAG Pays de Condruses (BE)

The two examples shared in this session showed how local communities can develop innovative actions to solve specific challenges in their local food and energy sectors. Key ‘building blocks’ of such initiatives are: local leadership, vision and strategy; local partnerships/cooperation; motivation and animation; building on local assets; and innovation.

The discussions acknowledged:

- The importance of **local leadership** in initiating, guiding and facilitating processes and in achieving sufficient **local critical mass** to ensure the implementation of local cooperation actions;

- The need for **investment in soft actions** (e.g. animation, facilitation, capacity building), particularly in the initial stages of developing community-led bioeconomy initiatives, for instance developing a common vision. This can help develop realistic local aspirations; and

- The need for a **policy instrument that is fast and easy to deploy at local level**. This should provide enough flexibility for local communities to support the actions needed in these local processes, from soft actions to piloting and small investments.
Creating an enabling environment – Challenges to policy coherence

Pablo Fernandez, Cooperativas Agro-alimentarias de España (ES) - Jean-Marc Jossart, Bioenergy Europe

Key barriers faced by the members of Cooperativas Agro-alimentarias de España in accessing new bio-based markets include legal definitions that limit the use of agri-food residues for bio-based activities. The members of Bioenergy Europe consider that, for bioenergy to deliver sustainable growth, concerted policy action at EU, national and local level is essential.

The discussion following these two presentations identified the key steps to create an enabling environment for the development of the rural bioeconomy:

• To **clarify the concept** of bioeconomy, sharing more practical examples with farmers;
• To facilitate **access to financing** including through the implementation of Financial Instruments;
• To **retain** as much value as possible in rural areas. This could be achieved through a combination of public procurement criteria, market measures and local strategies;
• To provide specific **advisory services** and coaching for farmers to guide them through the implementation of bio-based projects;
• To **update the legal frameworks** to reflect the new economic development possibilities offered by the bioeconomy (i.e. rules concerning the reuse of residues and by-products);
• To build **multi-actor and cross-sectoral approaches**, including involving communities, to reach the critical mass necessary to stimulate further progress and influence the policy making; and
• To build **market awareness** and foster the market for bioeconomy products including raising consumer awareness.

Regional approaches to bioeconomy

Inese Suija Markova, Institute for Environmental Solutions (LV) - Pierpaolo Rovere, Agrifood and Bioeconomy Cluster, Friuli Venezia Giulia (IT)

These presentations of two regional approaches to bioeconomy prompted a discussion on how to engage all regional actors in a bioeconomy strategy. Four elements were considered, under which the following activities were considered central:

• **Advice & information**: improving knowledge transfer and exchange of experience, advice and skills development (e.g. disseminating best practices, pilot cases, awards, participatory monitoring systems);
• **Networks & partnerships**: mapping stakeholders and extending networks (e.g. social network analysis), identifying the best work organisation possible within the network, considering the use of consultants as intermediaries to facilitate the process, and using a cluster approach (i.e. no formal legal structure, open, flexible, generating enthusiasm);
• **Finance**: different funding sources can be used to mainstream the bioeconomy, each serving different business cases: public funding (EU, national, regional and local), private funding (incl. loans, venture capital, crowdfunding), foundations. Other financial drivers include public procurement and clusters;
• **Research & innovation**: Research & innovation actors enable the implementation of the bioeconomy (e.g. universities, colleges, research institutes, EIP-Operational Groups, farmers, associations).

All regions face the same challenges: identifying who sets the agenda, who links or coordinates the different stakeholders, how to strengthen the regional context in all the above-mentioned elements and how to ensure appropriate training and skills development to underpin the availability of the appropriate work force and competences within the region.

Present and future opportunities for supporting rural bioeconomy through the RDPs

Members of the ENRD TG on ‘Mainstreaming the Bioeconomy’ presented the recommendations drawn as a result of a year-long analytical work of the TG. These include **recommendations** on how the bioeconomy can be mainstreamed in Rural Development policy and programmes, supported by a more detailed **set of recommendations** on the coordinated use of the measures of the current Rural Development Programmes (RDPs) with a view of inspiring similar interventions in the future CAP Strategic Plans.

This presentation provided the basis for the following panel discussion on how to mainstream the bioeconomy in rural areas.
How to mainstream the bioeconomy in rural areas now and in the future?
Panel discussion with MS Managing Authorities, rural stakeholders and the European Commission

Reactions to the TG recommendations
Clara Lopes (Ministry of Agriculture, Portugal), Aurélia Barateau (Regional Direction of Agriculture and Forest - Grand Est, France) and Oana Neagu (Copa-Cogeca) welcomed the TG recommendations as useful tools to address the challenges of rural bioeconomy within the current RDPs and in the future CAP Strategic Plans.

More guidance from the European Commission (EC) would help national authorities achieve comparable results in bioeconomy related initiatives. In France, the ‘Bioeconomy Trophy’, launched this year, is a good practice to develop a dialogue with citizens and ensure the sustainability of the bioeconomy.

All the different ‘factors’ of the EU bioeconomy – the revised EU Bioeconomy Strategy, post-2020 CAP, Horizon2020, EU Invest – need to come together. A toolbox approach may help stakeholders grasp the big picture and identify relevant opportunities. The bioeconomy can be a great opportunity to combat rural exodus, create and maintain more rural jobs, and combat climate change.

Benoit Esmanne (DG AGRI) remarked that a more general definition of the bioeconomy gives Member States more flexibility to fit the concept despite their different contexts and experience of the topic. Flexibility is also the spirit of the future CAP proposal. Other panellists agreed that clarity in the overall definition helps ensure a common bioeconomy framework across the EU, while the actual national, regional and local approaches need to be tailored to specific needs.

How to ensure a sustainable, effective and inclusive rural bioeconomy?
The panel underlined that it is important to coordinate and monitor the development of sustainable bioeconomy models in different territories, adopting comparable sustainability indicators. These should also encompass social sustainability. Better synergies between EU and national funds, including regional funds, can address shortcomings in infrastructure and services which can prevent the development of the bioeconomy in rural areas. Coordination and collaboration between different ministries is crucial to achieve this. Farmers and the agricultural industry also need to expand their cooperation beyond specific sectors to unlock the potential offered by current resources and their by-products. The EU Knowledge Centre for Bioeconomy is a rich source of resources and information to support the cross-sector coordination.

Looking at the future
Policy coherence is important in order to correctly track and enhance public expenditure incurred to reach climate objectives. Ecosystem services for climate action in the agricultural sector should be duly recognised and accounted for. Successful rural bioeconomy initiatives can make economically declining territories more attractive and generate new income for the locals, as has happened as a result of the collaborative projects undertaken by the agro-industrial clusters in Northern France.

Further centralisation of all relevant information on different financial frameworks and instruments available for bioeconomy initiatives was suggested as a useful future measure. Communication around the bioeconomy is key as it can have huge impacts on consumers and improve the market pull for bio-based sectors. The communication needs to underline the multi-functional nature of the bioeconomy, recognising the importance of the agricultural sector not only in production but also in managing resources in a sustainable way.

The Commission’s view is that the bioeconomy is relevant to several objectives of the proposal for the future CAP, not only objective 9 which specifically mentions it. The strategic moment to integrate the bioeconomy in the CAP Strategic Plans is now, during the stakeholder consultations on-going in the MS.

Conclusions & next steps
Neda Skakelja (DG AGRI) summed up the three main elements needed to mainstream the bioeconomy: awareness raising, communication and capacity building. Cooperation is key, as well as a holistic approach to sustainability.

This seminar concluded the Year 5 work of the ENRD TG on ‘Mainstreaming the Bioeconomy’.