

# Bioeconomy Event Highlights

The meeting launched the work of the Thematic Group on 'Bioeconomy and climate action in rural areas', which aims to promote climate action within the rural bioeconomy. Bioeconomy can mitigate climate change by replacing fossil-based materials with renewable and biological ones. There is also vast potential to reduce greenhouse gas (GHG) emissions from land-based sectors within the bioeconomy. More carbon can be sequestrated in biomass, soils and in bio-based materials.

EU Rural Development Policy and the post-2020 CAP can enhance the positive climate impacts of bio-based value chains while increasing rural incomes, jobs and the sustainable use of natural resources.

#### **Event Information**

**Title:** 1<sup>st</sup> meeting of Thematic Group on 'Bioeconomy and climate action in rural areas'

Date and Llocation: 25 September 2019, Brussels, Belgium

Organiser: ENRD Contact Point

**Participants**: 39, including representatives of Managing Authorities, National Rural Networks, LAGs, environmental NGOs, research and agricultural organisations, and the European Commission.

Outcomes: Identifying climate delivery potential and

opportunities of the rural bioeconomy. **Website**: https://enrd.ec.europa.eu/news-

events/events/1st-thematic-group-meeting-bioeconomy-

and-climate-action-rural-areas en

# Rural bioeconomy contributing to EU's climate targets

<u>Valeria Forlin</u> (DG CLIMA) and <u>Christine Falter</u> (DG AGRI) highlighted the central importance of the bioeconomy in the strategy towards a carbon neutral EU by 2050 (see <u>EU Communication 'A Clean Planet for All'</u>) and the future CAP as a key instrument to promote rural climate action. Land-based sectors – i.e. agriculture and forestry – can contribute significantly to both reducing GHG emissions and removing carbon from the atmosphere. They also constitute the basis for the bioeconomy as they produce the biomass that is used to replace fossil-based materials, thus allowing a reduction in GHG emissions in sectors such as energy, manufacturing and construction. This indirect mitigation role needs to be better communicated because, in the GHG emission inventory system, the emission reductions associated with this substitution are attributed to the sectors that directly benefit from *using* bio-based materials, while the emissions associated with *producing* these materials are accounted for in the land-based sectors<sup>1</sup>. Research and better data are necessary in order to accurately monitor the climate delivery of the bio-based sectors. The European Commission (EC) is currently conducting a study on carbon farming and pilot approaches to the topic are being tested through the <u>LIFE programme</u>. The Horizon 2020 research framework aims to bring different soil quality programmes and resources together. Better monitoring is key to designing targeted incentives for farmers to contribute to carbon sequestration. Finally, agriculture and forestry are highly vulnerable to the effects of climate change, hence the need for better adaptation in order to ensure a thriving bioeconomy.



Diversified business models related to the bioeconomy and climate action are expected to become even more important. Climate change mitigation and adaptation, and the promotion of the bioeconomy, are specific objectives of the post-2020 CAP. Current EU Rural Development Policy provides a very flexible toolbox to support strategic interventions along rural bioeconomy value chains (see the <u>recommendations</u> of the ENRD TG 'Mainstreaming the bioeconomy'). Building on lessons from the RDPs, similar approaches can be included in the CAP Strategic Plans. The latter will also be an important instrument to implement the vision laid out in the National Energy and Climate Plans and to address the climate risks identified in the National Adaptation Plans.

<sup>&</sup>lt;sup>1</sup> Biomass that is used for energy production is categorised as a source of CO2 emissions in the land use, land use change and forestry sector; biomass (wood) that is used to produce long-lived wood products is categorised as a temporary carbon sink in the same sector.



# Opportunities for climate change mitigation in bio-based value chains

Delivering integrated climate action is part of a 'multifunctional bioeconomy', according to <u>Catherine Bowyer</u> (ENRD/IEEP). Different actors in bioeconomy can cut GHG emissions and increase carbon removals through their activities in line with their business logic. The participants <u>mapped</u> these opportunities throughout the production, processing, re-use, distribution and consumption phases of biobased value chains. Specific agronomic and livestock practices in the biomass production process can enhance both CO2 capture and the reduction of GHG emissions. Increasing the circular use and re-use of inputs, energy and resource efficiency, and sustainable energy usein the processing and re-processing phases, together with harnessing local supply loops, were identified amongst the opportunities to cut emissions in the production and processing stages. Improved logistics, use of biofuels, and shorter distances between producers and consumers, and reduced packaging can reduce emissions in the product distribution phase. Finally, the consumers are in the driving seat because they create the demand for all these actions. Awareness raising activities, labelling and related certification systems are central opportunities to increase the market pull for climate neutral value chains. Advice, new collaboration models and management tools were identified as necessary enablers at different stages of the value chains, along with conducive tax and incentive systems.



Farmers' climate engagement

<u>Liisa Pietola</u>, Central Union of Agricultural and Forest Producers (MTK), Finland

Agriculture and forestry are the only sectors of the economy that sequester carbon from the atmosphere. MTK's <u>Climate Programme</u> states that maintaining the productivity of soils, reducing emissions and increasing carbon sequestration go hand in hand. It also states that sustainable farming to mitigate and adapt to climate change should become a prerequisite to producing both wood and food in future. According to the findings of a survey carried out by MTK amongst its members, farmers consider the most effective climate actions at farm level to be crop rotation, production and use of renewable energy, minimum tillage, and manure management. Farmers look to the bioeconomy and to climate efficient agricultural practices as opportunities, but food production continues to be their priority.



Building economic incentives to take up climate action

Elisabet Clota, Local Action Group Ripollès Ges Bisaura, Spain

The 'Energy, Forest and Climate Change' (ENFOCC) project aims to promote energy transition and sustainable forest biomass production in Catalonia's rural areas. The project promotes renewable energy and energy efficiency; raises awareness in rural areas about actions to mitigate and adapt to climate change; and supports sustainable forest management. As part of the initiative, an online energy management tool (ENEGEST) and a model of calculation for the transition to non-fuel energy were developed to make the economic advantages of the energy shift more visible. Signing up to using the tool improves enterprises' scores when applying for LEADER funding. The project also contributed to the implementation of a local strategic plan for biomass management and supply for private and public energy boilers.

## **CONCLUSIONS AND NEXT STEPS**

Climate change mitigation needs to be feasible and profitable for the key actors. The upcoming TG discussions will therefore focus on enabling tools to increase the uptake of climate action in bio-based activities, whilst also benefitting rural areas in other ways. These will include decision support tools to facilitate the adoption of mitigating practices; schemes on the accountability and verification of the climate impacts; and approaches to valorise and reward climate action for all value chain actors. The TG's work will help Managing Authorities developing CAP Strategic Plans, and other bioeconomy stakeholders, to build an enabling framework for a rural bioeconomy that significantly mitigates climate change. The TG's approach will be based on practical and concrete experiences and peer-to-peer learning, according to participants' specific needs and interests. It will build on lessons from previous ENRD Thematic Groups on 'Mainstreaming the bioeconomy', 'Transition to the green economy', 'Resource efficiency' and 'Water and soil management'.

### **ENRD** resources and tools

#### **ENRD Publications**



EU Rural Review 28: Bioeconomy



EU Rural Review 25: Resource Efficiency



EAFRD Projects Brochure: Bioeconomy

#### **Rural Bioeconomy Portal**



Policy documents, relevant stakeholders and inspiring Project examples (not only EAFRD-funded) – in six languages! <a href="https://enrd.ec.europa.eu/greening-ruraleconomy/bioeconomy/rural-bioeconomy-portal">https://enrd.ec.europa.eu/greening-ruraleconomy/bioeconomy/rural-bioeconomy-portal</a> en